

BEACH CHALET ATHLETIC FIELDS RENOVATION

Comments and Responses

Planning Department Case No. 2010.0016E

State Clearinghouse No. 2011022005

May 2012

City and County of San Francisco
San Francisco Planning Department



Important Dates:

DEIR Publication Date: October 26, 2011

DEIR Public Comment Period: October 26 to December 12, 2011

DEIR Public Hearing Date: December 1, 2011

EIR Certification Date: May 24, 2012



SAN FRANCISCO PLANNING DEPARTMENT

May 7, 2012

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

To: Members of the Planning Commission and Interested Parties
From: Bill Wycko, Environmental Review Officer
Re: **Attached Comments and Responses on Draft Environmental Impact Report
Case No. 2010.0016E Beach Chalet Athletic Fields Renovation**

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Attached for your review please find the Comments and Responses document for the Draft Environmental Impact Report (EIR) for the above-referenced project. **This document, along with the Draft EIR, will be before the Planning Commission for Final EIR certification on May 24, 2012.** Please note that the public review period ended on December 12, 2011.

The Planning Commission does not conduct a hearing to receive comments on the Comments and Responses document, and no such hearing is required by the California Environmental Quality Act. Interested parties, however, may always write to Commission members or to the President of the Commission at 1650 Mission Street and express an opinion on the Comments and Responses document, or the Commission's decision to certify the completion of the Final EIR for this project.

Please note that if you receive the Comments and Responses document in addition to the Draft EIR, you technically have the Final EIR.

The Comments and Responses document is available to view or download at <http://tinyurl.com/meacases>. Hard copies can be reviewed at the Planning Information Center (PIC) Counter at 1660 Mission Street, 1st Floor and at the San Francisco Public Library at 100 Larkin Street. To avoid expending paper needlessly, please note that the comment letters are included as a disc. These comment letters are available to view or download at <http://tinyurl.com/meacases>. Hard copies can be obtained at the cost of 10 cents per page by contacting Don Lewis at (415) 575-9095.

If you have any questions concerning the Comments and Responses document or the environmental review process, please contact Don Lewis at Don.Lewis@sfgov.org or (415) 575-9095.

Thank you for your interest in this project and your consideration of this matter.

BEACH CHALET ATHLETIC FIELDS RENOVATION

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Planning Department Case No. 2010.0016E

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Prepared for
City and County of San Francisco
San Francisco Planning Department

May 2012

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CHAPTER VIII

Introduction to Comments and Responses

A. Purpose of the Comments and Responses Document

This Comments and Responses document completes the final environmental impact report (Final EIR) analyzing potential environmental effects associated with the proposed Beach Chalet Athletic Fields Renovation project. The proposed project includes various physical and operational changes at the existing Beach Chalet Athletic Fields, an approximately 9.4-acre public sports field facility located at 1500 John F. Kennedy Drive in San Francisco, along the western edge of Golden Gate Park. The San Francisco Planning Department, as lead agency responsible for administering the environmental review for the City and County of San Francisco (CCSF) projects as required under the California Environmental Quality Act (California Public Resources Code, Sections 21000 *et seq.* [CEQA]), published a Draft EIR¹ on the proposed project on October 26, 2011. The Draft EIR review met the CEQA 45-day minimum public review by being available for review for 48 days, with a public review period ending on December 12, 2011. This Comments and Responses document provides written responses to comments received during the public review period.

The Draft EIR together with this Comments and Responses document constitute the Final EIR for the proposed project in fulfillment of CEQA requirements and consistent with CEQA Guidelines Section 15132. This Comments and Responses document contains the following: (1) a list of persons, organizations, and public agencies commenting on the Draft EIR; (2) copies of comments received on the Draft EIR; (3) responses of the San Francisco Planning Department to those comments; and (4) revisions to the Draft EIR to clarify or correct information in the Draft EIR. See Section C, below, for a description of the overall contents and organization of the Draft EIR and Comments and Responses document.

The Final EIR has been prepared in compliance with CEQA, including the CEQA Guidelines (Title 14, California Code of Regulations, Chapter 3, Guidelines for Implementation of the California Environmental Quality Act), and Chapter 31 of the San Francisco Administrative Code. It is an informational document for use by (1) governmental agencies (other than the CCSF) and the public to aid in the planning and decision-making process by disclosing the physical environmental effects of the project and identifying possible ways of reducing or avoiding their potentially significant impacts; and (2) the CCSF and the San Francisco Recreation and Parks Department (SFRPD) Commission prior to a decision to approve, disapprove, or modify

¹ State Clearinghouse No. 2011022005 and San Francisco Planning Department Case No. 2010.016E

the proposed project. If the CCSF approves the proposed project, it will be required to adopt CEQA findings and the Mitigation Monitoring and Reporting Program (MMRP) to ensure that mitigation measures identified in the Final EIR will be implemented. See Section B, below, for further description of the environmental review process.

This document is written to comply with the requirements of CEQA. Consistent with CEQA, responses to comments are focused on providing clarification to the project description and addressing physical environmental issues associated with the proposed project. These issues include physical impacts or changes attributable to the project rather than social or financial implications of the project. Therefore, to the extent that some of the comments received during the public review period are relevant neither to the proposed project nor to their physical environmental effects, this document provides limited responses to those comments.

B. Environmental Review Process

B.1 Notice of Preparation and Public Scoping

As described in the Draft EIR, the San Francisco Planning Department sent a Notice of Preparation (NOP) to governmental agencies, organizations, and persons interested in the proposed project on February 2, 2011 (see Appendix A in the Draft EIR). During an approximately 30-day public scoping period that ended on March 4, 2011, the Planning Department accepted comments from agencies and interested parties identifying environmental issues that should be addressed in the EIR. A public scoping meeting was held on February 23, 2011 at the Golden Gate Park Senior Center to receive oral comments on the scope of the EIR. The comment letters received in response to the NOP are available for review at the San Francisco Planning Department as part of Case File No. 2010.0016E. The San Francisco Planning Department considered the comments made by the public and agencies in preparing the EIR on the proposed project.

B.2 Draft EIR Public Review

The Draft EIR for the Beach Chalet Athletic Fields Renovation project was published on October 26, 2011 and circulated to local, state, and federal agencies and to interested organizations and individuals for a 48-day public review period from October 26 through December 12, 2011. Paper copies of the Draft EIR were made available for public review at the following locations: (1) San Francisco Planning Department, 1660 Mission Street, 1st Floor, Planning Information Counter, San Francisco, California; and, (2) San Francisco Main Library, 100 Larkin Street, San Francisco, California.² On October 26, 2011, the Planning Department also distributed notices of availability of the Draft EIR, published notification of its availability in a newspaper of general circulation in San Francisco, and posted notices at locations within the project site. The distribution list for the Draft EIR and all documents referenced in the EIR were

² Electronic copies of the EIR could be accessed through the internet at the following address: <http://tinyurl.com/sfceqadocs>.

also available for review at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103.

During the 48-day public review period, the San Francisco Planning Department conducted a public hearing to receive oral comments on the Draft EIR. The public hearing was held before the San Francisco Planning Commission on December 1, 2011 at San Francisco City Hall.³ A court reporter present at the public hearing transcribed the oral comments verbatim and prepared written transcripts. See Appendix PH of this Comments and Responses document for copies of the public hearing transcripts. During the Draft EIR public review period, the Planning Department received comments from 11 public agencies, 18 non-governmental organizations, and 198 individuals. See Chapter IX for a complete list of persons commenting on the Draft EIR.

B.3 Comments and Responses Document and Final EIR

The San Francisco Planning Department distributed this Comments and Responses document for review to the San Francisco Planning Commission as well as to the agencies, organizations, and persons who commented on the Draft EIR. The Planning Commission will consider the adequacy of the Final EIR – consisting of the Draft EIR and the Comments and Responses document – in complying with the requirements of CEQA. If the Planning Commission finds that the Final EIR complies with CEQA requirements, it will certify the Final EIR.

Following certification of the Final EIR, the SFRPD will review and consider the certified Final EIR and the associated MMRP before making a decision and taking an approval action on the proposed project. Consistent with CEQA Guidelines Section 15097, the MMRP is a program designed to ensure that the mitigation measures identified in the Final EIR and adopted by decision-makers to mitigate or avoid the project's significant environmental effects are implemented. CEQA also requires the adoption of findings prior to approval of a project for which a certified EIR identifies significant environmental effects (CEQA Guidelines Sections 15091 and 15092). If the EIR identifies significant adverse impacts that cannot be mitigated to less-than-significant levels, the findings must include a statement of overriding considerations for those impacts (CEQA Guidelines Section 15093[b]) if the project is approved. The project sponsors (SFRPD) will be required to adopt CEQA findings and the MMRP as conditions of project approval actions.

C. Document Organization

This Comments and Responses document is organized to complement the Draft EIR and follows the sequential numbering of chapters in the Draft EIR. The Draft EIR consists of the Executive Summary and Chapters I through VII as follows:

³ In addition, a public hearing was held on November 16, 2011 before the San Francisco Historic Preservation Commission to assist this commission in providing its comments on the Draft EIR; this was not a public hearing on the Draft EIR itself. Comments presented at this hearing relevant to the Draft EIR are contained in the comment letter from this commission.

- **Executive Summary.** This chapter summarizes the Draft EIR and includes a table of impacts and mitigation measures.
- **Chapter I, Introduction.** This chapter describes the environmental review process.
- **Chapter II, Project Description.** This chapter discusses the objectives of the project, provides background data on the project location, describes the operational and physical characteristics of the project, and identifies required project approvals.
- **Chapter III, Plans and Policies.** This chapter provides a summary of the applicable plans, policies, and regulations of the CCSF and regional, state, and federal agencies that have policy and regulatory control over the project site. It also discusses the proposed project's consistency with those plans, policies, and regulations.
- **Chapter IV, Environmental Setting and Impacts.** This chapter describes the project's existing setting and environmental impacts with respect to eight environmental resource areas. The sub-sections in this chapter are as follows:
 - IV.A Land Use
 - IV.B Aesthetics
 - IV.C Cultural Resources
 - IV.D Transportation and Circulation
 - IV.E Recreation
 - IV.F Biological Resources
 - IV.G Hydrology and Water Quality
 - IV.H Hazards and Hazardous Materials and Air Quality
- **Chapter V, Other CEQA Considerations.** This chapter addresses any growth inducement that would result from the proposed project; reiterates the significant environmental effects of the project that cannot be mitigated to less-than-significant levels; describes significant irreversible changes that would result if the project is implemented; and discusses secondary/indirect effects of the project.
- **Chapter VI, Alternatives.** This chapter presents and evaluates alternatives to the proposed project that could feasibly attain most of the project's objectives and reduce significant adverse impacts of the project.
- **Chapter VII, EIR Preparers.** This chapter identifies the EIR authors and consultants; project sponsors and consultants; and agencies and persons consulted.
- **Appendices.** The appendices include the Notice of Preparation and Initial Study, and supporting information for the EIR.

This Comments and Responses document consists of Chapters VIII through XI plus supplemental appendices, as follows:

- **Chapter VIII, Introduction to Comments and Responses.** This chapter describes the purpose of the Comments and Responses document, the environmental review process, and the organization of this document.

- **Chapter IX, List of Persons Commenting.** This chapter describes the coding and organization of comments and lists the persons and organizations that submitted comments on the Draft EIR.
- **Chapter X, Responses to Comments.** This chapter presents a summary of comments received on the Draft EIR together with responses to those comments. The comments and responses in this chapter are organized by topic, including all of the same environmental topics addressed in Chapter IV of the EIR, and are generally presented in the same order of topics as presented in the Draft EIR. Similar comments on the same topic received from multiple commenters are grouped together and a single response is provided. The comment summaries in this chapter are cross-referenced to the complete text of the comments by a comment code. The complete comments are included in the appendices to this document. The sub-sections in this chapter are as follows:
 - X.A Organization of Responses to Comments
 - X.B General Comments
 - X.C Environmental Review Process
 - X.D Project Description
 - X.E Plans and Policies
 - X.F Environmental Setting and Impacts
 - X.G Land Use
 - X.H Aesthetics
 - X.I Cultural Resources
 - X.J Transportation and Circulation
 - X.K Recreation
 - X.L Biological Resources
 - X.M Hydrology and Water Quality
 - X.N Hazards and Hazardous Materials and Air Quality
 - X.O Alternatives
- **Chapter XI, Draft EIR Revisions.** This chapter presents changes and revisions to the Draft EIR. The Planning Department has made changes and revisions to the Draft EIR either in response to comments received on the Draft EIR or at the staff's discretion. In either case, changes are provided to clarify or correct content in the Draft EIR or to add information received after the release of the Draft EIR. The chapter indicates whether a change was made in response to comments or was staff-initiated. None of the changes and revisions in Chapter XI substantially affects the analysis or conclusions presented in the Draft EIR.
- **Comments and Responses Appendices.** The appendices include full copies of the written comments received on the Draft EIR (Appendix COM, Comment Letters and Emails) and transcripts of the public hearing on the Draft EIR (Appendix PH, Public Hearing Transcripts). These appendices also show, in the margin of each letter or transcript, the bracketed comment code used to identify comments, and the topic code used to identify the corresponding responses. Additional supporting technical appendices are also provided to supplement the appendices in the Draft EIR and to support the responses to comments.

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CHAPTER IX

List of Persons Commenting

This Comments and Responses document is organized to respond to all comments received on the Draft EIR, including all written comments submitted either by letter, fax, or email and all oral comments presented at the public hearing. This chapter lists all persons and organizations who submitted comments on the Draft EIR. Commenters are grouped according to whether they represent a public agency or non-governmental organization or commented as individuals. Public agencies, non-governmental organizations, and individuals that submitted written or oral comments on the Draft EIR during the public comment period are listed in **Tables IX-1, IX-2, and IX-3**, respectively. The complete set of written and oral comments received on the Draft EIR is provided in Appendix COM, Comment Letters and Emails, and Appendix PH, Public Hearing Transcripts.

To facilitate the preparation of responses, this document assigns a commenter code to each comment letter, email, comment card, and public hearing transcript based on the name of the agency, organization, or individual submitting the comment. Comments submitted by mail, email, facsimile, comment card, or orally at the public hearing (as transcribed in the official public hearing transcript) are all coded and numbered the same way. The commenter code begins with a prefix indicating whether the commenter is from a public agency (A), non-governmental organization (O) or is an individual (I), and is followed by a hyphen and the acronym of the agency or organization, or the individual's last name. The coding assigned to each commenter is included in the lists of commenters, below. Individual comments on separate topics from each commenter are bracketed and numbered sequentially; the bracketed comments and corresponding comment codes are shown in the margins of the comments in Appendices COM and PH. There is a unique comment code for each individual comment.

TABLE IX-1
PUBLIC AGENCIES COMMENTING ON THE DRAFT EIR

Commenter Code	Name of Person and Public Agency Submitting Comments	Comment Format
<i>Federal</i>		
A-NPS	Frank Dean, General Superintendent, National Park Service	Letter
<i>State</i>		
A-CSCH	Scott Morgan, Director, Office of Planning and Research, State Clearinghouse	Letter
<i>Regional/Local</i>		
A-SFPC-Antonini	Michael Antonini, San Francisco Planning Commission	Public Hearing Comments
A-SFPC-Borden	Gwyneth Borden, San Francisco Planning Commission	Public Hearing Comments
A-SFPC-Fong	Rodney Fong, San Francisco Planning Commission	Public Hearing Comments
A-SFPC-Miguel	Ron Miguel, President, San Francisco Planning Commission	Public Hearing Comments
A-SFPC-Moore	Kathrin Moore, San Francisco Planning Commission	Public Hearing Comments
A-SFPC-Olague	Christina Olague, San Francisco Planning Commission	Public Hearing Comments
A-SFPC-Sugaya	Hisashi Sugaya, San Francisco Planning Commission	Public Hearing Comments
A-SFHPC	Charles Edwin Chase, President, San Francisco Historic Preservation Commission,	Letter
A-SFPUC	Irina P. Torrey, Manager, Bureau of Environmental Management, San Francisco Public Utilities Commission	Letter

SOURCE: ESA, 2012

**TABLE IX-2
NON-GOVERNMENTAL ORGANIZATIONS COMMENTING ON THE DRAFT EIR**

Commenter Code	Name of Non-governmental Organization Submitting Comments	Comment Format
O-CLF	The Cultural Landscape Foundation	Letter
O-CPF	California Preservation Foundation	Letter
O-CSFN	Coalition for San Francisco Neighborhoods	Letter
O-CSFN2	Coalition for San Francisco Neighborhoods	Letter
O-CSFN3	Coalition for San Francisco Neighborhoods	Public Hearing Comments
O-CYSA	California Youth Soccer Association	Letter
O-CYSA2	California Youth Soccer Association	Letter
O-CYSA3	California Youth Soccer Association	Public Hearing Comments
O-GGAS	Golden Gate Audubon Society	Letter
O-GGAS2	Golden Gate Audubon Society	Letter
O-GGAS3	Golden Gate Audubon Society	Public Hearing Comments
O-GGPPA	Golden Gate Park Preservation Alliance	Letter
O-HANC	Haight Ashbury Neighborhood Council	Letter
O-PAR	Planning Association for the Richmond	Letter
O-PAR2	Planning Association for the Richmond	Email
O-PAR3	Planning Association for the Richmond	Letter
O-PAR4	Planning Association for the Richmond	Letter
O-PAR5	Planning Association for the Richmond	Public Hearing Comments
O-RCA	Richmond Community Association	Letter
O-SCSFBC	Sierra Club San Francisco Bay Chapter	Letter
O-SCSFBC2	Sierra Club San Francisco Bay Chapter	Letter
O-SCSFBC3	Sierra Club San Francisco Bay Chapter	Public Hearing Comments
O-SFAH	San Francisco Architectural Heritage	Letter
O-SFCC	San Francisco Chamber of Commerce	Letter
O-SFLCR	San Francisco Lacrosse Club – Riptide	Letter
O-SFLL	San Francisco Little League	Letter
O-SFOE	San Francisco Ocean Edge	Letter
O-SFOE2	San Francisco Ocean Edge	Letter
O-SFOE/GGPA	San Francisco Ocean Edge and Golden Gate Park Preservation Alliance	Public Hearing Comments
O-SFPARKS	SFPARKS	Letter
O-SPEAK1	Sunset Parkside Education and Action Committee	Letter
O-SPEAK2	Sunset Parkside Education and Action Committee	Letter
O-SPEAK3	Sunset Parkside Education and Action Committee	Letter
O-SPEAK4	Sunset Parkside Education and Action Committee	Letter
O-THD	Telegraph Hill Dwellers	Letter

SOURCE: ESA, 2012

**TABLE IX-3
INDIVIDUALS COMMENTING ON THE DRAFT EIR**

Commenter Code	Name of Individual Submitting Comments	Comment Format
I-Anderson	Raja Anderson	Email
I-Arack	Patricia Arack	Email
I-Arack2	Patricia Arack	Public Hearing Comments
I-Bard	Kevin Bard	Public Hearing Comments
I-Bar-David	Ilana Bar-David	Email
I-Barish	Jean Barish	Letter
I-Bartley	Eddie Bartley	Email
I-Baum	Terry Joan Baum	Email
I-Baum2	Terry Baum	Public Hearing Comments
I-Begley	Steve Begley	Public Hearing Comments
I-Belkora	Jeff Belkora, Ph.D.	Email
I-Boskin	Steve Boskin	Email
I-Bowman	Arnita Bowman	Email
I-Brant	Michael Brant	Email
I-Bridges	Stacey Bridges	Email
I-Browd	Gary Browd	Email
I-Brown	Jessica Brown	Email
I-Buckbee	Charles Buckbee	Letter
I-Buffum	Nancy Buffum	Email
I-Buhler	Mike Buhler	Public Hearing Comments
I-Butler	Joseph Butler	Public Hearing Comments
I-Campos	Roland Campos	Email
I-Campos2	Roland Campos	Public Hearing Comments
I-Chappell	Jim Chappell	Letter
I-Chappell2	Jim Chappell	Public Hearing Comments
I-Chappell3	Jim Chappell	Letter
I-Cherny	Robert Cherny	Email
I-Ciccone	Don Ciccone	Email
I-Citron	Ben Citron	Email
I-AClark	Ann Clark, Ph.D.	Letter
I-AClark2	Ann Clark, Ph.D.	Public Hearing Comments
I-JClark	Janet Clark	Public Hearing Comments
I-Clayton	Rupert Clayton	Letter
I-Clayton2	Rupert Clayton	Public Hearing Comments
I-Colao	Flora Colao	Email
I-Colen	Tim Colen	Letter
I-Colvin	Lucy Colvin	Email

TABLE IX-3 (Continued)
INDIVIDUALS COMMENTING ON THE DRAFT EIR

Commenter Code	Name of Individual Submitting Comments	Comment Format
I-Cope	Jeffrey Cope	Public Hearing Comments
I-Corley	Jackie Corley	Public Hearing Comments
I-Cross	Richard Cross	Email
I-Crowley	William Crowley	Letter
I-Crowley2	Bill Crowley	Public Hearing Comments
I-Cuddeback	Sam Cuddeback	Public Hearing Comments
I-Daley	Thomas Daley	Email
I-Daley2	Thomas Daley	Email
I-D' Angelo	Jack E. D' Angelo	Email
I-D' Anne	Denise D' Anne	Letter
I-D' Anne2	Denise D' Anne	Letter
I-D' Anne3	Denise D' Anne	Public Hearing Comments
I-Darrigrand	Jacqueline Darrigrand	Email
I-Darrigrand and Clafin	Jacqueline Darrigrand and William Clafin	Letter
I-EDavis	Evette Davis	Email
I-FDavis	Fred Davis	Letter
I-de Forest	John de Forest	Email
I-Dean	Christopher Dean	Email
I-DeLisle	Jimmy DeLisle	Public Hearing Comments
I-Denefeld	Charles Denefeld	Email
I-Denefeld2	Charles Denefeld	Letter
I-Dennenberg	Hava Dennenberg	Email
I-Donjacour	Annemarie Donjacour	Letter
I-Dowell	Jessica Dowell	Public Hearing Comments
I-Draper	Andrea Draper	Email
I-Duderstadt	Christopher Duderstadt	Letter
I-Duderstadt2	Christopher Duderstadt	Public Hearing Comments
I-Dumont	Suzanne Dumont	Public Hearing Comments
I-Dworsky	Claire Dworsky	Public Hearing Comments
I-Edelson	Ellen Edelson	Email
I-Edelson2	Ellen Edelson	Public Hearing Comments
I-Elias	Evan Elias	Letter
I-Elsner	Nancy Elsner	Letter
I-Englander	Susan Englander	Email
I-Englander2	Susan Englander	Public Hearing Comments
I-Faulkner	Terence Faulkner	Public Hearing Comments

TABLE IX-3 (Continued)
INDIVIDUALS COMMENTING ON THE DRAFT EIR

Commenter Code	Name of Individual Submitting Comments	Comment Format
I-Foree-Henson	Elizabeth Foree & Ralph Henson	Email
I-Fraysse	Pierre Fraysse	Email
I-Fukuda	Hiroshi Fukuda	Public Hearing Comments
I-Garside	Michele Garside	Email
I-Gattuso	Courtney Gattuso	Public Hearing Comments
I-GGerrity	Graham Gerrity	Public Hearing Comments
I-MGerrity	Michael Gerrity	Public Hearing Comments
I-MGerrity2	Michael Gerrity	Letter
I-Glichstern	Anastasia Glichstern	Public Hearing Comments
I-Goggin	David Goggin	Letter
I-Goggin2	David Goggin	Public Hearing Comments
I-JeGoldberg	Jeremy Goldberg	Email
I-JoGoldberg	Jonathan Goldberg	Public Hearing Comments
I-Green	Susan Green	Email
I-Hahn	Thomas Hahn	Letter
I-Hall	Bob Hall	Email
I-Hansen	Eric Hansen	Public Hearing Comments
I-Hart	Paige Hart	Email
I-Hemphill	Pam Hemphill	Letter
I-Hemphill2	Pam Hemphill	Public Hearing Comments
I-Hicks	Tom Hicks	Email
I-Hill	Steven Hill	Email
I-Hillson	Rose Hillson	Letter
I-Hillson2	Rose Hillson	Public Hearing Comments
I-Hirsch	Susan Hirsch	Public Hearing Comments
I-Hobbs	Helen Hobbs	Email
I-Hoffman	Martha Hoffman	Public Hearing Comments
I-Horton	Inge Horton	Email
I-GIHoward	Glenn Howard, Jr., Ph.D.	Letter
I-GoHoward	Gordon Howard, Ph.D.	Letter
I-KHoward	Katherine Howard	Letter
I-Hurlbut	Rob Hurlbut	Email
I-Hyde	Kathryn Hyde	Email
I-Ivanhoe	Richard Ivanhoe	Letter
I-Ivanhoe2	Richard Ivanhoe	Public Hearing Comments
I-Joaquin-Wood	Joan Joaquin-Wood	Email

TABLE IX-3 (Continued)
INDIVIDUALS COMMENTING ON THE DRAFT EIR

Commenter Code	Name of Individual Submitting Comments	Comment Format
I-Johnson	Dominic Johnson	Email
I-Joyce	Sean Joyce	Email
I-Jungreis	Jason Jungreis	Email
I-Jungreis2	Jason Jungreis	Email
I-Kaspar	Trish Kaspar	Letter
I-Kaufman	Noel Kaufman	Email
I-Keegan	Bruce Keegan	Email
I-Kessler	Janet Kessler	Email
I-Khan	Tehmina Khan	Email
I-Kirshenbaum	Noel Kirshenbaum	Email
I-Kohn	Marilyn Kohn	Letter
I-Kohn2	Marilyn Kohn	Letter
I-Koivisto	Ellen Koivisto	Email
I-Koivisto2	Ellen Koivisto	Public Hearing Comments
I-Kuhn	Thomas Kuhn	Email
I-Kuhn2	Thomas Kuhn	Email
I-Kukatla	Rakesh Kukatla	Email
I-Kushner	Pinky Kushner	Letter
I-Kushner2	Pinky Kushner	Public Hearing Comments
I-Lampert	Gabriel Lampert	Email
I-Lampert2	Gabriel Lampert	Email
I-ELang	Eden Lang	Email
I-NLang	Nathan Lang	Email
I-Lawrence	Steve Lawrence	Email
I-Learner	Deborah Learner	Letter
I-Leifheit	Lex Leifheit	Email
I-Letofsky	Larry Letofsky	Email
I-BLewis	Beth Lewis	Email
I-NLewis	Nancy Lewis	Letter
I-Lieb	Reddy Lieb	Letter
I-Lissak	Ron Lissak	Email
I-Litehiser	Linda Stark Litehiser	Email / Letter
I-Livas	Rico Livas	Email
I-Lockwood	Dan Lockwood	Email
I-Louey	Man Kwong Louey	Email
I-Lounsbury	Jill Lounsbury	Email

TABLE IX-3 (Continued)
INDIVIDUALS COMMENTING ON THE DRAFT EIR

Commenter Code	Name of Individual Submitting Comments	Comment Format
I-Mabbutt	Anmarie Mabbutt	Email
I-Madrigal	Marcia Madrigal	Public Hearing Comments
I-Mayora	Edgar Mayora	Public Hearing Comments
I-McCowin	Kathleen McCowin	Email
I-Mcdevitt	Terry Mcdevitt	Email
I-McGrew	Shawna McGrew	Email
I-McGrew2	Shawna McGrew	Letter
I-McGrew3	Shawna McGrew	Public Hearing Comments
I-Meidinger	Roger Meidinger	Email
I-Miller1	Greg Miller	Letter
I-Miller2	Greg Miller	Letter
I-Miller3	Greg Miller	Letter
I-Miller4	Greg Miller	Public Hearing Comments
I-Miller	Mary Anne Miller	Public Hearing Comments
I-Minivielle	Albert Minivielle	Email
I-Mora	Leo Mora	Email
I-Mosgofian	Denis Mosgofian	Letter
I-Mosgofian2	Denis Mosgofian	Public Hearing Comments
I-Moss	Rasa Gustaitis (Moss)	Letter
I-Moss2	Rasa Moss	Public Hearing Comments
I-Mudge	Jane Mudge	Public Hearing Comments
I-Murphy	Dan Murphy	Letter
I-Murphy2	Dan Murphy	Email
I-Myers	Anna Myers	Public Hearing Comments
I-Napoli	Jerome Napoli	Email
I-Newman	John Newman	Public Hearing Comments
I-O'Dell	John O'Dell	Public Hearing Comments
I-Ogilvie	Alan Ogilvie	Letter
I-Ogilvie2	Alan Ogilvie	Email
I-AO'Leary	Andrea O'Leary	Public Hearing Comments
I-O'Leary	Andrea & Rick O'Leary	Email
I-Olivas	Ric Olivas	Public Hearing Comments
I-O'Rorke	Dennis O'Rorke	Email
I-Paskey	Candice Paskey	Letter
I-Pattillo	Chris Pattillo	Letter
I-Pattillo2	Chris Pattillo	Letter

TABLE IX-3 (Continued)
INDIVIDUALS COMMENTING ON THE DRAFT EIR

Commenter Code	Name of Individual Submitting Comments	Comment Format
I-Pattillo3	Chris Pattillo	Public Hearing Comments
I-Pertcheck	Edward Pertcheck	Letter
I-Pertcheck2	Edward Pertcheck	Public Hearing Comments
I-Pfister	Charles Pfister	Email
I-Pinchuk	Miriam Pinchuk	Letter
I-Pinchuk2	Miriam Pinchuk	Public Hearing Comments
I-Posthumus	Yope (Johannes) Posthumus	Email
I-Posthumus2	Yope Posthumus	Public Hearing Comments
I-Queliza	Emily Queliza	Public Hearing Comments
I-Rappolt	Toby Rappolt	Email
I-Ray	Jamie Ray	Letter
I-Ray2	Jamie Ray	Letter
I-Ray3	Jamie Ray	Letter
I-Ray4	Jamie Ray	Email
I-Ray5	Jamie Ray	Email
I-Ray6	Jamie Ray	Email
I-Reid	Patricia Reid	Email
I-Richards	Renee Richards	Email
I-Richman	Dan Richman	Letter
I-Richman2	Dan Richman	Public Hearing Comments
I-Rivera	Diane M. Rivera	Email
I-Robinson	Rosemary Robinson	Email
I-Roller	Terry Roller	Public Hearing Comments
I-Romano	David Romano	Email
I-Romano2	David Romano	Public Hearing Comments
I-Roskoski	Mark Roskoski	Public Hearing Comments
I-Rubio	John Rubio	Public Hearing Comments
I-Rupright	Pam Rupright	Public Hearing Comments
I-RRussell	Carrie Russell	Public Hearing Comments
I-MRussell	Mark (Gelade) Russell	Email
I-Sargent	John Sargent	Public Hearing Comments
I-Schmidt	Colin Schmidt	Public Hearing Comments
I-Schoggen	Leida Schoggen	Letter
I-Schultz	Cheryl Schultz	Letter
I-Schultz2	Cheryl Schultz	Public Hearing Comments
I-Schwartz	Richard Schwartz	Email

TABLE IX-3 (Continued)
INDIVIDUALS COMMENTING ON THE DRAFT EIR

Commenter Code	Name of Individual Submitting Comments	Comment Format
I-Scott	Diana Scott	Email
I-Sherman	G. Sherman	Letter
I-Shimek	Mary Lynn Shimek	Letter
I-Singer	Mike Singer	Public Hearing Comments
I-Solow1	Andrew Solow	Letter
I-Solow2	Andrew Solow	Letter
I-Solow3	Andrew Solow	Public Hearing Comments
I-Soulard	Chris Soulard	Email
I-Splittgerber	Buzz Splittgerber	Email
I-Spoelstra	Henk Spoelstra	Letter
I-Staben	Jeff Staben	Letter
I-Starr	Sheila Starr	Email
I-Stein	Lyn Stein	Email
I-Stern	Kathleen Stern	Email
I-Stern2	Kathleen Stern	Public Hearing Comments
I-Streicker	Joel Streicker	Email
I-Thomashefski	Johanna Thomashefski	Public Hearing Comments
I-DThompson	David Thompson	Email
I-GThompson	Gene Thompson	Email
I-GThompson2	Gene Thompson	Public Hearing Comments
I-Triska	Frank Triska	Public Hearing Comments
I-Van Riel	Walter Van Riel	Public Hearing Comments
I-Warriner	Joyce Warriner	Email
I-Watkins	Richardson Watkins	Letter
I-Watts	Kelley Watts	Public Hearing Comments
I-Weeden	Noreen Weeden	Email
I-Welborn	Tes Welborn	Public Hearing Comments
I-Wilkinson	John Wilkinson	Public Hearing Comments
I-Wood	Joan Wood	Public Hearing Comments
I-Wooding	George Wooding	Public Hearing Comments
I-Woodruff-Long	Lorraine Woodruff-Long	Email
I-Woodruff-Long2	Lorraine Woodruff-Long	Public Hearing Comments
I-Wuerfel1	Nancy Wuerfel	Letter
I-Wuerfel2	Nancy Wuerfel	Letter
I-Wuerffel3	Nancy Wuerfel	Public Hearing Comments
I-Zwolinski	John Zwolinski	Email

SOURCE: ESA, 2012

CHAPTER X

Responses to Comments

A. Organization of Responses to Comments

This chapter presents summaries of the substantive comments received on the Draft Environmental Impact Report (EIR) and responses to those comments. The comments and responses are organized by subject and are generally in the same order as presented in the Draft EIR, with general comments on the EIR or proposed project elements grouped together at the beginning of the chapter. Comments on the Executive Summary or specific mitigation measures are included under the relevant topical section of the Draft EIR. The order of the comments and responses in this chapter is shown below, along with the prefix to the topic codes (indicated in square brackets):

X.B	General Comments [GC]	X.J	Transportation and Circulation [TR]
X.C	Environmental Review Process [ERP]	X.K	Recreation [RE]
X.D	Project Description [PD]	X.L	Biological Resources [BIO]
X.E	Plans and Policies [PP]	X.M	Hydrology and Water Quality [HYD]
X.F	Environmental Setting and Impacts [ESI]	X.N	Hazards and Hazardous Materials and Air Quality [HAZ]
X.G	Land Use [LU]	X.O	Alternatives [ALT]
X.H	Aesthetics [AE]		
X.I	Cultural Resources [CR]		

Within each section of this chapter under each topic area, similar comments are grouped together and numbered sequentially using the topic code prefix and sequential numbering for each subtopic. For example, General Comments [GC] are listed as [GC-1], [GC-2], [GC-3], and so on. Within each topic code and corresponding heading that introduces the comment subject, there are quotes of comments, including the commenter name and a unique comment code that identifies the commenter.¹

¹ Each comment is assigned a unique comment code that corresponds to the type of commenter (i.e., public agency [A], non-governmental organization [O], or individual [I]); an acronym for the agency or organization (or, in the case of individuals, their last name); and the sequentially numbered, bracketed comment from that commenter. For example, the comment letter from the San Francisco Public Utilities Commission is coded A-SFPUC, and the first comment in the letter is coded A-SFPUC-01, the second comment on a different topic is coded A-SFPUC-02, etc. If a single agency, organization, or individual submitted comments more than once (or spoke at the public hearing in addition to submitting written comments), a number is inserted at the end of the identifying initials. For example, if the San Francisco Public Utilities Commission submitted comments both at the public hearing and in a letter; the first comment set is coded as A-SFPUC1, and the second set is A-SFPUC2; the subsequent sequential numbers denote the individual comments from that commenter (e.g., A-SFPUC1-01, A-SFPUC1-02, A-SFPUC1-03, etc.).

However, the reader is referred to Appendices COM and PH for the full text and context of each comment. Appendix COM includes a comment matrix (Table COM-1) that lists all comments received, and indicates the topic code associated with each comment. In some cases, a comment included multiple comment topics.

Following each comment or group of comments, a comprehensive response is provided to address issues raised in the comments and to clarify or augment information in the Draft EIR as appropriate. Response numbers correspond to the topic code; for example, the response to comments on topic GC-1 is provided under Response GC-1. The responses provide clarification of the Draft EIR text and may also include revisions or additions to the Draft EIR. Revisions to the Draft EIR are shown as indented text. New or revised text is underlined; deleted material is shown in ~~striktrough~~.

B. General Comments

B.1 Overview of General Comments

The comments and corresponding responses in this section cover general subjects not directly related to a specific section of the EIR, although in some cases they address a number of interrelated topics discussed in various sections of the EIR. The following categories are addressed under General Comments:

- GC-1, General Comments/Non-CEQA Comments
- GC-2, Project Cost

Portions of some of the comments addressed in this section also relate to other resource topics and are therefore responded to in those sections, including Section X.N, Hazards and Hazardous Materials and Air Quality.

B.2 General Comments/Non-CEQA Comments [GC-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below:

O-CSFN2-01	O-SFPARKS-47	I-Jungreis2-35	I-McGrew2-01
O-HANC-01	O-SPEAK-01	I-Koivisto-01	I-Mora-01
O-PAR-01	O-THD-01	I-Kuhn2-01	I-Ogilvie2-01
O-SCSFBC-35	I-Darrigrand-01	I-Learner-05	I-Starr-01
O-SFOE2-01	I-Jungreis-01	I-Learner-19	

“The Coalition for San Francisco Neighborhoods respectfully requests that the Planning Commission extend the public comment period for the Beach Chalet Athletic Fields Draft Environmental Impact Report (DEIR) for 90 days.

The Beach Chalet DEIR is a very dense and technical document of over 360 pages, and our membership requests the extra time to give it the thorough examination that it requires to return informed commentary on its content.” (*Coalition for San Francisco Neighborhoods, letter, November 9, 2011 [O-CSFN2-01]*)

“The Board of the Haight Ashbury Neighborhood Council supports the request of SF Ocean Edge and others to extend the period of public comment on the draft EIR regarding the Soccer Field (Beach Chalet Athletic Field) for 90 days.

The draft EIR is lengthy and complex and requires additional time for the public to review and respond to it.

This is a huge change proposed for Golden Gate Park (7 acres of artificial turf and large-scale sports lighting) and deserves extremely careful oversight and deliberation.

Please consider the extension of the comment deadline by 90 days." (*Haight Ashbury Neighborhood Council, letter, November 15, 2011 [O-HANC-01]*)

"The Planning Association For the Richmond (PAR) requests a 60 day extension of the public comment period for the above-referenced draft EIR, extending the period from the current deadline of December 12, 2011 to February 10, 2012. PAR is the largest neighborhood association in the Richmond and is keenly interested in the proposed project.

This extension is requested for several reasons. First, the Draft EIR is over 350 pages in length and involves complex, controversial issues that require a considerable amount of time to analyze and develop responsible input by our organization. PAR's next board meeting is not until January 9, 2012. PAR cannot issue a comment letter on the Draft EIR without first being vetted and approved at our Board meeting. Preferably, for an issue of this complexity, PAR would need two monthly meetings to develop and finalize its comments. Thus, an extension until February 10, 2012 is imperative.

Second, a comment period that ends during the month of December creates an unreasonable burden for the public in general to provide responsible comment, due to the predictable year-end demands and preceded by the Thanksgiving holiday period, which is one of the busiest travel periods.

Third, the legislative purpose of the public comment period under NEPA and CEQA is to provide the decision makers with quality, informed public comment to assist in the decision-making process in a constructive manner. Unless this requested extension is granted, that legislative purpose will be significantly compromised.

Please advise me as soon as possible whether this request has been granted." (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR-01]*)

"Other lighting concerns. For more detailed comments on the lack of analysis of lighting in the DEIR, the Sierra Club refers the Planning Department to the expert testimony submitted to Mr. Bill Wycko of the Planning Department by Lumineux Consult. This document is titled 'Expert comments on the Draft Environmental Impact Report for the Beach Chalet Athletic fields renovation,' dated December 10, 2011. (Lumineux Consult www.lumineux-consult.com.info)

lumineux-consult.com)” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-35]*)

“Attached please find letters from our supporters regarding the above project. Please include these in comments in the EIR.” (*San Francisco Ocean Edge, letter, no date [O-SFOE2-01]*)

“MEMORANDUM OF UNDERSTANDING (MOU) AND CITY FIELDS FOUNDATION. The following notations are not meant to impugn the reputation of any group or individual but simply to fit the definition and CEQA requirements and intent that a lead agency ‘use its best efforts to find out and disclose all that it reasonably can’ and that an EIR reflect ‘a good faith effort at full disclosure.’ Guidelines § 15144; 151.

An Agreement was made and entered into on February 16, 2006, by-and between the City and County of San Francisco, acting by and through its Recreation and Park Commission, and the City Fields Foundation C/O Pisces, Inc., a California law trust. The Beach Chalet Athletic Fields Renovation is covered by this agreement.

Since the Beach Chalet Conversion entails transferring responsibilities, and involves a partnership relationship with City Fields Foundation C/O Pisces Inc. which will have a direct impact on the proposed construction, and the areas subsequent maintenance and management, It is our position that all agreements and MEMORANDUMS OF UNDERSTANDING, (MOUs), between the City Fields Foundation C/O Pisces Inc. & the City and County of San Francisco should be included in the EIR.

City Fields Foundation C/O Pisces Inc. is a SOI(c)(3).

The foundation managers are a) John J. Fisher, (president of Pisces, Inc. an investment management company for the ‘Fisher Family’.) b) Robert J. Fisher (chairman of Fisher Development Inc., a general contractor & construction company) c) William S. Fisher (CEO of a private equity fund)

The following are some pertinent excerpts from the MOU made between City Fields Foundation (The Foundation), and the City and County of San Francisco (the City) / San Francisco Recreation & Parks Dept. (RPD) that pertain to the Beach Chalet renovation’s environmental impact;

- ‘The Foundation will select a contractor or contractors of its choice to perform all services relating to site preparation and installation of the Fields.’ (MOU page 3)
- ‘Under no circumstances whatsoever shall the Foundation or its trustees be liable to the City for any damages suffered by the City or any third party (incidental. Consequential or otherwise) arising out of the Foundation’s or its trustees’ acts or omissions related in any way to this Agreement or the construction or use of the Fields, unless specifically stated

otherwise in this Agreement or in a subsequent writing signed by both Parties.’ (MOU page 10)

- ‘City’s Waiver. Except as set forth specifically in this Section 11, the Foundation shall not be responsible for or liable to the City, and the City hereby assumes the risk of, and waives and releases Foundation and its Agents (as defined below) from all Claims (as defined below) for, any injury, loss or damage to any person or property in connection with any act or omission relating to this Agreement by the City or its Agents, and from all Claims (as defined below) for, any injury, loss or damage to any person or property in connection with any act or omission relating to the Turf Maintenance Services. Nothing in this Section shall relieve the Foundation from liability resulting from the act or omission of the construction contractor or contractors the Foundation selects pursuant to section 3.1(B), but the Foundation shall not be liable under any circumstances for any consequential, incidental or punitive damages.’ (MOU page 11)
- ‘RPD will make good faith efforts to include repair and replacement of the Turf in the Capital Program as future capital needs.’ (MOU page 6)
- ‘Indemnity. ‘The Foundation’s obligations under this Section shall survive the expiration or other termination of this Agreement but for a period no longer than three (3) years after the termination of Construction Services at any Field’. (MOU page 12)
- ‘City’s Indemnity. Upon final completion of the Construction Services at each Field and acceptance of the work by the City, the City shall, for the accepted Field, indemnify, defend and hold harmless the Foundation, its officers, agents, employees and contractors, and each of them, from and against any and all demands, claims, legal or administrative proceedings, losses, costs, penalties, fines, liens, judgments, damages and liabilities of any kind (“Claims”). arising in any manner out of (a) any act or omission by the City, its officers, employees, agents, contractors or subcontractors (collectively ‘Agents’), or its invitees, guests or business visitors (collectively, ‘Invitees’). relating to the Project, (b) the use of any field by any member of the public, (c) the condition of or any alleged defect in any of the fields or related facilities, or (d) the Parties’ decision to use turf for a field’s surface.
- In addition to the City’s obligation to indemnify the Foundation, the City specifically acknowledges and agrees that it has an immediate and independent obligation to defend the Foundation from any Claim that actually or potentially falls within this indemnity provision ... The City’s obligations under this Section shall survive the, expiration or other termination of this Agreement.’ (MOU pages 12-13)
- ‘Maintenance of Turf. The Foundation will select a contractor or contractors (including subcontractors) of its choice to perform all services relating to routine, ongoing maintenance of the Turf (‘Turf Maintenance Services’).’ (MOU page 4)
- ‘RPD shall be responsible for all community outreach, public review and for obtaining all necessary governmental approvals in connection with the Project.’ (MOU page 5)
- ‘RPD will provide training and the necessary equipment to RPD staff for the maintenance of the existing Turf fields, Youngblood-Coleman and Franklin Square. Any future gifts of Turf fields from the Foundation will not include a maintenance contract if RPD demonstrates that it is maintaining Youngblood-Coleman and Franklin Square turf fields to the manufacturers’ highest recommended standards.’ (MOU page 6)
- ‘The Foundation shall have the opportunity to place Appropriate signage at the Field Sites acknowledging the contributions of the Foundation and individual donors. The

Foundation may make recommendations regarding the size, content and location of any such signage... ' (MOU page 7)

- 'Field Use. The Parties shall jointly and promptly develop an efficient, fair and equitable system by which the City will allocate Use of the Fields along with all City playfields,' (MOU page 7)
- 'Early Termination and Enforcement. The Foundation may Terminate this Agreement due to the City's failure to comply with any term this Agreement (including all exhibits hereto) 30 days after having given the City notice of such failure, unless the City cures that failure to the Foundation's reasonable satisfaction within that 30-day period, or a different reasonable timeframe mutually agreed upon by the Parties in writing.' (MOU page 8)
- 'the Foundation may bring an action in San Francisco Superior Court to enforce this Agreement,' (MOU page 8)
- 'Access to Information. The City shall provide to the Foundation reasonable access in the most timely manner possible to its employees and public records, including but not limited to construction documents and financial records, necessary to accomplish the purposes of this Agreement and to permit the Foundation to oversee the implementation of this Agreement.' (MOU page 9)
- 'Public Relations. The City and the Foundation shall use all good faith efforts to cooperate on matters of public relations and media responses related to the Project. The Parties shall use good faith efforts to cooperate with any inquiry by the other Party or by the public in regard to this Agreement. Any report or memorandum between the Parties shall be subject to the disclosure requirements of the City's Sunshine Ordinance and the California Public Records Act.' (MOU page 9)

The Board of City Fields Foundation, 'The Team', (only individuals we feel are pertinent to deliberations for this EIR) ...

- John Fisher (president of Pisces, Inc. C/O City Fields Foundation)
- Robert Fisher (Pisces, Inc. C/O City Fields Foundation)
- William Fisher (Pisces, Inc. C/O City Fields Foundation)
- Susan Hirsch (president of Susan Hirsch Associates whose client list includes the 'Fisher Family'.)
- Phil Ginsburg (current RPD GM), (The Recreation & Parks Department is paying for this EIR)
- Dan Mauer (listed in the Beach Chalet DEIR as SFRPD Project Sponsor and Consultant.) (No mention is made in the DEIR of his City Fields Foundation affiliation.)
- Patrick Hannan (Beach Chalet EIR Project Sponsor and Consultant)
- Mack 5 (project management, construction management consulting firm for the renovations of Kimbell Playground, Mission Playground and the proposed Beach Chalet Renovation)
- Yomi Agunbiade (currently unlisted) (past RPD GM)
- Matt Lockary, (currently unlisted), owner of Baycor Builders, (at one time listed on his Baycor web site a business arrangement with City Fields / City of San Francisco for over \$50 million dollars).

Dawn Kamalanathan, (SF-RPD Beach Chalet Project Sponsor), is listed on the City Fields Foundation website as a ‘partners, volunteers, donors, supporters’ along with phil Ginsburg and Dan Mauer....

Since its inception ‘The Team’ of City Fields Foundation lobbyists have successfully fought EIRs for their previous projects by seeking and receiving special categorical exemptions.” [Images from original comment not included here. See original comment letter scan] (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-47]*)

“The Board of Directors of SPEAK met recently to discuss the Soccer Fields complex EIR and we believe that it is not possible for the public to review and understand this complex and controversial EIR in the short period before December 12, a date that is within the most intensive part of the holiday period when people are distracted and many are away.

This is a very controversial issue and difficult to bring to an environmentally desirable solution, so we therefore request an additional 90-day period for the EIR review. Thank you very much,” (*Sunset Parkside Education and Action Committee, letter, November 15, 2011 [O-SPEAK-01]*)

“The Telegraph Hill Dwellers’ Parks, Trees, and Birds Committee requests that the Beach Chalet Athletic Fields DEIR public comment period be extended 90 days from its current deadline of December 1st. The report is lengthy, complex, and detailed, and we need more time to study it in order to craft an informed response. Two holidays will have intervened between the issuance of the DEIR (Halloween and Thanksgiving), and the current deadline. Many of our committee members are going out of town over the Thanksgiving weekend. For all these reasons, we ask that you please extend the comment deadline.” (*Telegraph Hill Dwellers, letter, November 20, 2011 [O-THD-01]*)

“As property owning tax paying residents, we want to register our objections to the project.” (*Jacqueline Darrigrand, Letter, December 9, 2011 [I-Darrigrand-01]*)

“I request the Commission grant a 90 day extension of time for public comment on the DEIR Beach Chalet Athletic Fields.

Comments are currently due December 12th. However, due to the extensive and complex and technical nature of the DEIR, and the need to understand this DEIR in relationship to other potential Golden Gate Park projects, and with the holiday period upon us, I believe this request for an extension of time to comment is reasonable and does not prejudice the proposed project. However, I believe the denial of this request for an extension of time will unfairly burden and

thereby prejudice the opportunity for public comment on this important project.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis-01]*)

“The plan will result in the increased use of Golden Gate Park: there is insufficient analysis of the alternative positive impact this large athletic center would have upon McLaren Park.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-35]*)

“My understanding from the cover page letter is that comments should address the adequacy and accuracy of the DEIR. Comments, ...

ACRONYMS, ABBREVIATIONS, AND GLOSSARY

There are items used in the DEIR missing from this section, such as Title 22, or Title 22

GLOSSARY OF TERMS

There are multiple terms missing from this section that are vital to the discussion at hand. For example, there are no definitions of ‘tree’ or ‘shrub’, nor is there a definition of ‘recreation’ given. Yet major parts of the DEIR and the project in general rely on definitions of these three things.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-01]*)

“This letter is to request that the Commission grant a 90 day extension of time for public comment on the DEIR Beach Chalet Athletic Fields.

Due to the extensive; complex and technical nature of the DRTR; and the need to understand it in relationship to other potential Golden Gate Park projects, and with the holiday period upon us, the December 1 i h comment period does not provide enough time for far review.

Please consider an extension of time for this very important DEIR to be properly reviewed and commented upon.” (*Thomas Kuhn, email, December 11, 2011 [I-Kuhn2-01]*)

“ES-9: The Table ES-1: Summary of Impacts and Mitigation Measures, could provide more information in the cultural resources section, mentioning the various project components that would serve to create an adverse impact on the Beach Chalet Soccer Field as a contributing element to the GGP historic district” (*Deborah Learner, letter, November 29, 2011 [I-Learner-05]*)

“How successful has the artificial turf been in other parks from the viewpoint of players, maintenance staff, and neighbors? If appropriate in the EIR, it would be helpful to get a picture of demand for fields with artificial turf, (as compared to grass turf), and statements/ opinions of playability from players. Have maintenance issues such as drainage and vandalism been problematic? Have there been complaints from neighbors, and how have these been addressed.”
(Deborah Learner, letter, November 29, 2011 [I-Learner-19])

“I am requesting an extension from the Planning Department regarding the public comment period for the Beach Chalet Athletic Fields Draft Environmental Impact Report (DEIR) for 90 days.

I am discovering that the 360 pages is taking a lot of time to read, understand and digest.

This is a very important document and I need more time, and I am sure I am not alone, to process all of the information.” *(Shana McGrew, letter, November 16, 2011 [I-McGrew2-01])*

“hi my name is leo mora i went to polytechnic high school played soccer at that field for two years i don’t think upgrading it will keep the quality it now enjoys.” *(Leo Mora, email, December 9, 2011 [I-Mora-01])*

“I have recently received the Draft Environmental Impact Report on Beach Chalet Athletic Fields Renovation. This is an extremely lengthy and detailed report and requires serious and considerable attention.

In view of the length of the document, the need for many technical questions to be raised, and the fact that we are now approaching the Holiday Season I respectfully request that an extension of time be given in order for the report be examined in detail, and sufficient time be allowed for me to raise questions and seek technical advice on this very important matter.” *(Alan Ogilvie, email, November 15, 2011 [I-Ogilvie2-01])*

“We are writing to urge you to expedite the renovation of the Beach Chalet playing fields for the children of San Francisco.” *(Sheila Starr, email, December 9, 2011 [I-Starr-01])*

Response GC-1

This group of comments consists of the opinions of commenters on a number of topics, including: support or objection to the proposed project; requests for extension of the Draft EIR public comment period; citations of information from other documents without comment; references to other comments submitted separately; and requests for information regarding recreation user preferences between artificial turf and grass turf. These comments reflect the commenters' opinions or relate to non-CEQA issues, and the information will be forwarded to the decision-makers. The environmental impacts of the project are analyzed in Chapter IV of the EIR.

Commenters listed above that indicate support or objection to the proposed project, or request extension of the Draft EIR public comment period did not provide additional comments and thus are included in GC-1. However, it is noted that many other commenters also indicated support or objection to the proposed project, requested extension of the Draft EIR public comment period, or requested that the comment period not be extended. These commenters also provided comments on the EIR and those comments are addressed in other sections of this document. The Draft EIR public comment period was not extended as a result of these requests.

Regarding the request that additional information be provided in the EIR acronyms, abbreviations, and glossary list (I-Koivisto-01), Title 22 is a section of the California Code of Regulations, including hazardous waste. There is no specific description in Title 22 that would be appropriate for inclusion in the EIR acronyms, abbreviations, and glossary list. However, the portions of Title 22 that apply to the analysis of hazards and hazardous materials effects are listed and described in EIR, Section IV.H, Hazards and Hazardous Materials and Air Quality. Similarly, there are no specific definitions of the terms recreation, tree, and shrub. However, tree and shrub resources are described in the environmental setting sections of EIR Section IV.E, Recreation, and IV.F, Biological Resources.

Regarding the comment that the Executive Summary could include more information regarding the findings of the cultural resources section of the EIR (I-Learner-05), CEQA Guidelines Section 15123 indicates that the EIR should contain a brief summary of the proposed actions and its consequences. It further states that the summary should be worded in a clear and simple manner as is reasonably practical. Therefore, the EIR Executive Summary included a brief summary of the significant unavoidable historical resource impact. However, in response to this comment, the EIR page ES-3, paragraph 1, has been revised as follows:

The proposed project would have the following significant unavoidable impacts:

- The proposed project would cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code. The proposed project would materially impair in an adverse manner many of the character defining features of the Beach Chalet Athletic Fields, a contributor to the Golden Gate Park National Historic District. Alterations to the Athletic Fields, including the addition of spectator seating, synthetic turf, circulation paths, and field lights would collectively result in a significant impact. Although no individual project component

would result in the total loss of integrity of the resource, these components would collectively cause the Fields to lose historic integrity to the degree that its significance would no longer be apparent, resulting in a significant adverse impact to a historical resource per CEQA Section 15064.5. Because the installation of spectator seating, synthetic turf, circulation paths, and field lights are crucial to the implementation of the proposed project, there are no mitigation measures that would reduce the level of impact to a less-than-significant level while continuing to meet the project objectives. Therefore, the impact is considered significant and unavoidable.

This revision does not change the analysis or conclusions presented in the EIR.

Regarding the comment that the project would result in the increased use of Golden Gate Park, and that there would be a resulting positive impact on McLaren Park ([I-Jungreis2-35]), it is assumed that the commenter means that increased use of the Beach Chalet Athletic Fields would reduce use of McLaren Park. Increased use of the Beach Chalet Athletic Fields would address some of the unmet requests for playfield time in San Francisco, and is not expected to substantially reduce use of other play fields.

B.3 Project Cost [GC-2]

Summary of Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below:

A-SFPC-Borden-02	I-Darrigrand & Clafin-07	I-Jungreis2-07	I-Moss-06
O-CSFN-08	I-Dennenberg-17	I-Jungreis2-24	I-Napoli-02
O-GGAS2-34	I-Draper-01	I-Jungreis2-29	I-O'Leary-02
O-GGPPA-07	I-Edelson-19	I-Keegan-01	I-Pattillo-05
O-SPEAK3-14	I-Englander2-03	I-Khan-18	I-Pertcheck2-02
I-Anderson-18	I-Forsee-Henson-03	I-Kirshenbaum-01	I-Ray3-02
I-Bar-David-04	I-Fraysee-01	I-Kirshenbaum-02	I-Ray3-06
I-Bartley-11	I-Fukuda-02	I-Lampert2-02	I-Ray3-07
I-Bridges-05	I-Hall-04	I-Learner-09	I-Ray4-05
I-Bridges-06	I-Hall-05	I-LEwis-06	I-Richman-08
I-Browd-03	I-GIHoward-11	I-Litehiser-04	I-Schoggen-01
I-Brown-04	I-GIHoward-13	I-Mabutt-02	I-Solow2-06
I-Bufferum-02	I-GoHoward-09	I-McDevitt-05	I-Staben-01
I-Bufferum-06	I-Ivanhoe-06	I-McGrew-03	I-Staben-03
I-Citron-18	I-Ivanhoe2-03	I-Mosgofian-04	I-Triska-02
I-Clayton-06	I-Joaquin-Wood-01	I-Mosgofian-06	I-Weeden-09
I-Cross-01			

“And as you talk about the recreation open space element and we talk about the issues about privatization of the parks, I think that issue is money. And actually it’s interesting that the Presidio is an example because the Presidio actually has a huge economic engine which you can

spend in 10,000 or \$20,000 a month to rent a house there. And that helps fund some of the nice things that they can do.

And they actually are doing quite well economically because they have other assets that they're able to leverage and we don't have other assets we're able to leverage related to the Park." (Gwyneth Borden, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Borden-02])

"Artificial turf replacement: What happens to the field when it wears out in 8-10 years? This is important because there are approximately 30 acres of artificial turf throughout the city. This would be a rather expensive undertaking, and the city at this point does not have the budget for hardly anything. What is the guarantee that it will be replaced properly? It will be a much easier and reasonable cost-effective replacement. What will be the impact of the park land if there is no money to either replace the turf in 10 years or put back the natural grass?" (Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-08])

"...An EIR must include an adequate discussion of alternatives to ensure informed decision making in the selection of one alternative over another. (See *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.AppAth 713, 735 [‘A major function()1 an EIR ‘is to ensure that all reasonable alternatives to proposed projects are thoroughly assessed by the responsible official.’ (citation omitted)]; see also Pub. Resources Code, § 21002.1(a) (a) [purpose of EIR includes identifying alternatives to the project].) The ‘reasonableness’ of alternatives, which is assessed in part on their financial and physical feasibility. (Pub. Resources Code, § 21061.1)

...Finally, the DEIR is silent as to the economic feasibility of the alternatives, especially as compared to the proposed project. Golden Gate Audubon has been made to understand that the Beach Chalet renovation will exceed \$10-12 million. We also understand that the Polo Fields renovation, which turfeded seven playing fields, cost approximately \$2 million. Clearly, some of the project objectives (e.g., decreased maintenance) could be offset or addressed through the significant financial savings that one of the alternatives may provide (e.g., some of the funds saved could be dedicated to ongoing maintenance of naturally growing grass fields, which would improve safety and access, decrease biological, hydrological, and hazardous materials impacts, and be more consistent with the historic and cultural values of the western end of Golden Gate Park). By failing to forthrightly analyze these alternatives, the DEIR is unfairly skewed toward the proposed project." (Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-34])

"Another project objective is **renovating the restroom building** at Beach Chalet Athletic Fields. This is a worthy goal, but hardly worth substantiating the destruction of parkland and the

expense of a \$9.8 million project. ...” (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-07]*)

“...it is hardly conceivable that suitable soil for growing natural turf again could be obtained at a price and in such a large quantity, except at very high cost. If there is no financial feasibility to replace the worn-out turf, replacement will not take place. The EIR should study Year Eight when the turf is worn out and no funds are available to replace this material; the material is not real soil and therefore not renewable. It cannot be renewed, it must be replaced. The city would be caught in a replacement cycle it could not afford. What does the EIR say about this forecast? Would the fields have to be cordoned off with ‘Keep Out’ and ‘Hazardous Materials’ and removed from use?

The hazards of agreeing to this cycle of replacement without sufficient funds to do the replacement, means that the project would not be viable except for the first five to seven years. No funds are set aside for the replacement of the artificial turf every eight years. The breakdown and deterioration of the artificial materials would cause this project to be unsustainable; the artificial playing surface has to be replaced approximately every eight years. There would be cycles of eight years for the foreseeable future; each time, the plastic and latex materials would have to be removed for transport to a toxic waste disposal area. There is no mitigation for this impact unless city funds are earmarked for the purpose. ...” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-14]*)

“...What will be the new, compared to the prior, custodian hours? How will this be financed?” (*Raja Anderson, letter, December 12, 2011 [I-Anderson-18]*)

“...What will be the new, compared to the prior, custodian hours? How will this be financed?” (*Ilana Bar-David, letter, December 12, 2011 [I-Bar-David-04]*)

“The environmental and economic injustice to San Francisco citizens - \$8 – 11 MILLION that could go to programs throughout the money strapped parks department.” (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-11]*)

“It is much less expensive and more environmentally sustainable for the City to restore the natural grass fields.” (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-05]*)

"This is a onetime gift to the City. When the artificial turf fields need to be replaced in 8-10 years where will the millions of dollars come from?" (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-06]*)

"I attended the Planning Commission meeting on Dec. 1 and heard speaker after speaker present lucid, compelling arguments refuting the DEIR's conclusions. They addressed ... the outrageous cost,..." (*Gary Browd, letter, December 7, 2011 [I-Browd-03]*)

"I also feel that the millions of dollars this will require could be better spent fixing the area up for more environmental usage. 11m actually a little flabbergasted SF can give up it's Championship Football Team but plans to build a million dollar soccer field!" (*Jessica Brown, letter, November 30, 2011 [I-Brown-04]*)

"I also question the overall financial advantages of concentrating heavy use to these fields, versus improving other SF athletic facilities, and doubt the long term savings of artificial turf over grass fields." (*Nancy Buffum, letter, December 12, 2011 [I-Buffum-02]*)

"What are the increased costs in personnel, equipment and materials to the expanded use of the fields?

Is it planned that fees for field use remain affordable to the community-based groups and leagues that currently use these and other Park & Rec fields?

Please factor in the life of an artificial turf field--generally about 12 years. What is the cost of replacing the fields?

Please factor the construction costs plus maintenance costs plus replacements costs and compare to the Compromise Alternative construction and maintenance." (*Nancy Buffum, letter, December 12, 2011 [I-Buffum-06]*)

"...What will be the new, compared to the prior, custodian hours? How will this be financed?

...Why can't RPD clean up the bathrooms without spending \$9.6 million on artificial turf and night lighting?" (*Ben Citron, letter, December 11, 2011 [I-Citron-18]*)

“...Secondly, there are good reasons to view the Compromise Alternative as more cost-efficient than the proposed project. Cost estimates for the planned project have ranged up to \$12 million. Recently, the city renovated seven grass pitches at the Polo Fields for \$1 million-\$1.3 million. From this we can estimate that renovating the four grass pitches at the Beach Chalet might cost less than \$1 million, plus another \$1 million or less for renovated restrooms, ADA-compliant parking and similar improvements. This leaves a substantial budget of perhaps \$10 million to renovate and light fields at another site. There is good reason to think that the Compromise Alternative can deliver greater benefits than the proposed project, at lower cost, and with far less environmental impact.” (*Rupert Clayton, letter, December 10, 2011 [I-Clayton-06]*)

“...Chris Duderstat very convincingly present what will happen again if we do not allow for a more permanent and extended time of play by way of the artificial fields. He presented photos of the fields when they were renovated by Mayor Willie Brown’s decree. Then he presented photos of the fields just one year later. They were abysmal and had again been closed for repairs. Without the financial support of the City Fields Foundation, by installing the artificial turf, we will gain nothing. City Fields Foundation certainly doesn’t want to fund such a temporary and ‘doomed to fail’ plan. Where will the money come from without City Fields Foundation’s help? The city certainly can’t afford the renovation and the continual upkeep. So, it will again fall into disrepair.

...The city charges from \$25 to \$65 per hour depending on the group (youth, adult, non-profit, etc). If and additional 9500 hours were made available and the city were to charge an average of \$35 per, we could generate an additional \$332,500 per year to put back into maintenance of other park needs. ...” (*Richard O. Cross, letter, December 12, 2011 [I-Cross-01]*)

“As property owning tax paying residents, we want to register our objections to the project.” (*Jacqueline Darrigrand, Letter, December 9, 2011 [I-Darrigrand-01]*)

“We do not like the idea of artificial turf--mostly for the expense-- but it is not highly regarded by many environmentalists. Finally, why does this have to be a big expensive undertaking when we are scarcely able to pay our outrageous property taxes and the city is scrambling for money for essential services.” (*Jacqueline Darrigrand and William Claflin, Letter, December 9, 2011 [I-Darrigrand & Claflin-07]*)

“...What will be the new, compared to the prior, custodian hours? How will this be financed? ... Why can’t RPD clean up the bathrooms without spending \$9.6 million on artificial turf and night lighting?” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-17]*)

“Cost -- the taxpayers of this city are under so much financial stress these days- the Compromise Alternative is a much more comfortable plan for San Francisco tax payers.” (*Andrea Draper, Letter, December 12, 2011 [I-Draper-01]*)

“...What will be the new, compared to the prior, custodian hours? How will this be financed? ... Why can't RPD clean up the bathrooms without spending \$9.6 million on artificial turf and night lighting?” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-19]*)

“With the Astroturf we will not save on upkeep. It will commit the City to years of repair and to be a much lower upkeep in terms of preservation. So why switch grass for Astroturf.” (*Susan Englander, public hearing comments [I-Englander2-03]*)

“I am also concerned that the artificial turf must be replaced after so many years; I have heard 10. This creates another expense, another EIR, etc.” (*Elizabeth Foree and Ralph Henson, Letter, December 9, 2011 [I-Foree-Henson-03]*)

“...As you know, many people who oppose this project, have been also intensively involved in the mayoral race, since the incumbent candidate, mayor Ed Lee, had made it clear that balancing the budget was his first priority. And we know that this project is all about the commercialization of the SF GGP to raise more revenue for the city....” (*Pierre Fraysse, Letter, November 21, 2011 [I-Fraysse-01]*)

“but there's some questions about artificial turf. What happens to the field when it wears out in eight to ten years? And this is important because it's not just at Beach Chalet. There are approximately 30 acres of artificial turf throughout the city. They have also had to be replaced, and to replace this is a rather --it's expensive undertaking. And the city at this point does not have the budget for hardly anything. So what's the guarantee that it's going to be replaced properly.

Seems that Astroturf would be a much easier reasonable cost-effective replacement. And what would be the impact on the parkland if there's no money to either replace the turf ten years or put back the natural grass. This whole entire question about artificial turf was not fully studied in the Draft environmental impact report.” (*Hiroshi Fukuda, public hearing comment [I-Fukuda-02]*)

“It is much less expensive and more environmentally sustainable for the City to restore the natural grass fields.” (*Robert Hall, letter, November 29, 2011 [I-Hall-04]*)

“This is a onetime gift to the City. When the artificial turf fields need to be replaced in 8-10 years where will the millions of dollars come from?” (*Robert Hall, letter, November 29, 2011 [I-Hall-05]*)

“I wish to provide the following information to your Commission relating to natural turf fields and use and upkeep costs. Because of the issues raised in the DEIR about issues with the synthetic turf, including the unnatural color that stands out, I contacted the Glen Cove Department of Parks and Recreation for information about the local fields, which are all natural grass.

The first comment was, when the Golden Gate DEIR was explained, that Glen Cove has rejected synthetic turf upon careful investigation and has no intention of pursuing it. Initial cost was very high, there were serious upkeep issues including significant maintenance above and beyond normal maintenance every 3 to 4 years, and there was the issue of the ground tire dust. In addition, the main fields are used for 5 different sports, creating a serious surface lining issue. Just the initial cost for one regulation soccer field (\$700,000) far exceeded the entire Department budget.” (*Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-11]*)

“The Glen Cove Department of Parks and Recreation has an annual budget of about \$140,000 which covers 9 facilities including a golf course, all fields, two beaches, a boat ramp, Morgan Park and other small areas. This includes everything; labor, equipment and supplies. The cost of maintaining the main grass fields is about 30% of the total budget.” (*Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-13]*)

“...Alternative 2: Off-Site Alternative is poorly presented without any consideration for potential economic benefits to neighborhoods where development is needed. ...” (*Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-09]*)

“the synthetic turf will need to be replaced every ten years or so. Who is going to pay for its replacement? Recreation and Park Department has within the past few years shown an inability to maintain what it has built.” (*Richard Ivanhoe, letter, December 13, 2011 [I-Ivanhoe-06]*)

"I'm not sure if the turf field replacement will come from Rec and Park's capital budget for maintenance budget, and they do seem to have a problem with their maintenance budget." (*Richard Ivanhoe, public hearing comment [I-Ivanhoe2-03]*)

"This project is a thinly disguised plan for a professional soccer stadium masquerading as a gift for the children of San Francisco. The artificial turf which is a part of the project is far more expensive than proper maintenance of natural grass and will be dangerous besides." (*Joan Joaquin-Wood, email, December 12, 2011 [I-Joaquin-Wood-01]*)

"The plan requires many many tons of synthetic turf to form the synthetic surface of the soccer fields: there is no analysis of how local conditions (i.e., high humidity, high salinity, cool temperatures) will effect the anticipated cost of regularly required replacement of the synthetic surface due to local conditions impacts upon the lifespan of the synthetic surface." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-07]*)

"Under the financial requirements of the plan, the City must pay over \$6 million now and set aside \$200,000/year for replacement costs of the artificial turf: there is insufficient analysis of the alternative in which the City uses the \$200,000/year monies to instead hire a full-time maintenance crew and entirely replace a grass field every other year." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-24]*)

"The plan requires payment for the fields: there is insufficient analysis of the impact on the added costs for youth soccer for use of the fields once these improvements have been created." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-29]*)

"I oppose the renovation of the soccer fields using artificial turf and installing lights for night games.

Please use natural grass for people to enjoy during daylight hours and use the money saved to renovate playing ies outside the park." (*Bruce Keegan, email, December 10, 2011 [I-Keegan-01]*)

"...What will be the new, compared to the prior, custodian hours? How will this be financed?

...Why can't RPD clean up the bathrooms without spending \$9.6 million on artificial turf and night lighting?" (*Tehmina Khan, email, December 10, 2011 [I-Khan-18]*)

"However, probably unlike most other opponents, one of our concerns is financial.

Specifically, our discomfort with the project concerns the cost of its implementation. At a time when the City of San Francisco is striving to keep expenditures within bounds, an unnecessary project of this nature is contrary to reason. Artificial turf is not only contradictory to the natural environment harmonious to Golden Gate Park, but it is a considerable -- and unnecessary expense." (*Noel Kirshenbaum, email, December 6, 2011 [I-Kirshenbaum-01]*)

"Moreover, not only is the proposed lighting system inimical to the site's natural surroundings, but the lighting is obviously a very costly outlay which appears wasteful and extravagant under the circumstances of the time." (*Noel Kirshenbaum, email, December 6, 2011 [I-Kirshenbaum-02]*)

"Can you compare the environmental cost of locating the complex at the Beach Chalet vs. locating it closer to where soccer players actually live?" (*Gabriel Lampert, email, December 4, 2011 [I-Lampert2-02]*)

"IV.H-9: Project Approvals, Maintenance/funding: What does the Department's gift policy say about the maintenance of gifts and replacement of a capital expense - i.e. turf replacement? This should be mentioned in the EIR under project approvals and project description. Is there a capital trust/gift account to make such funds available - bequest perhaps? Did the MOD between the Department and the fund donor establish such a mechanism?" (*Deborah Learner, letter, November 29, 2011 [I-Learner-09]*)

"What will be the impact on the environment if the artificial turf starts to break down and there is no money to replace it? Will the artificial turf be left in place to degrade?" (*Beth Lewis, letter, December 4, 2011 [I-BLewis-06]*)

"We don't know the long term maintenance of these fields. We have only had such fields for less than 10 years. The long term wear and tear is unknown and repairs will be needed as times goes on. Once these fields begin to deteriorate we could find ourselves in another budget crisis but we won't have the option to replant grass or let the fields become a natural area in the park. This

decision will impact this area of the park for generations to come, without flexibility.” (*Linda Stark Litehiser, email/letter, December 1, 2011 [I-Litehiser-04]*)

“No less significant is the deceptive manner in which this project has been advanced by the Recreation and Parks Department. The proposed gift of the conversion of the Beach Chalet fields to artificial turf from the City Fields Foundation has never been approved by the Recreation and Park Commission or the Board of Supervisors. I sent a letter to the Board of Supervisors back in January 2010 reminding them of their obligations under Administrative Code Section 10.100-305(b) to approve all gifts in excess of \$10,000 including the proposed artificial turf soccer complex at Beach Chalet. Within hours, Fisher Family lobbyists, Susan Hirsch and Alex Clemens, began a flurry of lobbying activity including multiple contacts with General Manager Phil Ginsburg, Board President David Chiu and Supervisor Eric Mar. Just days later, Supervisor Mar introduced Resolution #100053 to approve the City Fields Foundation gifts at Beach Chalet and Mission Playground. But this legislation was never calendared to Committee and simply expired.

Since its inception, the Recreation and Parks Department, the Recreation and Parks Commission, the City Fields Foundation and the Board of Supervisors have conspired together to deny the public the information, notice and opportunity to comment to which they are clearly entitled under the law. The RPD has never supplied the Controller, the Clerk or the Board with the annual and quarterly reports required under Ordinance #060255 and Administrative Code Section 10.100-305(a). The RPD has also refused to report the City Fields Foundation gifts on its website as required by Sunshine Ordinance Section 67.29-6.” (*Anmarie Mabbut, email, December 12, 2011 [I-Mabbut-02]*)

“Maintenance costs - There was no data describing the current costs of maintenance versus the cost of the plastic turf. I worked for Saint Ignatius High School during their construction of plastic turf fields and their subsequent replacement eight years later. The replacement cost for I soccer/football sized field was \$430,000 after 8 years and \$100,000 for replacement/cleaning of the drainage system in the ninth year. If the Beach Chalet fields are the size of four soccer pitches then the cost extrapolates to approx. \$2,000,000 for 8 years not including the c.c.s.f. cost of initial installation. Compared to labor (1 gardener @\$70,000 a yr. x 8= \$560,000 + materials \$80,000=\$640,000) I don’t see how this project saves in maintenance costs.” (*Terry McDevitt, email, January 1, 2012 [I-McDevitt-05]*)

“What maintenance cost is the SFRPD saving at the expensive of our environment?” (*Shana McGrew, email, no date [I-McGrew-03]*)

“Changing the historic character of GGP is not justified by the goal of reducing gardener and custodial maintenance costs, or increasing revenue from more play time. The debate here is not between no play time and huge play time. It’s not necessarily about natural grass turf play time vs. artificial turf play time. It’s about revenue and costs.

It’s about whether a partnership between RPD and the Fields Foundation which is promoting synthetic turf shall override the Master Plan and the historic character of the Park,

The flip side is it is about RPD shedding responsibility for maintaining parklands with gardeners and custodians on a regular basis, with regular maintenance costs.

I did not see this debate dealt with in any detail in the DEIR, because the project goals are accepted on face value, vis., more play time (revenue), less maintenance (cost). But is this what the residents of San Francisco want in Golden Gate Park?” (*Denis Mosgofian, letter, December 11, 2011 [I-Mosgofian-04]*)

“The excuse currently is that these kinds of changes are necessary to address budget shortfalls. This is merely a political dodge by administrators to avoid demanding that our federal dollars be sent back to us to support our community.

I believe it is time to stop accepting historic changes on the alter of budget deficits. And it is time to be critical of the precedent such public-private (corporate) partnerships establish. In my view, this needed to be addressed in the DEIR.

The Planning Department is in the position of enabling this project, or of being more critical. I urge you to be much more critical.” (*Denis Mosgofian, letter, December 11, 2011 [I-Mosgofian-06]*)

“Long term costs compared to the cost of investing in improvement and maintenance of the existing grass fields, and the fact that the turf has to be replaced every 10 years or so but as of now no manufacturer is recycling its product.” (*Rasa Gustaitus (Moss), letter, December 12, 2011 [I-Moss-06]*)

“The costs of renovating the fields with natural grass and gopher abatement will be substantial less than that introducing artificial surfaces and lighting. At a time when all city and county agencies are under severe budgetary constraints, spending ten to twelve million dollars on the proposed project is profligate! Other cheaper, natural alternatives exist and MUST be considered. DON’T LET THIS PROJECT GO FORWARD as currently proposed!” (*Jerome Napoli, email, December 12, 2011 [I-Napoli-02]*)

"1. The remake of this existing field is not about creating more playing time for kids - it's about following the money which leads directly to RPD taking advantage of another opportunity to get tax payers to pay again to 'renovate' a beloved play space into something that RPD can market to larger leagues to whom they can charge top dollar for the use which ultimately displaces use by smaller local low-stress play groups.

2. Kids don't need mega athletic complexes that are in operation way into the night to have quality experiences, and leagues don't need another excuse to make children's sports more about winning and less about being a kid. RPD needs to take care of what they have and remember that they are supposed to be all about 'recreation' and not about making money off tax-paid public property." (*Andrea & Rick O'Leary, email, December 11, 2011 [I-O'Leary-02]*)

"The DEIR fails to include an analysis of the maintenance costs that compares a new artificial turf field with a newly renovated, state of art, living grass field. This should include replacement costs of the artificial turf after 10 years (the standard warranty length) and the expense to repair vandalism and all other expenses involved in maintaining both types of fields. It should be done over a 20 year period to allow for the cost of artificial turf field replacement. Doing so may very well demonstrate that the anticipated savings is less than what would justify the proposed project." (*Chris Pattillo, letter, December 8, 2011 [I-Pattillo-05]*)

"Tires --tires were designed to be tires. Tires were not designed to be a playing surface. And people mentioned, you know, this is the use of taxpayer money. Because these fields have to be thrown away every ten years, we as taxpayers --and I live in the Bayview --we as taxpayers are going to have to pay to have these replaced every ten years. And yet San Francisco claims to be an environmentally friendly city and we have a goal no landfill use by the year 2030. And someone told me that, 'Oh, they're just going to exclude Rec and Park. Rec and Park didn't have to comply with that.' But taxpayers are going to have to comply with that and taxpayers are going to have to pay for the replacement of these fields every eight to ten years. I mean, if you look at studies, I mean, the fact of the matter is maintenance on natural grass and maintenance on artificial turf costs the same if you look over time. The yearly average of maintenance costs the same. I live near Silver Terrace Playground. It's an artificial turf field. It's not maintained properly. The city doesn't have the money to maintain any kind of fields properly. ..." (*Edward Pertcheck, public hearing comment [I-Pertcheck2-02]*)

"...is the answer to spend \$45 M, of which \$20M is tax payer bond funds that were approved to improve neighborhood parks throughout the city that are in desperate need of repairs - and build a sports complex?"

RPD defers millions of dollars of needed capital improvement / maintenance projects in our parks every year. Children's playgrounds are dilapidated and more are needed. Does this project really reflect the intent of the voters when they voted to approve these funds? Does this serve the park, park visitors, neighbors, the environment and wildlife?" (*Jamie Ray, letter, no date [I-Ray3-02]*)

"RPD has claimed that they can't afford to hire an athletic turf specialist to maintain these fields. Instead a gardener, without the highly specialized skills needed to maintain athletic fields to maximum capacity usage has been maintaining these fields in such a lackluster manner as to cause his work habits to be common knowledge amongst neighbors who don't even have access to these fields.

If RPD can't afford to pay someone with the skill needed to maintain the grass turf fields, is it reasonable to expect that funds will suddenly be available to provide the equally specialized maintenance of artificial turf and the entire proposed sports complex? Including maintaining shower rooms, and other facilities?

Or are the fields going to be privatized, with the Fisher brothers' City Fields providing the funding for maintenance and operation? If so, the public hasn't been told." (*Jamie Ray, letter, no date [I-Ray3-06]*)

"Proper care of these fields, including regular aeration to reduce compaction would reduce field closures due to rain and reduce the extent to which fields are currently "rested." The Beach Chalet Soccer Fields rest on sand, beneath the sod's (compacted) loam layer. Sand provides excellent drainage. If necessary, perforated drainage tubing could be installed under the turf to carry away excess water on heavy rain days, at minor cost. England plays on grass throughout their heavily rainy winters as do many world class countries. Why can't we? 'The city that knows how.'

The answer is not a \$45M capital improvement project, with maintenance to be added to the millions of dollars of deferred maintenance project repairs \$20M of tax payer funds should be spent on increasing the quality of life for parks and park visitors across our city.

We should pay a turf specialist to improve drainage and overall field conditions to keep them available on weekends when demand exceeds current use capacity. " (*Jamie Ray, letter, no date [I-Ray3-07]*)

"The only beneficiaries of this intrusive and objectionable element are the Bay Area adult leagues that the city hopes will pay enough to cover the cost of replacing the artificial turf they play on." (*Jamie Ray, letter, December 12, 2011 [I-Ray4-05]*)

“Then, further asks the rational person, Is there no moral problem with spending a ton of dough on a project on public land that will serve a small, exclusive percent of ‘the public?’ Could it be more than one percent? It would seem that if you really want to engage ‘the public,’ you would get this Proposal into the next City-wide Referendum. Then you, and all of us, will really find out what public thinks of Rec/Park’s scheme.” *(Dan Richman, letter, no date [I-Richman-08])*

“While there are conflicting opinions about the financial burdens of artificial versus real turf, about the dangers to the users of the artificial turf, about the costs of installation and maintenance of artificial turf and other issues,” *(Leida Schoggen, letter, November 29, 2011 [I-Schoggen-01])*

“...If they have not already done so, I request that the City Fields Foundation provide technical comparison of the efficiency (and cost) of 60’, 45’ and 32’ light poles to light Beach Chalet including the proposed locations for the different height light poles, the type of light fixtures to be used on the different size light poles, and some estimate of the amount of spill over and reflected light for the different height light poles and fixtures (light pole heights are approximate). Again, if it has not already been done, perhaps a field lighting contractor could provide the requested lighting comparison....” *(Andrew Solow, email, December 1, 2011 [I-Solow2-06])*

“Planning Commission - Patrick Hannan from City Fields Foundation has been instrumental in changing how athletic fields are being build throughout the City. Though artificial turfs have been asset with regards to less immediate and short-term costs to DPR. Matter of fact, it will cost the people of SF to maintain these turf fields. For instance, the Mission Street and 16th fields are no longer safe to play on; the materials has torn beyond repair, the tires and other materials are forming dune like piles and DPR cannot pay for its maintenance. At Crocker Amazon, the fields are being used beyond their intended use. The DPR has immensely increased the fields usage starting @ 6:00 am for many sports and up to 10:00 pm. The department that issues permits does not care about keeping the environment safe and rather, are asking for high fees to play on said areas.

If the Beach Chalet fields are going to be built, then (a) have DRP and City Fields Foundation provide adequate long-term maintenance service as long as either party is in existence;” *(Jeff Staben, letter, December 6, 2011 [I-Staben-01])*

“Develop long-term planning for adequately studying the long-term effects and costs for having turf fields; and” *(Jeff Staben, letter, December 6, 2011 [I-Staben-03])*

“...In the absence of a sure solution and in the absence of deciding which is really best, what I would like as a citizen is to have the lowest cost alternative which provides the best use with the lowest cost per participant hour. I don’t know what that is.” (*Frank Triska, public hearing comment [I-Triska-02]*)

“This is a onetime gift to the City. When the artificial turf fields need to be replaced in 8-10 years where will the millions of dollars come from?” (*Noreen Weeden, email, November 29, 2011 [I-Weeden-09]*)

Response GC-2

With respect to comments related to funding or financial implications of the project, CEQA Guidelines Section 15382 states that a social or economic change by itself shall not be considered a significant effect on the environment. Therefore, the EIR is not required to address comments related to the project’s funding or financial implications when those implications would have no environmental effects. No further response is required.

Comment O-GGAS2-34 requests evaluation of the economic feasibility of project alternatives, and cites Public Resources Code Sections 21002.1(a) and 21061.1. Section 21002.1(a) states that “The purpose of an environmental impact report is to identify the significant effects on the environment of a project, to identify alternatives to the project, and to indicate the manner in which those significant effects can be mitigated or avoided.” Section 21061.1 states that “‘Feasible’ means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors.’ In identifying a range of reasonable alternatives, evaluation of economic feasibility is not required to determine the overall feasibility of an alternative. Pursuant to CEQA Guidelines Section 15382, the EIR is not required to address comments related to the project’s funding or financial implications when those implications would have no environmental effects.

As part of the consideration of the project for approval by the SFRPD, findings, with respect to impacts that cannot be mitigated to a less-than-significant level must indicate that “[s]pecific economic, legal, social, technological, or other considerations ... make infeasible the mitigation measures or alternatives identified in the environmental impact report” (Public Resources Code Section 21081(a)(3)). This finding must be based “on substantial evidence in the record” (Public Resources Code Section 21081.5), which may—and, in most instances does—include information in the public record that is in addition to the EIR. Therefore, the determination of whether to adopt or reject one or more project alternatives, including the feasibility of those alternatives, financial and otherwise, is not part of the EIR, but is made by the on the basis of all the

information in the record. The function of the EIR is to identify the physical effects of the proposed project and alternatives, not to evaluate their financial feasibility.

However, for informational purposes, maintenance of the proposed project by existing SFRPD staff at 1/3 full time equivalent would continue to be funded under the existing maintenance program. As indicated in Response PD-4, 1/3 full time equivalent maintenance staff would provide sufficient synthetic turf maintenance, based on SFRPD experience with existing artificial turf fields. As discussed in Response HAZ-2, the expected life span of the synthetic turf is anticipated to be a minimum of 10 years. Turf replacement funding would be managed by the following process: San Francisco Recreation and Parks Department maintains a capital asset program that tracks the condition, life expectancy and replacement cost for each park asset. This project would be entered into this tracking system once constructed. As with all capital renovation needs, the San Francisco Recreation and Parks Department forecasts capital needs, determines the appropriate funding mechanism at that time, and implements the renovations needed. At this time, a specific fund source allocation has not been identified for turf replacement, but would be identified through typical funding opportunities such as the General Fund, Open Space Fund, general obligation bonds, revenue bonds, grants, and philanthropic gifts.

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C. Environmental Review Process

C.1 Overview of Comments on the Environmental Review Process

The comments and corresponding responses in this section cover topics in Chapters I and II of the EIR. These include topics related to:

- ERP-1, Environmental Review Process
- ERP-2, Project Approvals
- ERP-3, CEQA Topics Eliminated from Further Discussion in the Initial Study

Portions of some of the comments addressed in this section also relate to other resource topics and therefore, those portions of the comments are responded to in those sections, including discussion of cumulative impacts in applicable resource sections and Section X.O, Alternatives.

C.2 Environmental Review Process [ERP-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-CSCH-01	O-SPEAK2-02	I-Joyce-03	I-Mosgofian-03
A-SFPC-Antonini-13	O-SPEAK3-01	I-Jungreis2-01	I-Mosgofian2-01
A-SFPC-Moore-04	O-SPEAK3-02	I-Jungreis2-20	I-Mosgofian2-05
A-SFPC-Moore-05	O-SPEAK4-02	I-Kessler-02	I-Moss-02
A-SFPC-Olague-01	I-Bard-01	I-Kohn2-01	I-Moss2-01
A-SFPC-Sugaya-01	I-Barish-05	I-Kohn2-13	I-Pfister-03
A-SFPC-Sugaya-05	I-Bartley-07	I-Koivisto-01	I-Ray4-01
O-CSFN3-01	I-Campos-01	I-Koivisto-33	I-Richards-02
O-GGAS-02	I-Campos-03	I-Koivisto-40	I-Richman-04
O-GGAS2-05	I-Chappell-01	I-Koivisto-46	I-Richman2-01
O-GGAS2-06	I-AClark-07	I-Kushner-03	I-Rivera-01
O-GGPPA-02	I-Cuddeback-01	I-Kushner-04	I-Rivera-07
O-PAR2-01	I-Edelson2-03	I-Kushner-05	I-Romano-08
O-PAR3-06	I-Hansen-01	I-Kushner2-01	I-Romano2-04
O-PAR4-01	I-Hirsch-01	I-Lawrence-01	I-Sherman-02
O-PAR5-01	I-Horton-04	I-Learner-07	I-Weeden-06
O-SCSFBC-09	I-GoHoward-08	I-Learner-20	I-Wuerfel-06
O-SFPARKS-01	I-Ivanhoe-04	I-Mabutt-04	

“The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on December 9, 2011, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents) pursuant to the California Environmental

Quality Act.” (Scott Morgan, Director, State of California Governor’s Office of Planning and Research, State Clearinghouse and Planning Unit, letter, December 12, 2011 [A-CSCH-01])

“Then another person brought up the question --a couple people brought up the waste treatment plant that’s proposed apparently by SFPUC. This is a separate project. I mean, I don’t think it’s right to try to analyze them together because that might not happen. And it will be evaluated on its own merits and so I think it should be considered. Yes, it is a possibility that that could happen but we’re going to have that make that decision independently and one project is not dependant upon the other.” (Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-13])

“I’ll probably write some additional comments on that, but one of the things which is of concern, it was briefly touched on in passing by some of the people who were presenting is indeed the disconnect with us as a city having properly updated our Recreation and Parks element, which is indeed an integral part of the policy document referred to as the general plan. And that is hanging out. And one of the most important things in that particular element is for me the further commercialization of our open spaces, and not just of Golden Gate Park but everywhere else in the city.

And while I think it is a collective policy discussion we would all have the think about in order to make our city fiscally viable, to do a wholesale commercialization without having reflected on that in the larger context of the city for me is an ill-timed...

I’m saying that because as planning commissioners, as planners, as architects, as citizens, I think we need to be able to reference projects with comprehensive plans and with comprehensive policy discussions. And I do not believe that we have completed the policy discussion of where we want to go with our recreation and park open space as a city from here on into the future.” (Kathrin Moore, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Moore-04])

“On your instruction sheet, you are asking that written comments be submitted by December 12th addressed to Bill Wycko, Environmental Review Officer and the address. Does that mean that people will not submit by e-mail? That’s been very confusing in the two most recent EIRs because there’s no e-mail address given, and people don’t know what to do.” (Kathrin Moore, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Moore-05])

“And I think what this raised for me a little bit was a process question and in the future, I guess this is something maybe we could discuss during the Commissioners’ comment period is the idea

of providing more education to the public about, you know, exactly, you know, the Draft EIR process, the EIR, and, you know, what types of comments are expected regarding the different documents and who has jurisdiction over what and what it means because I think sometimes it's impossible for members of the public to actually understand the process that goes on here. So I don't -- I welcome the comments that even the ones that related to the project because I think it was important sometimes. This is a forum still where people are able to raise those issues even though ultimately it will be Park and Rec that makes -- but there's still -- in other words there's still a lot of time. So the Draft EIR will probably take months before the final EIR with the comments and responses is responded to and then, you know, then there's Park and Rec and, you know, other bodies. So there's still plenty of time to weigh in on this project. It doesn't end after tonight." (*Christina Olague, President, San Francisco Planning Commission, public hearing comment [O-SFPC-Olague-01]*)

"I've heard a lot of testimony from people about the project and kids and all that stuff. That has nothing to do with the environmental report. And as a matter of fact this Commission has no approval powers over this project except for the environmental report. So if you're urging us to reject the project or approve the project, that's the Rec Park Commission, not us.

So I can't prevent you from testifying and expressing your opinions and all of that, but you should keep in mind that this Commission is not the one that ultimately approves this particular project.

I know that we have the power to accept or reject the environmental report which is a little different kind of animal, but the actual project approval lies with Rec Park Commission." (*Hisashi Sugaya, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Sugaya-01]*)

"Isn't it also true that -- isn't it also true, staff, that -- in the past uncertain on certain environmental reports we've been told by staff that they've been responding to comments that have come in well after the comment period is over; is that true?" (*Hisashi Sugaya, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Sugaya-05]*)

"...this is running at the same time as the Rec and Open Space elements of the San Francisco general plan. And as Mr. Rizzo said, there are some legal decisions that need to be made statewide.

So the EIR is intended to be an informational tool that helps the city leaders make critical decisions. We need to have certain things in place on -- for instance, the legal ruling that Mr. Rizzo mentioned and the Rec and Open Space element before this comes into play." (*Coalition for San Francisco Neighborhoods, public hearing comment [O-CSFN3-01]*)

“We also know that the Recreation and Parks Dept. has already predetermined the ‘preferred alternative’ for the project, regardless of the outcome of the environmental review.” (*Golden Gate Audubon Society, letter, November 21, 2011 [O-GGAS-02]*)

“The Planning Department (at the urging of the RPD and City Fields Foundation) initially tried to circumvent the EIR process by issuing a Categorical Exemption in April 2010. In the Categorical Exemption, the Planning Department claimed, among other things, that the project was consistent with all land use plans and that it would not have a significant negative impact on the historical and aesthetic resources. (See Categorical Exemption, at 6, 11)

The Planning Department and RPD only relented and agreed to produce an EIR once Golden Gate Audubon and other groups and individuals appealed the Categorical Exemption. The DEIR does not reflect this history and, as such, is misleading to decision makers about the CEQA process to date.

Moreover, given the extremely close relationship between RPD, the Planning Department, and the private City Fields Foundation, Golden Gate Audubon is not confident that the Planning Department exercised the kind of ‘independent judgment’ in preparing the DEIR that is required by law. (See *Friends of La Vina v. County of Los Angeles* (1991) 232 Cal.App.3d 1446; see also *Protect the Historic Amador Waterways v. Amador Water Agency*, supra, 116 Cal.App.4th 1 099 [requiring independent factual analysis]) Because the departments have not been forthcoming, even to Sunshine Act Requests, about documents and communications related to this matter, the public and decision makers have no way of discerning the independence of the Planning Department’s judgment in this matter.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-05]*)

“Throughout the document, the DEIR’s authors rely on assumptions and provide conclusions without providing supporting facts or other evidence. This is not allowed under CEQA. The DEIR must set forth the factual basis for these conclusions rather than merely assume the conclusions it is supposed to prove.² The DEIR must be revised to provide the foundations for these conclusions.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-06]*)

“The current Recreation and Park Commission has never over-ruled the wishes of the Department. In fact, most decisions are made with a unanimous vote by the Commission. **We can assume that once the EIR has been finalized, the Recreation and Park Commission will once again ignore their own planning document and vote to destroy the bucolic nature of the**

western end of Golden Gate Park.” (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-02]*)

“While both projects identified above would be located next to each other in the western end of Golden Gate Park, the Planning Department and its commission are conducting sequential environmental reviews of each project separately. The California Environmental Quality Act (CEQA) requires that the ‘cumulative effects’ of all environmental impacts on a common area be assessed.

As indicated in its communications of March 4th, November 22nd and December 15th of this year, PAR believes that, in order to assess the ‘cumulative effects’ of both projects, the environmental impacts from each project cannot be assessed and applied sequentially. As a result, PAR suggests the DEIRs for both projects be considered concurrently.

A possible alternative would be for the Planning Commission to proceed with a sequential certification of each EIR separately and then request that the Recreation and Parks Commission consider and apply both concurrently. Because the San Francisco Public Utilities Commission is the proponent of the water treatment plant, that may not be possible for the Recreation and Parks Commission to do.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-01]*)

“BCAF EIR Public Comment Period should be continued to the release of the Westside Water Treatment V Plant DEIR and the Groundwater Project. We are concerned that this EIR has been issued separately from the DEIR for the Westside Water Treatment Plant. We understand that the BCAF DEIR does not judge this cumulative impact to be important; however, we do not see how the cumulative impacts of these projects can be evaluated by the public without the complete information that would be provided by having all DEIR’s available at the same time.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-06]*)

“The purpose of this letter is to urge that certification of the draft Environmental Impact Report for the Beach Chalet Soccer Fields Project be delayed until the draft EIR for the San Francisco Public Utilities Commission’s Water Treatment Plant has been published and until the DEIRs for both projects in the western end of Golden Gate Park can be considered together.

Even if the proposed soccer fields are initially found to have potential environmental effects on the park that are ‘individually limited’, those effects may be ‘cumulatively considerable’ when viewed in connection with those from the proposed water treatment plant. The publication date of the DEIR for the water treatment plant is unknown.

Nevertheless, the SFPUC’s ‘preferred alternative’ for the location of its water treatment plant is still the western end of the park adjacent to the soccer fields. Pumps that may be enclosed in the

plant would extract water from the aquifer underneath that portion of the park and pump it into San Francisco's pristine Hetch Hetch), Water System without additional treatment." (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR4-01]*)

"...we hope you will consider it in conjunction with the EIR, the final one, for the water treatment plant that is designed to go in between the soccer fields and Murphy's Windmill.

The reason for doing that is twofold. Number one, we think that the scope of this particular Draft EIR is far too narrow. It doesn't even consider the cumulative effect of this other proposal for that particular portion of the Park. Not only on the Park but also in the immediate neighborhood.

So we'd like to reiterate that request that you schedule the consideration of both EIRs together and we will by that time, believe me, have proposals from Recreation and Park Department and we'll be there to either support or oppose either over both projects. I don't know which it's going to be right now." (*Raymond Holland, Planning Association for the Richmond, public hearing comment [O-PAR5-01]*)

"A programmatic EIR to analyze the cumulative affects of the project is warranted by CEQA." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-09]*)

"... In the Appendix A NOP / Initial Study of the DEIR under HAZARDS AND HAZARDOUS MATERIALS it asks, does it; 'Topic a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? (**Potentially Significant Impact**)' (pages 53 and 54)

Subsequently, this topic appears to have been rewritten in the DEIR to read; 'Impact HZ-1: The proposed project would not create a significant hazard to the public or the environment through routine use, disposal, handling, or emissions of hazardous materials. (**Less than Significant**)' (pages ES-14 and IV.H-27)" (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-01]*)

"...the proposed Soccer Fields project should be reviewed together with the proposed Recycled Water Treatment Plant which is also to be located at the western end of Golden Gate Park. The cumulative impacts of both proposed projects need to be evaluated together. Until a DEIR for the Treatment Plant is published this DEIR for the Beach Chalet Soccer Fields should not be approved." (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-02]*)

“Cumulative Impacts: Recycled Water Treatment Plant. The proposed Soccer Fields project should be reviewed together with the Recycled Water Treatment Plant which is also proposed for location at the western end of Golden Gate Park. The cumulative impacts of both proposed projects need to be evaluated together. There is more than enough information available to allow analysis of the proposed Treatment Plant vis-a-vis the Beach Chalet Soccer Fields. ...” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-01]*)

“Cumulative impacts: Precedent for future installation of artificial turf and stadium lighting should be studied as a part of cumulative impacts. The EIR should study the likelihood that if this project is approved, there would be subsequent attempts to convert the Polo Fields to artificial turf with stadium lighting. The EIR should study this eventuality whether or not it is affirmed by the project sponsor; the public senses this strongly as a possible precedent.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-02]*)

“...the proposed Soccer Fields project should be reviewed together with the proposed Recycled Water Treatment Plant which is also to be located at the western end of Golden Gate Park. The cumulative impacts of both proposed projects need to be evaluated together. Until a DEIR for the Treatment Plant is published this DEIR for the Beach Chalet Soccer Fields should not be approved.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-02]*)

“I haven’t gotten one survey asking me about how I feel about the possible impact of this drastic proposal. I walk around Golden Gate Park all the time every day. It’s my home. It is my backyard.

So you should reject this, send this back and have the Rec and Park Department do a full survey for the people who actually live on 48th Avenue and Irving and on an equally similar side on the Outer Richard area. I got a survey asking me how I felt about the AT&T electronic box and I sent that back saying I opposed it. I have heard nothing from Rec and Park about how I feel as a tenant for over seven years living on 48th Avenue and Irving, how I feel about this program.” (*Kevin Bard, public hearing comment [I-Bard-01]*)

“Despite significant alterations to the appearance of the Park, the DEIR concludes that these changes do not significantly impact the aesthetics of the project environment. There are several reasons why this conclusion is incorrect and must be re-examined.

...The DEIR’s conclusions are based on the subjective determinations of consultants engaged by the Department of Recreation and Parks, the project sponsors. There is a strong likelihood that these consultants are biased, and given the significance of this project, their opinions are not

sufficient. The only valid and meaningful determination of the project's impact on the aesthetics of the site is empirical evidence based on rigorous, objective research. This research should be conducted by an experienced, independent research organization. It should include an adequate number of randomly selected subjects that represent the population affected by changes to the site, it should use a questionnaire or other survey technique that will elicit valid and reliable responses, and in all other ways it should be conducted using standardized, generally accepted scientific methodology." (*Jean Barish, letter, December 12, 2011 [I-Barish-05]*)

"That the report is commissioned by the SF Recreation & Parks Department who has wholeheartedly endorsed the artificial turf project (without any environmental consideration) as a money maker and is only begrudgingly and at the threat of lawsuit commissioning the EIR in itself is ethically challenging." (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-07]*)

"I urge the Planning Commission to STOP the Beach Chalet Soccer Complex project, because the proposed use of artificial turf and stadium lighting to extend use beyond daylight hours is a blatant violation of the environment defined in the Golden Gate Park Master Plan for the park. ..."
(*Roland Campos, letter, December 11, 2011 [I-Campos-01]*)

"... And the water treatment plant is also a major assault Golden Gate Park. ..."

Regarding the water treatment factory, I request that you please support the following:

1. LOCATE THE FACILITY OUTSIDE OF GOLDEN GATE PARK

2. FOLLOW THE 1998 GOLDEN GATE PARK MASTER PLAN and use this areas of Golden Gate Park for more meadows, LIVING grass practice fields, a new picnic area or new plantings for EVERYONE to enjoy - not a factory." (*Roland Campos, letter, December 11, 2011 [I-Campos-03]*)

"I have carefully reviewed the Draft Environment Impact Report on the Beach Chalet Athletic Fields and find it inadequate to address the impacts of this project. 'An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information that enables them to make a decision that intelligently takes account of the environmental consequences.' (DEIR, page 1-5). This document virtually ignores the vast planning record related to the environmental and historic resources of the site and is thus inadequate to provide decisionmakers with the information needed to take this into account." (*Jim Chappell, letter, December 10, 2011 [I-Chappell-01]*)

“It is recommended that a new research consulting and oversight committee be formed of groups and organizations from neighborhoods, community organizations, environmentalists, historical preservationists and soccer leagues to consult, oversee and sunshine the research, analyses, and recommendations. This follows the DEIR precedent which identifies San Francisco Recreation and Parks Department and City Fields Foundation as DEIR project sponsors and consultants.

To avoid possible bias, it is recommended that the committee not include previous DEIR consultants, sponsors and preparers.

Action on Beach Chalet Athletic Fields Renovation. It is recommended that there be no action on the proposed Beach Chalet Athletic Fields Renovation until the new DEIR research is completed: evaluated for validity and reliability: thoroughly vetted and sunshined to the public and until the DEIR proposal is rewritten to include the research analyses, findings and the evaluation of environmental impacts, mitigation measures and alternatives.

It is recommended that the DEIR research be published and made accessible for public review and comments for a minimum of forty days and subsequently be on the agenda of the San Francisco Planning Commission within fifteen days. Written comments to the San Francisco Planning Department be accepted before or within fifteen days after the commission meeting.”
(Ann Clark, letter, December 12, 2011 [I-AClark-07])

“I think that as I speak for the project, the comments that I would have about the Draft EIR is that I degree that it is adequate, it is complete, and I would point out again that it has found less than significant levels of impact in the key areas as the Department reported earlier. ...

But at the end of the day about the EIR, I think we have to agree that the Draft EIR has been complete and addresses the issues that are important. Thank you very much.” *(Sam Cuddeback, public hearing comment [I-Cuddeback-01])*

“...I totally agree with all the people who’ve said that the residents don’t know about this. I happen to know because I happen to know. I’m but --so many people do not have a clue that this is going to be done.” *(Ellen Edelson, public hearing comment [I-Edelson2-03])*

“It is important to note that the project that you have here in front of you today has been around for several years and has gone through a great deal of public comment already. The turf and lights are still part of this project but an effort has been made by Rec and Park in the city fields to minimize those impacts, and the design has been shaped to fit within the context of the Park and the Beach Chalet area as much as possible. Delaying this process any further will only result in

more seasons that our kids will miss proper fields at the Beach Chalet.” (Eric Hansen, public hearing comment [I-Hansen-01])

“The EIR thoroughly examined many of the issues you hear that have been raised today. It is very comprehensive and data-driven. The Beach Chalet has been studied extensively for over two years with an abundance of community participation. We’re asking you that you do not extend the review period which would give it further project delay that would benefit so many kids who have already been patiently waiting for the renovation.” (Susan Hirsch, public hearing comment [I-Hirsch-01])

“Another point I would like to make is that environmental impacts of the proposed Soccer Fields project should be reviewed together with those of the proposed Recycled Water Treatment Plant which is also to be located at the western end of Golden Gate Park. The cumulative impacts of both proposed projects need to be evaluated together. Until a DEIR for the Treatment Plant is published, this DEIR for the Beach Chalet Soccer Fields should not be approved.” (Inge Horton letter, December 1, 2011 [I-Horton-04])

“The DEIR contains a section (V.B) which is titled: Significant Environmental Effects that Cannot be Avoided if the Proposed Project is Implemented.

That title, alone, should have been sufficient to kill the project. “ (Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-08])

“What is the source of this table at pages ES-9 through ES-14? The findings of Less than Significant Impact prior to Mitigation for Impacts AE-1, AE- 3, TR-1, AQ-1, HY-1, and HZ-1 are inconsistent with the Notice of Preparation and Initial Study, which found Potentially Significant Impacts for each of these elements (and also found potentially significant impacts for elements AE-4, AE-5, CP-4, RE-2, RE-3, RE-4, HY-4, and HY-7, which are not listed on this table). Have these environmental impacts been ‘swept under the rug,’ or are they addressed elsewhere in the Draft EIR?” (Richard Ivanhoe, letter, December 13, 2011 [I-Ivanhoe-04])

“In addition, as a person who watched the long and costly renovation of the Murphy Windmill (and believes that this project will draw significant numbers of tourists) I have to wonder why the city would now put a large, unattractive water treatment plant virtually next door. That is completely inconsistent.” (Sean Joyce, email, November 29, 2011 [I-Joyce-03])

“This project should be considered at the same time you are considering a draft EIR for the San Francisco Public Utilities Commission’s Tertiary Water Treatment Plant (with an enclosed Water Supplementation Pump) Project because of their interconnectedness in terms of cumulative environmental impact, cumulative construction impact, and anticipated aquifer impact ...” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-01]*)

“The plan requires significant construction of permanent facilities: there is insufficient analysis regarding irreversible impact under CEQA.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-20]*)

“Also the water treatment plant should not be put on our parkland. Our parkland has been set aside for the use of the citizens, as a place of respite from what is often a hectic urban environment. Please leave the park for what it was intended, not for buildings.” (*Janet Kessler, email, December 8, 2011 [I-Kessler-02]*)

“This writ will not only be challenging the adequacy of the draft EIR, it will be requesting the court to order the preparation of a new EIR by a reputable, outside, independent contractor.

I had not even completed the Executive Summary of this document before I realized that it is wholly biased and result-driven. Further reading of the DEIR only re-enforced this initial impression. Whatever occurred behind the scenes to produce such a flawed draft EIR, it is clear that the Planning Department is not capable producing a reasoned analysis of this project. The review process must be simply taken out of their hands .

I am not the only critic to have noted the ‘bias,’ ‘tunnel-vision’ and ‘uncritical acceptance of the sponsor’s objectives’ of this draft EIR. (Cf. Comments filed by Rupert Clayton, Greg Miller.) Indeed, the drafter’s bias fairly leaps ‘off the page.” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-01]*)

“For all these reasons (and many more), the DEIR is wholly inadequate and must be sent back to the drawing board. On the evidence of this first attempt by the Planning Department staff it is highly questionable whether they are capable of producing an impartial and properly analyzed document on the Beach Chalet Athletic Fields Renovation project.” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-13]*)

“My understanding from the cover page letter is that comments should address the adequacy and accuracy of the DEIR. Comments, and responses to the comments, will be added to the Final

EIR. There will be a chance to respond to or question the responses to DEIR concerns before the Final EIR is certified. ...” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-01]*)

“On p. 21, it is pointed out that federal guidelines call for ‘retention of historic vegetation and rejuvenating it, rather than replacement or destruction of the material.’ Rejuvenation of existing grass, even massive improvement of it, is possible and cheaper than synthetic turf. Why does this lose out to extended playing time then? What is the rubric for making this decision? What criteria are being used to analyze the data? It is very difficult to see how a fair, responsible, and safe decision can be made with so many pieces of information ignored or missing in the DEIR. Is this another instance of the project proponents withholding information from the neighbors?” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-33]*)

“The 8-foot-tall chain link fence currently around the fields was added without neighborhood notification, and was a de-facto seizure of public lands for private use. The current project has attempted to proceed in the same way. Dog walkers, who daily circle the fields with their pets, saw no notices about the proposed synthetic fields and light towers when the soccer clubs were apparently meeting with manufacturers of synthetic turf under the auspices of City Fields and the SFRP. No one in the neighborhood saw any notices, and the neighbors only found out about the proposed project when a local member of a soccer league told us. This initial utter lack of transparency or concern for the setting of the proposed project makes clarity and transparency in the DEIR vital.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-40]*)

“Elimination of sewer treatment facilities is contradicted by the referred to proposal to put a water treatment facility into this area... will not ‘emphasize the naturalistic landscape qualities existing at the western portion of the park.’ ” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-46]*)

“The dEIR compares the project and the proposed alternatives relative to the various considerations that make up an environmental impact, i.e., Land Use and Land Use Planning, Aesthetics, Cultural and Paleontological Resources, Wind and Shadow, Recreation, Biological Resources, Hydrology and Water Quality, Hazards and Hazardous Materials, Agriculture and Forest Resources, and Air Quality. This list in the dEIR does not grade or weight the considerations; it merely views them as though they were all equal.

The legislative intent of the California Environmental Quality Act does not view these considerations as equal. The preservation and enhancement of the environment are more important than these other issues. This fact was made clear by the creation of the second, ‘further’

explanation of what is meant by environmental protection, found in Section 21001. And, by the way, recreation is not mentioned within CEQA legislative intent at all.

This dEIR should evaluate the environmental impacts in the context of the intent of the CEQA legislation and not treat impact considerations as equals." (*Pinky Kushner, letter, December 12, 2011 [I-Kushner-03]*)

"This dEIR should define what is meant by 'environment'. It appears that this EIR defines 'environment' to mean play opportunities for youth at the expense of the enjoyment by these same youth and future youth of Golden Gate Park as resource with a naturalistic setting. Might it be that this dEIR has misconstrued the words 'healthful and pleasing to the senses and intellect of man' and ignored the preservation of 'a high quality environment'? [See below, Section 21000 (b).]" (*Pinky Kushner, letter, December 12, 2011 [I-Kushner-04]*)

"This dEIR must explain fully how each of the issues that are considered and evaluated relate to the legislative intent of the CEQA law. I have included the sections on legislative intent, Sections 21000 and 21001, for your convenience. Please relate each of issues considered in this dEIR to the legislative intent as defined in these sections, in your response to my comments." (*Pinky Kushner, letter, December 12, 2011 [I-Kushner-05]*)

"I'm a member of the Conservation Committee from the Sierra Club. I'm sure you all know the various considerations that make up an environmental impact report: Land use, land use planning, aesthetics, cultural and paleontological resources, wind and shadow, recreation, biological resources, hydrology, water quality, hazards and hazardous material, agriculture, forest resources and air quality.

This laundry list is frequently kept as a laundry list in an EIR. I think this is wrong and especially it's wrong in this Draft EIR.

All of these items are not equal according to the intent of California Environmental Quality Act law. What you've just been handed is the legislative intent and the additional legislative intent of the California law. The legislative intent speaks of quality environmental, high quality environment, the preservation and enhancement of the environment, the management of natural resources.

This was --this was actually written around 1970. Recently it was further explained in Section 21001 as additional legislative intent. This you also have. 'Develop and maintain a high quality environment now and in the future and take all action necessary to protect, rehabilitate and enhance the environmental quality of the state.'

'Take all action necessary to provide the people of the state with clean air, water, enjoyment of aesthetic, natural scenic and historic environmental qualities.'

This says nothing about recreation. This says nothing about obesity." (*Pinky Kushner, public comment [I-Kushner2-01]*)

"You are certain to receive many comments from those reached by environmental organizers, who instruct their followers in what to do and say, and give rides to the meeting. Is governing by interest group in the public interest?" (*Steve Lawrence, email, November 28, 2011 [I-Lawrence-01]*)

"The EIR, possibly in the cumulative impacts section, should also mention that the installation of athletic field lighting and artificial turf would be a major precedent setting move. These project elements would erode the character of the park and conceivably set the stage for the installation of athletic field lighting and artificial turf in other areas of the park. The future implications of this project should be questioned and examined in the EIR and by decision makers. ..." (*Deborah Learner, letter, November 29, 2011 [I-Learner-07]*)

"Project mitigations can also be codified in well-conceived and well-managed operation/permit guidelines." (*Deborah Learner, letter, November 29, 2011 [I-Learner-20]*)

"Two huge construction projects are currently planned for the western end of Golden Gate Park, the artificial turf soccer complex at Beach Chalet and the Recycled Water Treatment Facility. Please support moving these projects to locations outside of Golden Gate Park. If you have any doubts, take a look at the plans for the 1915 Panama Pacific International Exposition in Golden Gate Park on pg. 36 of *The Making of Golden Gate Park, The Growing Years: 1906-1950* by Raymond H. Clary. The aerial image is a powerful and sobering reminder of how important your decisions are in protecting not only Golden Gate Park but all of San Francisco's public park space." (*Anmarie Mabbut, email, December 12, 2011 [I-Mabbut-04]*)

"The DEIR does not address what will obviously happen should this project be approved by the RP Commission, based initially upon a supportive EIR by Planning. This project can be seen from a revenue/cost perspective, and ignore the historic character of the Park, or it can be seen as the 'camel's nose under the tent', a precedent setting project. In the desert they say do not let the camel get his nose under the tent, or he will soon be eating your lunch. That's this project.

Should the EIR ultimately declare that the project, if approved with synthetic turf, will not have a significant environmental impact, the project will set a precedent for further revenue generating projects to install synthetic turf in the Polo Fields, Big Rec and Kezar, and maybe in the nearby golf course. More play time, more revenue, less maintenance, less grass." (*Denis Mosgofian, letter, December 11, 2011 [I-Mosgofian-03]*)

"...And it occurs that I think, at this point, that timing of this process as well as the timing of the redraft or the revise of ROSE is a little off. And it would suggest to me and to others that it would be appropriate for this process to have a little extra time for public comment both because of its possible interrelationship ROSE." (*Dennis Mosgofian, public hearing comment [I-Mosgofian2-01]*)

"And you then have to deal with the cumulative impact of that decision and that precedent on future fields in Golden Gate Park." (*Dennis Mosgofian, public hearing comment [I-Mosgofian2-05]*)

"1. Drawing unsupported broad conclusions without support in facts or analysis
2. dismissing as 'insignificant' many impacts without explanation" (*Rasa Gustaitus (Moss), letter, December 12, 2011 [I-Moss-02]*)

"The Draft EIR has several serious flaws. It reaches firm conclusions unsubstantiated by evidence, enumerates particulars without pointing to questions and inconsistencies that arise and fails to consider cumulative polls." (*Rasa Moss, public hearing comment [I-Moss2-01]*)

"The DEIR seems to be just a boilerplate of the carefully crafted arguments of this lobbying group and simply ignores or gives little consideration to the many arguments against the project." (*Charles Pfister, email, December 12, 2011 [I-Pfister-03]*)

"I wanted to ask a question about our city charter and the legality of building in Golden Gate Park without a public vote? ...

RPD told me when I enquired about utilizing 112 acre of the 4 acre parcel behind the soccer fields (that had been used for green waste composting) to build a small wildlife hospital and nature education center, that it would require a public vote.

I'm the director of San Francisco's only wildlife rehabilitation program for injured sick, oiled and orphaned wildlife. We'd hoped to use Prop 84 bond funds that were designated for new nature

education centers to build a small wildlife hospital and state of the art nature education center that would allow the public to watch and learn about resident and migratory wildlife (and how we can all protect the environment) - utilizing streaming video of the patients as they progress through the rehabilitation process - onto large screens in the nature center. Our proposal to RPD's capital improvement department also included a proposal to offer simple local organic food as well. I've recently heard that RPD has taken this suggestion for the old millwright house and adopted it.

This same property is now slated for a 40,000 square foot water treatment plant (MOU between RPD and PUC signed in Feb. 2010 ... without a public vote. Shouldn't the water treatment plant and the soccer field expansion and complex of structures require a vote?

Could you please clarify why the soccer field complex project is not going to a citywide vote? Also, Prop A bond funds do not look like they apply for use on this project, as I believe RPD intends." (City Charter detail included as attachment to comment letter) (*Jamie Ray, letter, December 12, 2011 [I-Ray4-01]*)

"I have read the DEIR and am astounded that the artificial turf project is even being realistically entertained given the fact that 'The proposed project would have the following significant unavoidable impacts: The proposed project would cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code.' ..." (*Renee Richards, email, December 8, 2011 [I-Richards-02]*)

"And while we're on the subject of the people who live in the environs of the West End, did you canvass the neighborhoods to ask our fellow citizens how they feel about the vastly increased traffic that would surely flow down their streets to and from the proposed parking lots?" (*Dan Richman, letter, no date [I-Richman-04]*)

"One of the major deficiencies I found in the report along with other deficiencies was it seems to me one of the most vital elements of an urban environment are the people who live in the city. I wonder if it would be possible to poll all the folks who live in the western part of the city. And I don't mean just soccer parents on one side and environmentalists on the other side, but just the people who live there. I wonder if that wouldn't be a sort of a necessary part of an urban environmental report. Something to think about." (*Dan Richman, public hearing comment [I-Richman2-01]*)

"I'm writing to ask you to oppose two current proposals for the western end of Golden Gate Park; ... Westside Recycled Water Treatment Plant" (*Diane M. Rivera, email, November 28, 2011 [I-Rivera-01]*)

"The Water Treatment Plant is an enormous industrial building that does not belong in Golden Gate Park. It should be located elsewhere as the property will erode away over time and need to be moved just as we face the same problem at the end of Sloat Blvd at Ocean beach today." (*Diane M. Rivera, email, November 28, 2011 [I-Rivera-07]*)

"The DEIR does not properly address the ... concerns and dismisses them as not significant or substantial. They are significant and substantial. This needs to be rectified in the final Report. The DEIR should be an informational document; it reads more like a sales pitch by RPD." (*David Romano, email, December 9, 2011 [I-Romano-08]*)

"The Draft report does not properly address ... concerns but glosses over them. In every instance where there are impacts noted, the Draft report says that they are not significant, not substantial." (*David Romano, public hearing comment [I-Romano2-04]*)

"But such sentiments were quickly drowned out by a parade of City Field Foundation supporters who had created an overflow at the proceedings. It turns out that the Playfields Initiative lobbyists had done an email blast that arranged for transportation and presentation coaching to anyone who would show up and support their cause at the meeting.

After the Planning Department's Don Lewis gave an introduction, the Commission limited the public comment to one minute per person, .due to the overflow .. This is the kind of tactic that the City Fields lobbyists have been using for years .. , said Mark Albright, a political observer. (Before a recent mayoral debate, Playfields Initiative representatives bought dinner for anybody who showed up and signed their petition). A one minute limit prevents any thoughtful or technical discourse. Also by coaching others in advance, the lobbyists don't have to speak on the record and give false information., noted Albright.

The coaching was in evidence by the repeated invoking by the City Field Foundation supporters and league representatives that; artificial fields were safer than grass, that the City Fields Playfield Initiative was creating more Playfields. mixed in with emotional anecdotes of gopher holes. All lies .. said Janet Broward. I used to be a City Fields supporter. The facts are that artificial fields are not safer at all. Study after study has shown that. And no matter what they say, City Fields Foundation does not want to create more playfields. They are in the business of

turning existing city playfields into artificial sports complexes. And don't get me started on how easy gophers are to keep out.

The City Fields Foundation, Playfields Initiative is the brain child of billionaires John, Robert, and William Fisher. According to an agreement with the City their corporation, Pisces Inc., gets to choose who gets awarded millions of dollars in construction contracts, (i.e. Musco lighting, FieldTurf synthetic fields), while the city of San Francisco provides them with free land.

In attendance at the Commission Meeting was City Field's team of high-powered lobbyists; Alex Clemens (political insider and founder of Barbary Coast Consulting), Susan Hirsch, (City Fields Foundation director and founder of Susan Hirsch Associates), Patrick Hannan (City Fields Foundation director of communications), Allie Herson (Barbary Coast Consulting). along with Dawn Kamalanathan, (Rec and Parks Beach Chalet EIR project sponser).

A San Francisco RPD employee who wished to remain anonymous speculated that, this, (the Beach Chalet Field conversion) may not be their end all goal at all. While everyone is being distracted by the Beach Chalet EIR the Rec and Parks Commission has green lit two other projects .. (The Mission Playground in the Mission District and the Minnie and Lovie Playfield, a \$ 7 million / 10 acre project in the Oceanview neighborhood) . And depending on how the Planning Departments' EIR is written it could be smooth sailing for them going forward on their other projects, (including the 9 acre West Sunset grass Playfield in the Sunset which is listed in the Draft Beach Chalet EIR as an alternative).

Mr. Albright took note that, what was unusual about the Historic Preservation Commission members was their seeming unwillingness to be bullied. Despite the fact that some of the commissioners had met with lobbyists before the meeting there was a noticeable lack of the usual kowtowing I have seen with other commissions. John Fisher, (City Fields Foundation Trustee and President of Pisces Inc.), was not reachable for comment." (G. Sherman, email, November 28, 2011 [I-Sherman-02])

"Why is there no mitigation for the people and wildlife that are negatively impacted by this proposed project?" (Noreen Weeden, email, November 29, 2011 [I-Weeden-06])

"The DEIR states that the Off-Site Alternative 'would have construction-related impacts similar to or greater than the proposed project because the fields are more proximate to sensitive receptors such as schools and residences ... '. This implies that a project's impact on people (the sensitive receptors) has greater importance in the DEIR consideration of the alternative than the project's impact on the non-human environment. Is there a hierarchy of impact significance between all the elements reviewed in the DEIR, with some elements more worthy than others? If so, I am unaware of this grading system. If not, remove the reference to 'sensitive receptors'"

causing 'greater' impacts, because this statement will unfairly mislead the decision makers as to what the DEIR is saying." (*Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-06]*)

Response ERP-1

Initial Study

Some commenters indicate that the EIR's less-than-significant findings are inconsistent with Initial Study findings that impacts could be potentially significant (I-Ivanhoe-04, O-SFPARKS-01). As indicated in CEQA Guidelines Section 15063(c), the purpose of an initial study is to: 1) provide the Lead Agency with information to use as the basis for deciding whether to prepare an EIR or a Negative Declaration; 2) enable the applicant or Lead Agency to modify a project to avoid or reduce potential impacts; and 3) assist in the preparation of an EIR to focus on environmental topics that may be significant. The Initial Study prepared for the proposed project was used to identify environmental topic areas which could result in potentially significant impacts, in order to refine those topics to be further discussed in the EIR. The Initial Study included detailed impact evaluations for project topics not likely to result in significant impacts. The Initial Study reached No Impact, Not Applicable, or less-than-significant impact conclusions for many topics. However, only preliminary impact assessments were conducted for topics that could have potentially significant impacts in the Initial Study. Detailed impact analysis was not conducted nor impact conclusions made for those topics, because that is the purpose of an EIR. Following preparation of the Initial Study, further evaluation was conducted for topics which could result in potentially significant impacts. It was determined through substantive impact analysis reported in the EIR that some impact topics previously identified as having significant impacts would result in less-than-significant-impacts. Supporting information for these findings is included in the analysis.

EIR Preparation

Several comments indicated that the project environmental analysis should be conducted by independent or unbiased resources, or that the EIR was commissioned by the San Francisco Recreation and Parks Department and/or is otherwise biased (I-Barish-05, I-AClark-07, I-Kohn2-01, I-Bartley-07, I-Pfister-003, I-Romano2-04, I-O-GGAS2-05, I-Kohn2-01, I-Kohn2-12, I-Romano-08, I-Romano2-04). Other commenters indicate that the EIR is adequate and complete (I-Cuddeback-01, I-Hirsch-01). These comments are noted. Under Chapter 31 of the San Francisco Administrative Code, the San Francisco Planning Department serves as Lead Agency responsible for administering the environmental review on behalf of the City and County of San Francisco, and provides independent, unbiased environmental review of the project. Environmental consultants assisting with preparation of environmental documents are under the direction of the Planning Department. The San Francisco Recreation and Parks Department, serving as the project sponsor, provided project description information, relevant information regarding environmental setting, and references requested by the Planning Department, but did not prepare the environmental review. The Planning Department responded to all requests to review the project administrative record.

Comment I-Chappell-01 indicates that the EIR does not include sufficient information regarding the record of resources at the site to enable decision makers to take account of environmental consequences. Several comments indicate that the EIR includes conclusions not supported by fact and dismisses impacts as less than significant without explanation (I-Moss-02, I-Moss2-01, I-GGAS2-06). Each EIR resource section includes a description of the existing setting, including a description of relevant plans and policies. EIR Section IV.C, Cultural Resources, presents an overview of the history of the project area and nearby areas from the late 1800s until today. The resource setting information included in the EIR sufficiently characterizes the project area, and supports the impact analysis findings presented. Comments regarding EIR conclusions not being supported by fact that were presented without evidence, explanation or specific examples from the EIR are acknowledged; however, no detailed response is possible. The EIR 1) provides up-to-date and relevant setting information for all resource topics; 2) uses current and verifiable scientific data (as set forth in the footnotes and citations throughout the document); and 3) includes a cumulative impact analysis under each resource topic consistent with CEQA Guidelines Section 15130.

Comment I-Jungreis2-20 indicates that the analysis of irreversible impacts is insufficient. CEQA Guidelines Section 15127 indicates that a description of irreversible changes needs to be included only in EIRs for the following activities: 1) adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency; 2) adoption by a Local Agency Formation Commission of a resolution making determinations; or 3) a project that will be subject to a National Environmental Policy Act environmental impact statement. The proposed project does not meet these requirements and analysis of irreversible changes is not required.

Comment O-GGAS2-05 indicates that the 2010 categorical exemption prepared for the proposed project and the appeal of that document should be discussed in the EIR. In response to this comment, EIR page I-1, paragraph 2 has been revised:

The San Francisco Planning Department, serving as lead agency responsible for administering the environmental review on behalf of the City and County of San Francisco (CCSF), published a categorical exemption from environmental review for the proposed project on April 8, 2010. An appeal of the categorical exemption was filed on April 28, 2010. At the request of the SFRPD, the Planning Department reviewed the appeal letter, and additional information that was made available regarding the proposed project and existing resources within the project area, and determined that the preparation of an EIR was needed.

This revision does not change the analysis or conclusions presented in the EIR.

Some comments indicated that CEQA environmental topics should not be considered equally because CEQA considers preservation and enhancement of the environment to be more important than other issues (I-Kushner-03, I-Kushner-04, I-Kushner-05, I-Kushner2-01). Comment I-Wuerfel-06 requests clarification of the term sensitive receptors and asks whether impacts related to certain topics are considered more important than others. It is noted that the CEQA legislative intent (CEQA 2100) includes maintenance of a quality environment and provision of a

high-quality environment that is healthful and pleasing. In meeting this intent, CEQA guidelines were developed to allow for environmental evaluation of many resource types, but there is no requirement that some environmental resources be considered more important than others. Further, CEQA does not indicate that environmental resources should be weighed or compared to one another. The purpose of an EIR is to describe and analyze the significant environmental effects of a project and discuss ways to mitigate or avoid the effects. The EIR describes the potential effects associated with the proposed project, and does not weigh or compare environmental resources against other resources, but reaches impact conclusions for each resource topic independently. In response to comment I-Weeden-06, mitigation measures were presented for all impacts where significant impacts were identified. While identification of mitigation measures for impacts determined to be less than significant is not required, it is noted that optional improvement measures were presented for some topics for which impacts would be less than significant, but where these improvements measures could further minimize potential effects.

Regarding the term sensitive receptors, as stated on EIR page. xii (Glossary), this refers to a land use that is sensitive or more vulnerable to (i.e., "receives") effects of noise, air quality, or a specified resource than the general population. For the most part, this term is used in the context of noise and air quality effects. Accordingly, sensitive receptors are discussed as part of the analysis of those issues that is contained in the Initial Study in EIR Appendix A. All impacts are considered of equal importance in the EIR analysis in accordance with CEQA, though interested parties may focus on particular environmental issues.

Consideration of Other Actions

Several comments discuss the potential for the proposed project to be analyzed jointly with the San Francisco Westside Recycled Water Project and/or an updated *General Plan* Recreation and Open Space Element, or indicate that the project EIR should not be certified until the EIR for those projects is available for public review (SFPC-Antonini-13, A-SFPC-Sugaya-05, I-Horton-04, I-Jungreis2-01, O-PAR2-01, O-PAR3-06, O-PAR4-01, O-PAR5-01, O-SCSFBC-09, O-SPEAK2-02, O-SPEAK3-01, O-SPEAK4-02). These comments are noted. CEQA Guidelines Section 15378 defines a 'Project' as the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment. The San Francisco Westside Recycled Water Project, proposed by the San Francisco Public Utilities Commission, is independent from the proposed project in that approval and implementation of that project does not require implementation of the proposed project and vice versa. Therefore, each project is subject to separate environmental analysis. However, the San Francisco Westside Recycled Water Project is considered a cumulative project in the Beach Chalet Athletic Fields Renovation EIR, and the cumulative impacts of the projects are considered in each cumulative impact discussion. On February 28, 2012, the San Francisco Public Utilities Commission announced that a new recycled water treatment plant location outside Golden Gate Park was being pursued. However, as a worst-case scenario and because the recycled water project Notice of Preparation is still on file with the Planning Department as being sited in

Golden Gate Park, this EIR continues to consider the recycled water treatment plant in Golden Gate Park as a potential cumulative project.

Several comments were submitted regarding the impacts and environmental analysis of the San Francisco Westside Recycled Water Project (I-Campos-03, I-Joyce-03, I-Kessler-02, I-Koivisto-46, I-Mabutt-04, I-Ray4-01, I-Rivera-01, I-Rivera-07). As stated above, the San Francisco Westside Recycled Water Project is a separate project proposed by the San Francisco Public Utilities Commission. Comments regarding the environmental analysis of that project should be submitted to the San Francisco Planning Department at the time an EIR is available for public comments. Questions regarding the EIR schedule may be directed to Timothy Johnston, EIR coordinator for the San Francisco Westside Recycled Water Project, at (415) 575-9035.

The *San Francisco General Plan* Recreation and Open Space Element is discussed in EIR Chapter III, Plans and Policies. It is noted that the Recreation and Open Space Element is being updated, and that a revised draft plan was released for public input in June 2011. The San Francisco Planning Department is preparing the CEQA environmental analysis for the element and anticipates release of the environmental document in July 2012, with potential adoption of the element in late 2012. In response to comments A-SFPC-Moore-04, O-CSFN3-01, and I-Mosgofian2-01, EIR page III-3, paragraph 3, has been revised:

The Recreation and Open Space element policies include development, preservation, and maintenance of open spaces; preservation of sunlight in public open spaces; elimination of nonrecreational uses in parks and reduction of automobile traffic in and around public open spaces; maintenance and expansion of the urban forest; and improvement of the western end of Golden Gate Park for public recreation. The San Francisco Planning Department is preparing an update to the Recreation and Open Space Element, which is scheduled for adoption in late 2012. There are no obvious inconsistencies between this project and new policies or changes identified in the June 2011 draft Recreation and Open Space Element. The only explicit policy reference to Golden Gate Park in the June 2011 draft is Policy 1.4, "Support the continued improvement of Golden Gate Park."

This revision does not change the analysis or conclusions presented in the EIR.

Several commenters ask whether the proposed project would lead to similar projects within Golden Gate Park (I-Learner-07, I-Mosgofian-03, I-Mosgofian2-05, O-SPEAK3-02). The San Francisco Recreation and Parks Department evaluated siting opportunities for installation of artificial turf and lighting throughout San Francisco, including consideration of several locations within Golden Gate Park and determined that the proposed project would be the most suitable Golden Gate Park opportunity. No other Golden Gate Park locations are being considered for artificial turf and lighting by the San Francisco Recreation and Parks Department, with the exception of the potential addition of lighting to the tennis courts, which is noted in the Golden Gate Park Master Plan.

Draft EIR Publication and Noticing

Comment A-CSCH-01 indicating that the Draft EIR was distributed to state agencies, that no agencies commented, and that the State Clearinghouse review requirements were complied with is acknowledged.

Several comments requested that a survey be conducted to determine if residents near the project site support or oppose the project or that questionnaires/surveys should be conducted to elicit valid and reliable responses (I-Bard-01, I-Richman-04, I-Richman2-01, I-Barish-05, I-AClark-07, I-Kohn2-01). Multiple comments indicate that the public notification of local residents regarding the proposed project was insufficient (I-Edelson2-03, I-Koivisto-40). Pursuant to Chapter 31 of the San Francisco Administrative Code, the Planning Department requires that Notice of Availability for the proposed project include information on where the Draft EIR can be accessed, how and where to submit comments on the Draft EIR, details on the Draft EIR public comment period, and the Draft EIR public hearing date and location. Surveys to determine support or opposition to a project or to contribute to development of a project description are not required under CEQA. The Planning Department further requires that Notices of Availability of a Draft EIR be distributed to individuals, organizations, agencies, and adjacent property residents and property owners, as identified by Planning Department's environmental coordinator for the project. Surveys are not required under CEQA. However, the availability of the Draft EIR was properly noticed according to CEQA and the public was provided sufficient opportunity to become aware of the Draft EIR availability and to provide comments on the EIR, as described below.

Consistent with the above-noted Planning Department requirements, the NOA of the Draft EIR for the project was distributed on October 26, 2011 to individuals, organizations, agencies, and nearby residents and homeowners. In addition, the NOA was posted to the Planning Department webpage, at <http://www.sf-planning.org/index.aspx?page=1828> and <http://tinyurl.com/sfceqadocs> on October 26, 2011, and published in the San Francisco Examiner on October 26, 2011.

Further, the San Francisco Recreation and Parks Department posted a Draft EIR Fact Sheet to its website, at <http://tinyurl.com/6wyo993>, which included a link to the Draft EIR on the Planning Department's website. City Fields Foundation, as well as organizations supporting or objecting to the project distributed emails and postings to their group mailing lists calling attention to the Draft EIR availability and public comment period. Some provided links to the Draft EIR on the Planning Department's website. This increased access to information but was not part of Planning Department's noticing effort.

Comment I-Koivisto-40 indicates that no notices were observed for the Draft EIR at the field itself. In accordance with the Planning Department's requirements, the NOA was posted at the project site on October 26, 2011. Posting locations within the site included: 1) the entrance gate to the Beach Chalet Athletic Fields parking lot; 2) the chain link fence surrounding the fields (see photo below); and 3) the restroom building wall. Consistent with the Planning Department's requirements, two site visits were conducted following the postings to ensure the notices remained in place. Visits occurred within one week of the initial posting, and one week prior to the December 12, 2011 comment period closure date.



Draft EIR NOA posting on athletic field chain link fence

Comment I-Lawrence-01 discussing public outreach mobilization efforts conducted by both project supporters and opponents is acknowledged. Comment O-GGAS-02 indicates that project supporters organized public outreach is also acknowledged. Project proponents and opponents are not prohibited from organizing and submitting comments on the Draft EIR.

Public Hearing

Comment A-SFPC-Sugaya-01 indicating that the purpose of the Draft EIR public hearing is to hear comments on the EIR, and that the Planning Commission does not decide on project approval is acknowledged. Comment A-SFPC-Olague-01 clarifying the public hearing, Final EIR, and project approval process, and recommending that future Planning Commission hearings consider providing greater public education regarding the Draft EIR public comment process is also acknowledged.

As indicated in response GC-1, comments that support or oppose the project are not the focus of this Comments and Responses document, although these comments will be considered by the decision-makers. Public hearing comments that related to project effects were considered in this document.

Comment I-Sherman-02 indicates that public hearing speakers were limited to one minute per person at the San Francisco Historic Preservation Commission Hearing on November 16, 2011. This comment is noted. However, at the Planning Commission hearing on the Draft EIR, held on December 1, 2011, each speaker was allowed up to three minutes per person.

Comments and Responses

Comment A-SFPC-Sugaya-5 asks whether comments received after the close of the comment period have been responded to for past environmental documents. While the Planning Department is not required under CEQA to respond to comments received after the close of the

comment period, comments received after the close of the comment period are responded to when possible for the purpose of the record.

Comment A-SFPC-Moore-05 asks whether comments can be submitted by email. Public comments were received in writing and email, and responded to in this Comments and Responses document.

Final EIR and EIR Certification

Comment I-Koivisto-01 asks whether there will be an opportunity to comment on the Comments and Responses document prior to a decision on EIR certification. The Planning Commission typically does not hold a public hearing on the Comments and Responses document. However, members of the public who wish to comment on this document may either submit comments in writing to the Planning Department or Planning Commission, or may speak before the Commission on the day of the scheduled EIR certification hearing, under the Agenda Item, "Public Comment on Items Where the Public Hearing has Been Closed." As is stated on the Planning Commission agenda for dates on which such an item appears, "At this time, members of the public who wish to address the Commission on agenda items that have already been reviewed in a public hearing at which members of the public were allowed to testify and the public hearing has been closed, must do so at this time. Each member of the public may address the Commission for up to three minutes." It is noted that this Comments and Responses document has been prepared to respond to all substantive issues raised in the written and oral testimony during the public comment period. The document has been distributed to the Planning Commission, commenters, and others as requested. After review of the Comments and Responses document, including any revisions to the Draft EIR and incorporation into the EIR of any further changes requested by the Commission, the Commission may certify, at a public meeting, that the Final EIR has been completed in compliance with state law. The Commission will also determine whether the project would or would not have a significant effect on the environment. It is important to note that certification of the EIR does not approve or disapprove a project, but rather concludes that the EIR complies with CEQA and provides environmental information regarding the proposed project to serve as one of the elements upon which a reasoned decision is based.

Project Approval

Commenters indicate that the project should be rejected because it would result in significant unavoidable impacts (I-GoHoward-08, I-Koivisto-33, I-Richards-02). Comment I-CPF-03 indicates that public agencies must deny approval of a project with significant adverse effects when reasonable alternatives or feasible mitigation measures can substantially lessen such effects. Comment O-GGPPA-02 indicates that the Recreation and Parks Commission will ignore the EIR analysis findings and proceed with the proposed project. Comment I-Learner-20 indicates that mitigation measures can be codified in operational guidelines. While the information in the EIR does not control the ultimate decision to approve or disapprove a project, CEQA requires that the decision-makers respond to each significant effect identified in the EIR by making one of the following findings, in accordance with State CEQA Guidelines Section 15091:

- Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR;
- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency; or
- Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

If impacts are identified that cannot be reduced to a less-than-significant level, the agency must make a statement of overriding considerations if the project is to be approved (CEQA Guidelines Section 15093; see also Guidelines Section 15121[b]). Thus, as part of project consideration, the decision-makers would, if they approve the project, be required to adopt findings and a statement of overriding considerations because the EIR identifies significant impacts, including some significant and unavoidable impacts. As part of the findings, the decision-makers are also required to adopt a Mitigation Monitoring or Reporting Program (MMRP) (see CEQA Guidelines Section 15097). The MMRP presents all of the mitigation measures identified in the EIR and indicates responsible parties and the implementation schedule.

Therefore, project approval and adoption of findings would constitute a commitment on the part of the project sponsor (i.e., the San Francisco Recreation and Parks Department) to implement—and fund—the mitigation measures as part of the project during the appropriate timeframe. For any mitigation measures for which funding may be uncertain, the corresponding impacts were determined to be significant and unavoidable, and the decision-makers must adopt a statement of overriding considerations to acknowledge the uncertainties associated with implementing those measures.

C.3 Project Approvals – Other Agencies and the Public [ERP-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

I-Ciccone-02
I-Kohn2-05

I-Koivisto-09
I-Ray3-03

I-Ray4-01
I-Richman-08

“This park belongs to the people of the city and was meant to be enjoyed by all. Any changes should be up to the people and should be done in their interest...” (*Donald Ciccone, letter, November 21, 2011 [I-Ciccone-02]*)

“He has side-stepped the federal government policy to choose conservation over development, where the two conflict.” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-05]*)

“And while it is nice to see all the San Francisco agencies required to approve the project, I couldn’t find any mention of approval needed from relevant state or federal authorities even though their interests in this project, given the possible impacts on endangered species on nearby federal land (the Snowy Plover at Ocean Beach, for example) and the impacts of crumb rubber and run-off migrating into the ocean, could be quite large. The need to check state and federal input in this plan was brought up at the scoping session.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-09]*)

“And, is this project legal without a vote by residents? Our City Charter says, that enlarging or building any structure in Golden Gate Park requires a public vote. We’ve not voted to approve this!” (*Jamie Ray, letter, no date [I-Ray3-03]*)

“I wanted to ask a question about our city charter and the legality of building in Golden Gate Park without a public vote? ...

RPD told me when I enquired about utilizing 112 acre of the 4 acre parcel behind the soccer fields (that had been used for green waste composting) to build a small wildlife hospital and nature education center, that it would require a public vote.

I’m the director of San Francisco’s only wildlife rehabilitation program for injured sick, oiled and orphaned wildlife. We’d hoped to use Prop 84 bond funds that were designated for new nature education centers to build a small wildlife hospital and state of the art nature education center that would allow the public to watch and learn about resident and migratory wildlife (and how we can all protect the environment) - utilizing streaming video of the patients as they progress through the rehabilitation process - onto large screens in the nature center. Our proposal to RPD’s capital improvement department also included a proposal to offer simple local organic food as well. I’ve recently heard that RPD has taken this suggestion for the old millwright house and adopted it.

This same property is now slated for a 40,000 square foot water treatment plant (MOU between RPD and PUC signed in Feb. 2010 ... without a public vote. Shouldn’t the water treatment plant and the soccer field expansion and complex of structures require a vote?

Could you please clarify why the soccer field complex project is not going to a citywide vote? Also, Prop A bond funds do not look like they apply for use on this project, as I believe RPD intends.” (City Charter detail included as attachment to comment letter) (*Jamie Ray, letter, December 12, 2011 [I-Ray4-01]*)

“...Is there no moral problem with spending a ton of dough on a project on public land that will serve a small, exclusive percent of ‘the public?’ Could it be more than one percent? It would seem that if you really want to engage ‘the public,’ you would get this Proposal into the next City-wide Referendum. Then you, and all of us, will really find out what public thinks of Rec/Park’s scheme.” (*Dan Richman, letter, no date [I-Richman-08]*)

Response ERP-2

The project would not require any discretionary federal or state permits or approvals (Comment I-Koivisto-09). However, the DEIR and/or NOA was distributed to the following agencies:

- Federal
 - National Park Service, Golden Gate National Recreation Area
 - United States Fish and Wildlife Service

- State of California
 - California Coastal Commission
 - Department of Fish and Game, Region 3
 - Department of Parks and Recreation
 - Department of Resources Recycling and Recovery
 - Department of Transportation, District 4
 - Department of Water Resources
 - Native American Heritage Commission
 - Office of Historic Preservation
 - Department of Toxic Substances Control
 - Office of Planning and Research, State Clearinghouse and Planning Unit
 - Regional Water Quality Control Board, Region 2
 - California Resources Agency

DEIR comments were received by the National Park Service, Golden Gate National Recreation Area. No other federal or state agency provided DEIR comments.

Commenters I-Cicccone-02, I-Ray3-03 and I-Ray4-01 indicate that changes to Golden Gate Park should require local residents’ approval or a public vote. City Charter Section 4.113, Recreation and Parks Commission, indicates that: “(2) No park land may be sold or leased for non-recreational purposes, nor shall any structure on park property be built, maintained or used for non-recreational purposes, unless approved by a vote of the electors.” The proposed project does not include sale or lease of park land and does not include construction, maintenance, or use of park land for non-recreational purposes. There are no requirements that other changes to Golden Gate Park should be subject to vote or to local residents approval.

Comment I-Kohn2-05 indicates that the EIR does not consider federal government policy to choose conservation over development where the two conflict, but does not provide reference to

a specific policy. This comment is noted. However, as indicated, no federal permits or approval is required for the proposed project.

C.4 CEQA Topics Eliminated from Further Discussion in the Initial Study [ERP-3]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-NPS-05	I-Brown-02	I-Jungreis2-28	I-Ogilvie-11
O-GGAS3-03	I-Citron-02	I-Jungreis2-31	I-O'Leary-05
O-SCSFBC-26	I-Colao-03	I-Koivisto-04	I-O'Leary-10
O-SCSFBC-37	I-Colao-05	I-Koivisto-37	I-Ray-10
O-SCSFBC-38	I-D'Anne2-01	I-Koivisto-51	I-Ray-12
O-SFPARKS-40	I-FDavis-03	I-Koivisto-72	I-Ray2-01
O-SFPARKS-43	I-Horton-02	I-Lampert2-01	I-Ray3-12
O-SFPARKS-49	I-GoHoward-01	I-McDevitt-01	I-Romano-02
I-Barish-18	I-GoHoward-02	I-McGrew-12	I-Schoggen-03
I-Barish-20	I-KHoward-01	I-Ogilvie-09	I-Wuerfel-01
I-Barish-34	I-Joyce-02		

“NPS suggests including the impacts of additional lighting on Greenhouse Gas Emissions” (*Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-05]*)

“There’s many other examples of the inadequacies of the study, for example,... the noise... that will occur once this turf has to be ripped up in eight to ten years. ...” (*Michael Lynes, Golden Gate Audubon Society, public hearing comment [O-GGAS3-03]*)

“**Other Issues Related to Human Health.** ...The DEIR presents no examination of the possible synergistic effects of high temperatures that synthetic fields experience. ...” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-26]*)

“**Lack of Analysis of Effects of Global Warming and Climate Change.** The DEIR fails to analyze the impact of sea level rise on the project, and fails to analyze the impact of the project on global climate change.

Impact of rising sea level on the project. The DEIR fails to analyze the impact of sea level rise due to climate change on the project. This is required because project site is adjacent to the ocean.

Higher sea levels and higher tides will change the hydrology of the area, including the chemical makeup of ground water, the frequency of flooding, and increased likelihood of ocean contamination from the synthetic turf, as well as other possible hydrological effects.

Sea level rise has been recognized as fact by government agencies. For instance, the San Francisco Bay Conservation and Development Commission (BCDC) has issued a climate change proposal that recognizes that sea level rise is occurring. In April 2009, BCDC released report summarizing current scientific research on climate change and examining possible impacts on the Bay of sea level rising 16 to 55 inches. In the fall of 2010 proposed amendments to its update its San Francisco Bay Plan based on sea level rise findings added a new section on climate change policy." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-37]*)

"Impact of the project on global climate change. The DEIR also fails to analyze the environmental impact of the project on global climate change. California courts have recognized that CEQA requires this analysis. For instance, in *Center for Biological Diversity et al. v. City of Desert Hot Springs, et al.*, No. RIC 464585 (Riverside County Sup. Ct., Aug. 6, 2008), the court invalidated an EIR for failure to make a meaningful attempt to analyze a project's effects on global climate change.

The effects of synthetic turf on global climate change have been quantified, and appropriate mitigation measures have been identified. For instance, this was done in a paper entitled *Estimating the Required Global Warming Offsets to Achieve a Carbon Neutral Synthetic Field Turf System Installation* by the Athena Sustainable Materials Institute of Merrickville, Ontario, a non-partisan non-profit research collaborative. (<http://www.athenasmi.org>) To quote from the introduction:

The purpose of the study was to estimate of the greenhouse gases emitted during the life cycle of the synthetic turf system as opposed to a natural grass surface. The study also determined the number of trees to be planted to achieve a 10-year carbon neutral synthetic turf installation.

The results identified a mitigation for a synthetic turf field would be the planting of 1861 trees. From the Results section:

As per U.S. DOE, 1998, a medium growth coniferous tree, planted in an urban setting and allowed to grow for 10 years, sequesters 23.2 lbs of carbon, equivalent to 0.039 metric tonnes CO₂. The tree planting offset requirements to achieve a 10-year carbon neutral synthetic turf installation is estimated to be 1861 trees (±23%).

The EIR for the Beach Chalet projects needs such an analysis, and appropriate mitigation must be proposed. Furthermore, the project may also require an EIR to determine the ... cumulative impact on global climate change of the Recreation and Parks Departments' program of replacing

multiple grass fields through the city with synthetic turf." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-38]*)

"NOISE LEVEL COMPARISONS BETWEEN ARTIFICIAL TURF AND GRASS. Artificial fields have even been found to be 8 to 10 decibels noisier than natural grass. This would have a significant impact on adjacent activities in the park or to neighborhood parks as would be the case with 'Alternative, 2) Off-Site Alternative'." (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-40]*)

"VANDALISM AND GRAFFITI.

- Salisbury, Pennsylvania Vandals spray-painted racial slurs on artificial turf <http://www.mcall.com/news/local/all-vandals-salisbury-061809-cn,0,5215509.story>
- Lehigh Valley, PA Vandals spray paint slurs and other vulgar words onto artificial turf <http://www.lehighvalleylive.com/allentown/index.ssf/2009/03/vandalsspraypaintartificial.html>.
- Destrehan, LA Vandals spray-painted graffiti and obscene drawings on the new artificial turf field <http://www.nola.com/news/index.ssf/2008/12/vandalstargetdestrehanhigh.html>.
- Naperville Vandals used spray paint to damage new synthetic turf <http://www.dailyherald.com/story/?id=308470&src=2>
- Carson City, Nevada vandals spray-painted the artificial turf.' This among the latest in a string of vandalism at the stadium. 'Another increasing trend is dog waste crews are regularly cleaning up after dogs, but parts of the turf have already been damaged from urine.' <http://www.nevadaappeal.com/article/20110712/NEW5/110719956/1070&ParentProfile=1058>
- Eudora, Kansas: Vandals painted profanities and rude images on the field's artificial turf \$25,000 worth of damage <http://www.kansascity.com/2011/07/13/3011279/vandals-damage-at-eudora-high.html>
- Southfield, Michigan Vandals spray painted graffiti on a synthetic baseball field cost of \$6,000 or the entire brown [infield] section for \$60,000. <http://www.hometownlife.com/article/20110526/NEW520/110526003>
- Petal, Mississippi Graffiti spray-painted on artificial turf <http://www.hattiesburgamerican.com/article/20100629/NEW501/6290332>.
- Escondido, California: Vandals had cut apart the large 'E' printed on the turf. \$5,000 in damage <http://www.news.com/news/localescondido/article70a2f229-4fea-5d56-afOb-d227431e9e50.html>
- City of St. Catharines, Ontario, Canada Vandals spent a great deal of effort tearing out a section of the new artificial sports turf expected to cost between \$14,000 and \$15,000 <http://www.niagarathisweek.com/news/article/1012182--vandals-steal-new-artificial-turf-section>

- Melton, Australia A rectangular section of synthetic grass was stolen from playing surface <http://melton-leader.whereilive.com.au/news/storv/plastic-lawn-stolen-from-melton-sports-ground/> .
- Charlotte, North Carolina Vandals cut several pieces of artificial turf field Damage is estimated at \$7,500 <http://www.wcnc.com/news/local/Vandals-cut-turf-on-Ardrey-Kell-football-fie-ld-96145119.html> .
- Baltimore County, Maryland Plan to install video surveillance cameras at artificial turf fields being damaged by vandals. County to spend \$500,000 to monitor artificial fields <http://www.explorebaltimorecounty.com/news/l06802/cameras-help-county-turf-battle-with-vandals/>
- Ann Arbor, Michigan Someone cut a piece of synthetic field at Michigan Stadium in Ann Arbor Estimated damage at about \$1,000 <http://www.chicagobreakingsports.com/2010/03/piece-of-block-m-stolen-from-michigan-stadium.html>
- Eustace, Texas Vehicle left tire damage Cost \$350,000 to \$400,000 to repair <http://www.athensreview.com/lacal/laca1stary196224203.html> .
- Baltimore, Maryland \$600,000 to install 24-hour video surveillance cameras at five regional parks and at athletic fields that have frequently been the targets of vandals who have spray painted artificial turf fields, and damaged some by fire.
- The county repaired more than \$150,000 in damages before the installation of cameras. <http://www.baltimaresun.com/news/lacal/baltimorecounty/bal-md.ca.ca.meras26may26.0.7218530.stary>.
- Chatham, New Jersey Vandalism to turf injures player Acts of vandalism have included 'attempts to burn sma, ll parts of the field with cigarettes or lighters resulting in singed areas and areas where turf has been cut, torn or disturbed to create depressions in the field. A player fell in a depression created by vandals, tearing his ligaments and breaking a toe bone. Pencils that have been broken off and left sticking up the turf have also been found. <http://www.nj.com/independentpress/index.ssf/2009/03/vandalsstrikechathamshaasf.html> .
- Sydenham (Melbourne), Australia Students vandalize turf field. \$40,000 worth of damage <http://www.cathnews.com/article.aspx?aeid=10686> .
- El Paso, Texas Vandals damage synthetic turf field The damage is estimated at \$15,000. <http://www.elpasatimes.com/newupdated/ci10600842> .
- Midland City, Ala Turf field vandalized by pickup truck on the synthetic field. http://www.wztv.com/template/inews_wire/wires.regional.a1/2753479b-www.fax17.com.shtml ar http://64.233.169.104/search?9=cache:FhOBAElh33YJ:www.fax17.com/template/inews_wire/wires.regional.a1/2753479b-www.fax17.com.shtml+wztv+fax+17+9Uincey&hl=en&ct=clnk&cd=1&gl=us .
- Jackson, New Jersey Town buys surveillance equipment for synthetic turf fields
- Holliston (Massachusetts) Soccer team urinated on the opponent's field causing officials to disinfect the field for two-days. <http://www.metrowestdailynews.com/homepage/x477569027> <http://www.bostonherald.com/news/regional/general/view.bg?articleid=1029883>,

- ANNAPOLIS, MD \$41,000 camera system would be installed because of its new artificial turf field. <http://www.hometownannapolis.com/cgi-bin/read/2007/0814-41/TOP>.
- Woodside, CA tire marks in the artificial turf field, http://www.almanacnews.com/news/how_story.php?id=9549 [Images from original comment not included here. See original comment letter scan] (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-43]*)

“HEAT AND HEAT ISLAND EFFECT. The only mention of heat issues in the DEIR is, ‘Because air temperature in the immediate area of synthetic turf can be higher than adjacent areas on hot or sunny days, creating what is known as a ‘heat island,’ signage would encourage field users to hydrate.’ - (DEIR page 11-24)

It is our position that this is a glossing over of a potentially serious health issue, especially on synthetic fields. Synthetic Fields warranties prohibit the drinking of electrolyte replenishing drinks on the playing surface, (water only).

The ‘2008 San Francisco Synthetic Playfields Task Force Report’ states, ‘Urban heat islands are created when natural areas are replaced by impervious surfaces like rooftops and asphalt, which absorb heat during the day, and continue to do so after the sun sets. SYNTHETIC TURF MATERIALS ARE ALSO IMPERVIOUS, and surface temperatures are higher than natural grass.’ (page 14)

In fact, synthetic turf gets much hotter than natural grass.

National Public Radio did a story called ‘High Temps On Turf Fields Spark Safety Concerns’ in which it was reported, ‘Since crumb-rubber turf absorbs and retains heat, the NYC Health Department report says heat is the primary health concern associated with playing on the fields. It says people can suffer dehydration, heatstroke and thermal burns at field temperatures above 115 degrees.

Based on these concerns, the New York City Parks Department has now decided to move away from using recycled-tire rubber in new turf fields. Commissioner Liam Kavanaugh says decisions have already been made regarding a couple of installations. ‘We have two fields in construction where we’ve actually canceled the black crumb rubber and are actively looking for an alternative,’ Kavanaugh says.’ <http://www.npr.org/templates/story/story.php?storyId=93364750>

The National Institute of Environmental Health Sciences (NIEHS), wrote, ‘Stuart Gaffin, at Columbia University, when using thermal satellite images and geographic information systems noticed that a number of the hottest spots in the city turned out to be synthetic turf fields.

Direct temperature measurements conducted during site visits showed that synthetic turf fields can get up to 60° hotter than grass, with surface temperatures reaching 160°F on summer days. For example, on 6 July 2007, a day in which the atmospheric temperature was 78°F in the early afternoon, the temperature on a grass field that was receiving direct sunlight was 85°F while an

adjacent synthetic turf field had heated to 140°F. 'Exposures often minutes or longer to surface temperatures above 122°F can cause skin injuries, so this is a real concern,' said Joel Forman, medical director of the Pediatric Environmental Health Specialty Unit at Mount Sinai School of Medicine, speaking at a 6 December 2007 symposium on the issue.

Many physical properties of synthetic turf—including its dark pigments, low-density mass, and lack of ability to vaporize water and cool the surrounding air—make it particularly efficient at increasing its temperature when exposed to the sun. This is not only a hazard for users, but also can contribute to the 'heat island effect,' in which cities become hotter than surrounding areas because of heat absorbed by dark man-made surfaces such as roofs and asphalt. From many site visits to both black roofs and synthetic turf fields, Gaffin has concluded that the fields rival black roofs in their elevated surface temperatures.'

The '2008 San Francisco Synthetic Playfields Task Force Report' found, 'In areas of San Francisco, extended periods of intense sunlight could potentially raise the field temperatures to a level that can contribute to the urban heat island effect.' (page 15)

The report goes on to say, 'In recent years there has been a popular movement to create 'living roofs' such as the one nearing completion on the new California Academy of Sciences museum in Golden Gate Park, to lessen the heat island effect caused by standard roofing material.' (page 14)

It is our position that the same healthy benefits will be accomplished by retaining a grass lawn such as the one at Beach Chalet Fields as well as other of San Francisco's neighborhood grass parks.

Field temperature measurements taken for the 2008 San Francisco Synthetic Turf Task Force.

SYNTHETIC FIELDS TEMPERATURES. The black tire crumbs are excellent solar collectors and can become painfully hot. A 98-degree day will produce a surface temperature on the synthetic grass of 173 degrees. At head-level height the thermometer registers 138 degrees. At Syracuse University the turf melted the bottom stud on one of a player's cleats.

The skin of young children and damaged skin are more susceptible to burns than other types. First-degree burns (superficial) are thought of as surface burns. Second-degree burns (partial thickness) involve the entire epidermis (top layer of the skin) and some portion of the dermis (second layer of the skin). "(SFPARKS, letter, December 12, 2011 [O-SFPARKS-49])

"The impact of synthetic turf on global warming;" (Jean Barish, letter, December 12, 2011 [I-Barish-18])

“The tendency for artificial turf to becoming dangerously overheated in warm and/or sunny weather;” (*Jean Barish, letter, December 12, 2011 [I-Barish-20]*)

“One of the adverse environmental and health impacts of artificial turf fields is the ‘heat island’ effect. This means two things: the synthetic surface undesirably absorbs, retains and emanates heat at temperatures and rates that are harmful to the environment, and the turf in its life-cycle is responsible for generation of carbon dioxide and other greenhouse gases that contribute to global warming.

- Please quantify the effect that replacing the natural grass in this project with artificial turf will have on oxygen production.
- Please quantify the effect that replacing the natural grass in this project with artificial turf will have on sequestration of carbon dioxide.
- Should the artificial turf fields become too hot to be comfortable or safe, what steps will be taken to mitigate this problem?” (*Jean Barish, letter, December 12, 2011 [I-Barish-34]*)

“...removing yet more natural space. I recall when (not so long ago) Union Square was a lovely mound of lush green grass with trees, now it’s an ugly concrete business square. This makes a negative impact on our smog level.” (*Jessica Brown, letter, November 30, 2011 [I-Brown-02]*)

“As a resident of the Sunset district and a frequent visitor to the park, I am aghast at the idea of a sports complex disturbing the tranquility of the western edge. The ...the noise ...are all completely out of sync with the serene character of the surroundings. ...” (*Ben Citron, letter, December 11, 2011 [I-Citron-02]*)

“Artificial grass heats up and adds to ambient temperature. It absorbs sunlight and emits heat. One study found it to be 85% hotter than natural grass.” (*Flora Colao, letter, November 23, 2011 [I-Colao-03]*)

“Natural grass absorbs carbon dioxide and produces oxygen, artificial grass does not. This impacts our air quality.” (*Flora Colao, letter, November 23, 2011 [I-Colao-05]*)

“I am opposed to the draft EIR for the Beach Chalet Athletic Fields. Much of the previous testimony before your committee has outlined some of the inadequacies of this EIR.

My concern is for the long-term effect on the ecology of the proposed site for this untested design for a soccer field. ... What effects when sea levels are predicted to rise due to global warming. ..."
(Denise D'Anne, Letter, December 7, 2011 [I-D'Anne2-01])

"TOPIC 17: MINERAL AND ENERGY RESOURCES: Would the project: c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner? The response states, in part: ' ... the project would not, in and of itself, generate a significant demand for energy and a major expansion of power facilities.' This answer is nothing more than cruel sophistry; the Project Description~ on page 5, states that the proposed 11 acre, site will be lit by 600,000 watts of illumination for several hours each day, 365 days per year. Who pays the light bill?? If this level of illumination, and electricity consumption, do not constitute 'large amounts of energy ... in a wasteful manner', it is difficult to imagine just what would!"
(Fred W. Davis, Letter, July 15, 2011 [I-FDavis-03])

"The proposed project will also have impacts on the historic resources which are concentrated at the western end of Golden Gate Park, the two windmills, the Beach Chalet and the Millwright's Cottage, and their connection with each other. This is not adequately addressed in the DEI R. I am also afraid that the amount of persons attracted to the soccer games and wandering around in the area could lead to vandalism of the historic resources." (Inge Horton letter, December 1, 2011 [I-Horton-02])

"1. Earthquake and related earth surface events.

A. Tsunami

Impact HY-6 states that the soccer fields are not in an area subject to tsunami run-up.

It refers to Map 6 General Plan Community Safety Element. The Map 6 is dated 1972.

The determination was made that the impact was less than significant.

This determination was made prior to the March 11, 2011 tsunami which devastated parts of Japan and produced damage along the Pacific Coast of the United States.

The City and County of San Francisco Emergency Response Plan. Tsunami Response Annex (March, 2011) map ('Attachment B') clearly shows that the project area is within the tsunami run-up zone. 'Attachment B' is based on 21st century modeling.

Additionally, the Annex presents this:

'Evacuation Priorities

First Priority is to clear people from:

Soccer fields near beach in Golden Gate Park (SFPD and PRO [sic])

Clearly, this is an area that needs further work. When their tsunami walls were overtopped, the Japanese learned that the old predictions were not accurate for the new realities of global geologic processes. The EIR should reflect the projected impact from the most recent data and models, not 40 year old models.

The predicted rise in ocean surface levels will exacerbate the potential for tsunami runup at the project site. This has not been addressed.

I am surprised that such a development would be placed in a location with a potential for sudden catastrophic destruction when other, safer locations are available or possible." (*Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-01]*)

"B. Earthquakes

The project site is in an area described as having the **potential** for liquefaction. (Map - 4) in the General Plan Community Safety Element.

The DEIR lists this risk as 'Less than significant impact.'

Human manipulation of the land is known to increase the risk of / severity of liquefaction.

The DEIR fails to address the impact that the alteration of the surface will have on the liquefaction potential at the soccer field site.

Maps 2 and 3 (Created in 1995), presented in the General Plan Community Safety Element, deal with the potential for 'shaking' from earthquakes. These two maps show that the project is in the 'non-structural' zone or Modified Mercalli Intensity Damage Level of VII (7.1 earthquake).

The DEIR does not address the impact that an earthquake would have on the top-heavy light poles. Rather it passes that off to another agency.

Specific earthquake hardening design criteria for sports field or other similarly high light poles (standards) should be presented or at the very least cited, just as other standards are presented in the DEIR.

Should the light poles fall, they would damage the surface of the fields, compromising the drainage system and other barriers designed to protect the surrounding environment from the materials in the field.

Additionally, the destruction in whole or in part, of the surface of the fields would trigger the need to remove some or all of the material for recycling.

Other causes, such as vandalism, may require portions of the surface to be removed and replaced.

This contingency has not been addressed, but needs to be. ...” (*Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-02]*)

“Impact of wind and fog: The DEIR states, ‘An Initial Study (is) was also distributed for review, describing the proposed project and identifying potential environmental effects of the project (see Appendix A). The IS identified impact topics that were determined not to apply to the proposed project and impact topics where the project would have no impact or a less-than-significant impact. These topics, summarized below, are not addressed in this EIR (see Section I.C, Organization of the Draft EIR, for a summary of environmental topics addressed in this EIR):

‘Wind and Shadow-alteration of wind or creation of shadows that substantially affect public areas.’

The constant wind off of the Pacific Ocean and the often accompanying fog are both defining features of the western end of Golden Gate Park and should be included in all categories of the DEIR analysis.” (*Katherine Howard, letter, December 11, 2011 [I-KHoward-01]*)

“Also considering the increased ...noise and the reduction in safety for people like us with young kids in the area, these projects are a terrible idea.” (*Sean Joyce, email, November 29, 2011 [I-Joyce-02]*)

“The plan requires the construction of a large athletic complex: there is insufficient analysis of the volume and duration of noise coming from the large athletic complex and its impact upon Park visitors, Ocean Beach visitors, nearby residents, local wildlife, and migratory wildlife.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-28]*)

“The plan requires the use of artificial surfaces: there is insufficient analysis as to the impact to the temperature in the local environment due to the use of large areas of artificial surfaces.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-31]*)

“Why are the only potential areas of controversy and unresolved issues of the project the ignoring of the park master plan and the loss of the character of this historic resource? If increased safety is a goal of the project to be mentioned in the DEIR, why weren’t the comments and concerns about safety that were brought up in the scoping session addressed in the DEIR?” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-04]*)

“The assumption that the league players would all come by car raises the question of increased CO2 emissions generated by this project due to car travel alone (excluding the same question related to the synthetic field materials and construction). Isn’t reducing global warming emissions a city goal, as stated earlier in the DEIR?” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-37]*)

“... the Impact Analysis should be reconsidered in light of these and other comments. Increased ... increased exhaust, and increased CO2 emissions are significant impacts.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-51]*)

“What is the CO2 result of all this manufacturing, ripping out, putting in, caring for, ripping out again, and disposing of the synthetic fields?” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-72]*)

“Can you estimate the level of impact of locating a major sports complex at the edge of the city on air pollution caused by automobiles?” (*Gabriel Lampert, email, December 4, 2011 [I-Lampert2-01]*)

“First is the loss of oxygen produced by natural grass. Every six square feet of grass produces enough oxygen for a person for a day. the proposed project would eliminate the equivalent of oxygen for some 40,000 people. Why is this not mentioned? Air quality would certainly be considered an environmental concern. No data was included on this issue

Second Air Temperature- studies have shown that natural grass has an air cooling effect of 3-7 degrees, while synthetic(plastic) turf can heat the air above it by 10-35 degrees depending on the weather. This much heating of the air would certainly affect, the flora nearby and affect the athletes playing on it adversely. There was no data on this issue in the D.E.I.R.” (*Terry McDevitt, email, January 1, 2012 [I-McDevitt-01]*)

“Remember all of the cars driving around will spew out emissions from the cars and pollute the environment.” (*Shana McGrew, email, no date [I-McGrew-12]*)

“Soccer fans get excited and make noise. It’s the same the world over at any level. The noise levels will increase dramatically and spoil the peaceful experience of being in Golden gate Park.”
(Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-09])

“Soccer can be a dangerous game for both players and spectators. Rivalries are commonplace, and things can get out of hand very easily result in people getting hurt. This includes nonparticipant passers by and residents” (Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-11])

“The hum of noise from this complex will drown-out the whistle of wind through trees, cooing of bedding birds, and definitely mask the crashing of waves. “(Andrea & Rick O’Leary, email, December 11, 2011 [I-O’Leary-05])

“Fumes from the exhaust of multiple buses every single day coming from every comer of the Bay Area with teams renting the fields cannot be controlled or mitigated against by any means what -so-ever.” (Andrea & Rick O’Leary, email, December 11, 2011 [I-O’Leary-10])

“Soccer fans get excited and make noise. It’s the same the world over at any level. The noise levels will increase dramatically and spoil the peaceful experience of being in Golden gate Park.”
(Jamie Ray, letter, December 12, 2011 [I-Ray-10])

“Soccer can be a dangerous game for both players and spectators. Rivalries are commonplace, and things can get out of hand very easily result in people getting hurt. This includes nonparticipant passers by and residents “(Jamie Ray, letter, December 12, 2011 [I-Ray-12])

“We will hear sports fans not bird songs. Vuvuzelas, not the wind in the trees. ... create excessive garbage strewn about, ... cause safety concerns when fans leave the park after night games, amongst other concerns.” (Jamie Ray, letter, no date [I-Ray2-01])

“...CO2 is absorbed by natural grass.

CO2 is not absorbed by artificial turf.

CO2 is generated by the electricity needed to power 150,000 watts of lighting each night, when demand for night games is questionable at best.

The benefits of grass in removing greenhouse gasses, emitting oxygen, providing a cool safe playing surface outweighs the water that is used for the benefit of providing athletic fields for the public.” (*Jamie Ray, letter, no date [I-Ray3-12]*)

“The increase in traffic that will occur if four fields are in use will result in noise, air pollution ... beyond the Park’s ability to absorb it.” (*David Romano, email, December 9, 2011 [I-Romano-02]*)

“There is so little green space in urban areas ...that can serve to help keep global warming at bay,” (*Leida Schoggen, letter, November 29, 2011 [I-Schoggen-03]*)

“The DEIR did not study the project effects of wind and shadow on the existing soccer area. This means that the loss of the existing windbreak provided by healthy, mature trees and shrubs that will be removed was not evaluated. The windbreak provides protection from gusts directly off the ocean that negatively affect recreational play, the integrity of the forest, and wildlife habitat. Also, the presence of shadow in the area is a requirement for some wildlife. Loss of shadow was not evaluated. Mitigation measures that could have been considered include retaining the maximum number of trees and shrubs by reducing the number of the optional amenities that require the removal of trees and shrubs.” (*Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-01]*)

Response ERP-3

As described in response ERP-1, an Initial Study was prepared that included detailed impact evaluations for topics which would not be expected to result in significant impacts. The Study also reached no impact, not applicable, or less-than-significant impact conclusions for many topics.

Comments that noise impacts would result from the proposed project (I-Citron-02, I-Joyce-02, I-Jungreis2-28, I-Ogilvie-09, I-O’Leary-05, I-Ray-10, I-Ray2-01, I-Romano-02, I-GGAS3-03, O-SFPARKS-40) are noted. The proposed project would not result in a substantial permanent increase in ambient noise levels in the project vicinity, and would not expose persons to noise levels in excess of standards established in the San Francisco General Plan or Noise Ordinance (see Initial Study pages 21 – 24, in EIR Appendix A). The Beach Chalet Athletic Fields are not currently affected by elevated noise levels due to proximity to existing high volumes of traffic

and commercial or industrial activity.¹ There would be no impact to ambient noise levels by the project in operation, because the project does not include construction of buildings, or noise from conditioning indoor air, nor program noise-generating recreational uses. The project site would remain an athletic facility and although facility use would increase, no new noise exposure of the proposed project is anticipated. This is because 1) the project site is located in an urban park, 2) is not located in an area with elevated noise levels in the existing environment, and 3) is not in the immediate vicinity of sensitive noise receptors. Therefore, operational noise would not be significant.

Several comments were submitted related to global warming, greenhouse gas emissions (GHG), the heat of synthetic turf, and production of oxygen by grass (A-NPS-05, I-Barish-18, I-Barish-34, I-D'Anne2-01, I-Schoggen-03, O-SCSFBC-38, I-Barish-20, I-Colao-03, I-Jungreis2-31, I-McDevitt-01, I-SFPARKS-49, I-Brown-02, I-Colao-05, I-McDevitt-01, I-Ray3-12, I-Koivisto-37, I-Koivisto-51, I-Lampert2-01, I-McGrew-12, I-O'Leary-10, I-Romano-02, I-Koivisto-72). As described in the Initial Study, pages 26 – 37 of EIR Appendix A, San Francisco's greenhouse gas reduction strategy identifies a number of mandatory requirements and incentives that have measurably reduced greenhouse gas emissions. These requirements include, but are not limited to: 1) increasing the energy efficiency of new and existing buildings, 2) installation of solar panels on building roofs, 3) implementation of a green building strategy, 4) adoption of a zero waste strategy, 5) a construction and demolition debris recovery ordinance, 6) a solar energy generation subsidy, 7) incorporation of alternative fuel vehicles in the City's transportation fleet (including buses and taxis), and 8) a mandatory composting ordinance. The strategy also identifies 42 specific regulations for new development that would reduce a project's greenhouse gas emissions. Depending on a proposed project's size, use, and location, a variety of controls are in place to ensure that a proposed project would not impair the State's ability to meet statewide greenhouse gas reduction targets outlined in AB 32, nor interfere with the City's ability to meet San Francisco's local greenhouse gas reduction targets. Projects that are consistent with San Francisco's regulations would not contribute significantly to global climate change for the following five reasons: 1) San Francisco has implemented regulations to reduce greenhouse gas emissions specific to new construction and renovations of private developments and municipal projects; 2) San Francisco's sustainable policies have resulted in the measured success of reduced greenhouse gas emissions levels; 3) San Francisco has met and exceeded AB 32 greenhouse gas reduction goals for the year 2020; 4) current and probable future state and local greenhouse gas reduction measures will continue to reduce a project's contribution to climate change; and 5) San Francisco's Strategies to Address Greenhouse Gas Emissions meet BAAQMD's requirements for a Qualified Greenhouse Gas Reduction Strategy. The proposed project would be required to comply with these requirements, and was determined to be consistent with San Francisco's Strategies to Address Greenhouse Gas Emissions.² As such, the proposed project would result in a less-than-significant impact with respect to GHG emissions. It is noted that air temperature in the immediate area of synthetic turf can be higher

¹ Noise map presented on the San Francisco Department of Public Health's website: <http://www.sfdph.org/dph/EH/Noise/default.asp>. Accessed on October 19, 2010.

² Greenhouse Gas Analysis: Compliance Checklist. January 25, 2011. This document is on file and available for public review in Case File No. 2010.0016E at the San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, California.

than adjacent areas on hot or sunny days; however, that condition only occurs in the immediate area of the turf.

Comments I-KHoward-01 and I-Wuerfel-01 indicate that wind and shadow impacts should be addressed. As described in the Initial Study, pages 37 – 38 of EIR Appendix A, the proposed project would not include buildings or other structures that would alter wind on the newly renovated project site, nor on surrounding development. The proposed light standards would not be of sufficient bulk to create substantial ground-level wind acceleration. Therefore, the project would not result in significant effects related to wind (see also response BIO-2 regarding vegetation removal/windbreak effects). The proposed project would not include buildings or other structures that would cast substantial shadows on the Beach Chalet Athletic Facility, nor on surrounding park property. The proposed light standards would be greater than 40 feet tall but would not be of sufficient bulk to cast substantial shadow. Therefore, no shadow effects would ensue as a result of the proposed project.

Comments I-FDavis-03 and I-Ray3-12 request consideration of energy resources analysis, particularly regarding lighting. As described in the Initial Study, pages 55 – 56 of EIR Appendix A, the proposed project would not have a substantial effect on the use, extraction, or depletion of a natural resource. In addition, the project would not, in and of itself, generate a significant demand for energy and a major expansion of power facilities. For this reason, the project would not cause a wasteful use of energy and would not have a significant effect on natural resources.

Comments I-GoHoward-01, O-SCSFBC-37, and O-SCSFBC-38 relate to tsunami potential and increased sea level rise. Comment I-GoHoward-02 relates to potential liquefaction and earthquake hazards. As stated in the Initial Study, pages 46 – 48 of EIR Appendix A, the areas of the City subject to geologic hazards are shown on maps in the *San Francisco General Plan Community Safety Element*. These maps indicate that the project site is located in an area subject to nonstructural damage ground shaking from earthquakes along the San Andreas (Map 2) and Northern Hayward (Map 3) Faults, and other faults in the San Francisco Bay Area. The project site is located in an area of liquefaction potential (Map 4) but is not located within a tsunami run-up area (Map 6). The project site is not within a mapped area of potential landslide hazard (Map 5) or subject to potential inundation due to reservoir failure (Map 7). As described in the Initial Study, a range of effects due to ground shaking could occur in the event of an earthquake on one of the regional faults. These effects include structural damage directly from ground shaking, or from secondary effects, such as differential settlement, lateral spreading, and liquefaction. Such damage could place people at risk of injury, and differential settlement can fracture or sever underground utility conduits.

The final building plans for the proposed fencing, light poles, and restroom building would be reviewed by the Department of Building Inspection (DBI). In reviewing plans, the DBI refers to a variety of information sources to determine existing hazards and assess requirements for mitigation. Sources reviewed include maps of Special Geologic Study Areas and known landslide areas in San Francisco and the building inspectors' working knowledge of areas of special

geologic concern. Potential geologic hazards would be fully addressed during the permit review process through these measures. To ensure compliance with all Building Code provisions regarding structure safety, when the DBI reviews the geotechnical report and building plans for a proposed project, they will determine the adequacy of necessary engineering and design features. Past geological and geotechnical investigations would be available for use by the DBI during its review of building permits for the site. Also, the DBI could require that additional site-specific soil report(s) be prepared in conjunction with permit applications, as needed. Therefore, potential damage to structures from geologic hazards on the project site would be mitigated through the DBI's possible requirement for a geotechnical report and review of the building permit application pursuant to DBI implementation of the Building Code.

As noted above, the project is not expected to expose people or structures to risk from inundation by seiche, tsunami, or mudflow, based on *San Francisco General Plan Hazard Maps*. In addition, the project site is not located in areas expected to be subject to significant flood hazards, and would not expose persons, structures, or housing to such hazards. The potential for the area to be inundated by increased sea levels is not certain at this time. However, the State of California's Interim Guidance regarding sea level rise projects an increase of up to 55 inches (about 5.5 feet) by 2100.³ The project site is at an elevation of approximately 25 feet San Francisco City Datum,⁴ or about 14 feet above mean sea level, and thus is nearly 10 feet above the anticipated sea level in 2100, although it is acknowledged that other effects, such as wave action, could result in increased water height during storms. Regarding water quality, as indicated in responses HYD-2 and HYD-3, the water quality of runoff and stormwater from the proposed project would be less than significant.

Several commenters indicated that the proposed project could be associated with increased crime and user conflicts due to the nature of athletic field uses. It is speculative to determine that athletic field users would be associated with criminal activities. As discussed in the Initial Study, the anticipated increased intensity of use is not expected to either increase the service calls to the San Francisco Police Department (SFPD) or increase crime prevention activities and additional policing of the project area. The closest police station to the Beach Chalet Athletic Facility is the Richmond Station located at 461 6th Avenue. No new stations are proposed in the project vicinity. However, the proposed project would not result in population or employment growth, and is therefore consistent with planned and expected growth. There are no aspects of the project description that would be expected to lead to an increase in crime, and SFPD has sufficient resources to accommodate the proposed project. Given the nature of the proposed project, it would not necessitate the construction of a new police station. Overall, the project would not have a significant effect on police protection services.

³ State of California Sea Level Rise Interim Guidance Document , October 2010. Available on the internet at: http://opc.ca.gov/webmaster/ftp/pdf/agenda_items/20110311/12.SLR_Resolution/SLR-Guidance-Document.pdf

⁴ San Francisco City Datum establishes the City's zero point for surveying purposes at approximately 8.6 feet above the mean sea level established by 1929 U.S. Geological Survey datum. In San Francisco, elevation in the 1929 USGS datum is approximately 2.7 feet lower than the corresponding elevation current 1988 North American Vertical Datum.

D. Project Description

D.1 Overview of Comments on the Project Description

The comments and corresponding responses in this section cover topics in Chapter II of the EIR. These include topics related to:

- PD-1, Project Description General or Miscellaneous Comments
- PD-2, Project Objectives
- PD-3, Project Site Characteristics and Setting
- PD-4, Project Components, Including Proposed Operations and Maintenance

To the extent that comments responded to in this section also discuss topics, such as project-specific or cumulative impacts or project alternatives, these comments are also addressed in those respective sections of the Responses to Comments document.

D.2 Project Description, General [PD-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFHPC-09	O-SPEAK3-05	I-Kushner-02	I-MMiller-02
O-SCSFBC-01	I-Chappell-02	I-Learner-02	I-O'Leary-01
O-SFPARKS-39	I-Jungreis2-34	I-Learner-13	
O-SFPARKS-44	I-Kushner-01	I-MMiller-01	

"The HPC believes the changes made since the previous proposal is in the right direction but needs more information about the design of the area between the soccer fields and parking lot as well as the planting material." (*Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-09]*)

"However, it is worth noting that the Notice of Preparation for this project refers to the site as the 'Beach Chalet Athletic Facility.' This is an incorrect characterization, since the site, as defined by the Golden Gate Park Master Plan and the City and County of San Francisco General Plan, is not an 'athletic facility.' It is a meadow in 'naturalistic' area that can be used for multiple recreational athletic and non-athletic activities, including soccer, frisbee, picnicking, hiking, and bird watching." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-01]*)

“Construction Scheduling and Staging. ‘The project would require excavation to a depth of approximately 1 foot below ground surface (bgs) for most project elements and approximately 10 feet bgs for the installation of ten GO-foot-tailight standards.’ (DEIR Page 11-21)

It is our position that this description leaves out a very substantial below ground ‘wall’ whose purpose is an attempt to contain the leachate from the field. This subterranean ‘wall’ sits approximately 5 foot below ground surface (bgs) and is greater than 12 inches wide. This wall will circumvent the 9 acre installation, (approximately 1.5 miles).

It is our position that the environmental impact of such a massive structure needs to be included in the EIR.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-39])

“SYNTHETIC TURF LIMITATIONS (Including Americans With Disabilities Act (ADA) QUESTIONS). Synthetic Turf Installation, (DEIR page IV.C-21),

In regards to the statement ‘allow for increased recreational use,’ (DEIR page IV.C-21), it is our position that this statement needs to be amended by eliminating the word ‘increased’.

It is our position that converting the grass lawn to plastic and SBR tire crumb does not create more available play time but will effectively impose ‘decreased recreational use,’ and eliminate a playfields use for many sports and recreational activities. The manufacturer’s warranty and the fragile nature of the synthetic surface excludes picnics, festivals, or fairs that involve structures, stakes, food, sports drinks, or any drinks other than water, sports that require a stake or pole or metal cleat. It is our position that a potentially, ‘universally’, usable field becomes usable to only a handful of sports.

The FieldTurf warranty prohibits repetitive training or repetitive marching on the same area of the field. ...

Additionally, it is our position the claim, ‘allow for increased recreational use’, does not be factor in comparative calculations with grass fields with similarly installed drainage or lights.

The DEIR states, ‘Separate signage would also clarify that the following uses would not be allowed on synthetic turf fields: smoking, barbeques, alcohol, food, bikes, dogs, and metal cleats.’ (DEIR 11-24)

It is our position that signage that a surface is too fragile for bikes, (and in the case of Silver Terrace no baby carriages), and does not allow bikes on its surface runs the potential risk of discouraging athletes in wheelchairs from accessing the synthetic field or encouraging others to discriminate against wheelchair athletes. This runs the risk of non-compliance with current ADA requirements.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-44])

“The proposed project is the development of a new and expanded sports facility complex, not a ‘Renovation’. The present Beach Chalet soccer fields are used today for soccer practice play, mainly after school. Before perimeter fencing was installed eight to ten years ago, there were afterschool soccer games and casual, unscheduled pick-up games on this meadow. The meadow was designed to be a large open grassy field, following the ‘Picturesque’ style which created in Golden Gate Park a series of alternating meadows, horticultural planted areas, recreation areas and forest. It should not be called a renovation. The DEIR does not study the project for what it is: an extreme makeover and major expansion which will materially affect the NRHP status. It is a new project, not a renovation and it should be studied as such. The word ‘RENOVATION’ should not be permitted to remain in the project title as it is biased in favor of the project and glosses over the major construction program that is being proposed.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-05]*)

“The title of the project, ‘Beach Chalet Athletic fields Renovation’ is a misnomer. The current fields are natural grass set in the western forest of the park; as such, they serve a dual role providing playing fields for active sports enthusiasts, while maintaining the overall fabric of meadows, forests and lakes that define the character of Golden Gate Park.

The proposed project is not a simple renovation but rather a complete remake of the site into a semi-professional sports complex made of modern non-natural materials. It includes over 7 acres of artificial turf, 10 metal poles with over 150,000 watts of sports lighting, 60 more metal light standards with various types of night lighting, bleacher seating for over 1,000 people, increased paving and increased parking, all of it in an area that is now a grassy meadow in a grove of trees with no lights and a small parking lot. This semi-professional sports complex, which could be located on any open land or even on top of a parking structure, is instead proposed to be located within a major landscape park, a park that is renowned world-wide for its naturalistic beauty. It is located next to Ocean Beach, a popular spot for San Franciscans and visitors alike to enjoy the untamed beauty of the ocean. The project will destroy the natural beauty of this area and change its character forever to that of an urban development. This is contrary to all the planning documents and this over-riding value of this area is given little weight in the DEIR.” (*Jim Chappell, letter, December 10, 2011 [I-Chappell-02]*)

“The plan must include alternatives: there is insufficient analysis of City policy to encourage school playing-field facilities to be used during non-school hours (these facilities are located where the demand is, and using local school playing-fields develops community relationships).” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-34]*)

“This project is no ‘renovation’ at all. Rather this project is a completely new direction and thus a new project for the soccer fields. The project describes a change in function from a play field with

a rural, pastoral setting into a highly technical sports arena and should be explained as such in full." (*Pinky Kushner, letter, December 12, 2011 [I-Kushner-01]*)

"The title of the dEIR should be Beach Chalet Sports Arena. A second comment in this regard is that the photo on the cover of the dEIR is completely deceptive and not conducive to trust in the public CEQA process as performed by the Planning Department of San Francisco. This photo must be changed to illustrate the fields as they will be used and lit by the proposed lights since these are the most significant changes proposed for the fields." (*Pinky Kushner, letter, December 12, 2011 [I-Kushner-02]*)

"II-24 Project approvals: This section only mentions that the Recreation and Park Commission would be required to give project approval. It would be more complete to mention that a Determination of Consistency with GGP Master Plan would be required. In addition a GGP master plan amendment may also be required because currently, the installation of athletic field lighting at the Beach Chalet Soccer Field is not consistent with the GGPMP." (*Deborah Learner, letter, November 29, 2011 [I-Learner-02]*)

"IV.C-23: The discussion of what would constitute an acceptable ADA walking surface is somewhat confusing, like a catch-2-2. It would be interesting to know what is being used throughout the park now, and throughout the park system that has satisfied the ADA requirements. I would be curious to know if turf block options have been considered that would be both stable and permeable?" (*Deborah Learner, letter, November 29, 2011 [I-Learner-13]*)

"There is a major misnomer in the title of this EIR study, which calls the project a 'restoration,' a term which gives the false impression that the fields are going to be renewed. Nothing could be more inaccurate to call the complete reconstruction of the entire area a simple renovation. If I came to your backyard and scraped away everything that was there and gave you something that I thought was better and you came home, you would see that I could not ever call that a 'renovation.'" (*Mary Anne Miller, public hearing comment [I-MMiller-01]*)

"Reading the project description leaves no other impression than that the project is entirely a new development with only a segment of the existing restroom retained and renewed. Everything else will be scraped away and a new sports facility complex will rise in its place." (*Mary Anne Miller, public hearing comment [I-MMiller-02]*)

“The Beach Chalet Soccer Field Draft EIR either directly supports, or by key omissions, confirms that the proposed remake must NOT become a reality.

This is not a ‘renovation’ of an existing field but an attempt to remake it into something it was never intended to be - a mega athletic complex:” (*Andrea & Rick O’Leary, email, December 11, 2011 [I-O’Leary-01]*)

Response PD-1

Comment A-SFHPC-09 requests additional information regarding various project components, including additional information on the design of the area between the soccer fields and the parking lot, such as the proposed planting material. Because the landscaping plan for this project has not been finalized, the plant material for this area has not been selected. Plant material selection would occur during the detailed design phase of the project. As stated in CEQA Guidelines Section 15151, Standards for Adequacy of an EIR, “An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible.” The planting material selected would not have any bearing on the environmental impacts of the project. Based on this, the inclusion of details requested by the comment is not necessary to provide adequate environmental review and to determine the environmental impacts of the proposed project. As indicated in Figure II-5 on page II-12, the area between the soccer fields and the parking lot would include a seating plaza, the restroom building, and play structures. These project components are discussed on EIR page II-17.

Comments I-Chappell-02, I-Kushner-01, I-O’Leary-01, O-SPEAK3-05, I-MMiller-01, and I-MMiller-02 state the title of the project is a misnomer because, according to the project description, the project is entirely a new development. The term “renovation” is used in the project title because the primary function of the site would not change and it would continue to be used as an athletic facility. Although some project components, such as the playground, picnic areas and spectator seating would constitute additions to the facility, these features would be ancillary to the facility’s primary use as athletic fields and most areas, including the fields, restrooms, and parking areas, would be retained and upgraded. Although their use would increase, their primary functions would not change. Thus, renovation is an appropriate term to title the project.

Comment O-SCSFBC-01 states that referring to the site as the “Beach Chalet Athletic Facility” is incorrect since the Park Master Plan does not define it as such but as a meadow in a “naturalistic” area that can be used for multiple recreational athletic and non-athletic activities. In fact, the *Park Master Plan*, on page 6-1, under the heading “Athletic Fields,” states “There are large athletic fields at Kezar Stadium, Big Rec, the Polo Field, and the Beach Chalet soccer fields.” It is clear that the project site is acknowledged by the *Park Master Plan* as an athletic facility. (The reader

may be referring to the *Master Plan's* Landscape Design Framework on pages 4-6 – 4-7, in which the soccer fields are designated as “*Meadows and other important spaces*” (italics added.) Please also see Section E, Plans and Policies and Subsection E.3, Consistency with *Golden Gate Park Master Plan* [PP-2], for a discussion of the project’s consistency with the *Park Master Plan*.

Comment I-Kushner-02 states that the cover photo misrepresents the proposed project. The cover photo illustrates existing conditions on the project site, which is a common type of a graphic used on EIR covers. The Planning Department guidelines for preparation of EIRs state, with respect to an EIR cover, “Images depicting the project site are permitted, subject to the approval of the environmental coordinator, but no images of the proposed project shall be used.” The reason for this is to avoid having the EIR, which is an informational document neutral in tone, appear to be promoting a proposed project. Plans of the proposed project components are included in the EIR, on pages II-12, II-7, and II-18 through II-20 of the EIR, with visual simulations of the proposed project included on pages IV.B-20, IV.B-22 through IV.B-25, and IV.B-27, and nighttime visual simulations provided on pages IV.B-31 and IV.B-32. This comment represents a personal opinion and is so noted.

Comment I-Learner-13 is in regard to Mitigation Measure M-CP-1, which states that “circulation paths shall be designed with a more naturalistic compatible surface material such as decomposed granite, NaturePave, or compacted earth in place of the proposed concrete surface materials.” The EIR states that these types of surfaces are infeasible because they would not meet accessibility requirements for the proposed project. In addition, the durability of newer products such as NaturePave is not known. The comment requests information on existing materials currently used as acceptable ADA walking surfaces throughout the park and asks whether the turf block option considered is stable and permeable. This comment is in regard to specific project components and not on the adequacy of the EIR. In terms of ADA requirements in general, as stated on page II-5 of the EIR, compliance with current ADA accessibility guidelines is one of the project objectives and access to site facilities would be provided per ADA requirements. Currently, the Beach Chalet Athletic Fields are not ADA accessible. No further response is required. Comment O-SFPARKS-39 states that the Project Description leaves out discussion of a below ground “wall” which would sit 5 feet below ground surface and whose purpose would be to contain leachate from the field. Project components are discussed on page II-10 through page II-21 of the EIR. No such below-ground-surface wall is proposed as part of the project at this time.

Comment O-SFPARKS-44 asserts that converting grass lawn to synthetic turf does not create more available play time but will instead decrease recreational use and eliminate a playfield’s use for many sports and recreational activities. Since the Beach Chalet Athletic Fields are currently reserved for athletic play use only, it is unclear from the comment how the project would decrease recreational activities. As stated under Project Objectives on page II-5 of the EIR, one of the project’s objectives is to increase the amount of athletic play time, which would be achieved by converting grass fields to synthetic turf, among other changes discussed in the EIR. The Recreation and Park Department also expects to issue permits for lacrosse and ultimate frisbee at the project site once the renovation is complete as the synthetic turf can accommodate increased play without field degradation. At other athletic facilities, such as Crocker Amazon, play time has increased due to

field surface modifications that allow the fields to be used, for example, shortly after a rain storm, when a grass field might be too wet and/or muddy for use. The project site would also be used for picnics and other types of passive recreation.

Comment O-SFPARKS-44 states that the proposed sign that clarifies that certain uses would not be allowed on the synthetic turf (including bicycles) would also discourage wheelchair users from using the fields, thus conflicting with ADA requirements. As stated on page II-5 of the EIR, compliance with current ADA accessibility guidelines is one of the project objectives and access to site facilities would be provided per ADA requirements. Currently, the Beach Chalet Athletic Fields are not ADA accessible.

In response to comment I-Jungreis2-34, which states that the EIR contains insufficient analysis of City policy to encourage school fields to be used during non-school hours, the role of the EIR is to analyze impacts of the proposed project, which is proposed by SFRPD on a site controlled by SFRPD. To the extent that project objectives can be met through other reasonable means, these are analyzed as part of Chapter VI, Alternatives. . As stated in Section X.E, Plans-Policies, Response PP-1, for the past several years, SFRPD has had an agreement with San Francisco Unified School District allowing SFRPD to permit community groups on San Francisco Unified School District athletic fields during non-school hours. This agreement would not change with the proposed project.

D.3 Project Objectives [PD-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Antonini-11	I-Boskin-01	I-Jungreis2-14	I-Newman-01
A-SFPC-Fong-01	I-Buckbee-01	I-Jungreis2-22	I-Queliza-01
A-SFPC-Sugaya-03	I-Clayton-09	I-Jungreis2-39	I-Rappolt-01
A-SFHPC-06	I-AClark-05	I-Kaufman-01	I-Ray3-07
O-CYSA-01	I-Colen-02	I-Kaufman-02	I-Robinson-01
O-CYSA2-04	I-Cross-01	I-Koivisto-41	I-Roskoski-01
O-GGAS2-34	I-EDavis-01	I-Learner-01	I-Rubio-01
O-GGPPA-05	I-Dean-01	I-BLewis-09	I-Rupright-01
O-GGPPA-06	I-MGerrity_2-03	I-Lissak-01	I-Singer-01
O-GGPPA-07	I-JeGoldberg-01	I-Lockwood-01	I-Solow-01
O-GGPPA-08	I-Green-01	I-Lounsbury-01	I-Solow3-01
O-PAR3-08	I-Hahn-06	I-Lounsbury-03	I-Streicker-01
O-SFCC-01	I-Hahn-07	I-Lounsbury-04	I-Thomashefski-02
O-SFLCR-02	I-Hansen-03	I-Madrigal-01	I-DThompson-01
O-SPEAK3-11	I-Hart-01	I-Mayora-01	I-Watkins-01
O-SPEAK3-12	I-Hobbs-01	I-McGrew-08	I-Welborn-04
O-SPEAK4-10	I-Hurlbut-01	I-MMiller-05	I-Woodruff-Long-02
I-Arack-07	I-Ivanhoe-01	I-Mosgofian-01	I-Zwolinski-01
I-Belkora-01	I-Ivanhoe2-02	I-Mudge-01	

“But that area is dangerous in there. And I think another benefit of the lights, not the field lights, but the other lighting around the facility that is part of the whole project will add to security in the area and people might actually want to be walking around there at night, which you probably wouldn’t want to do now given the conditions in the thickness in the brush.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-11]*)

“Futsal is an indoor version of soccer being played on a basketball court largely because of the lack of fields or the difficulty to schedule practices and games. So I think that’s a telltale reason, direction why we do need more fields to be more reliable for kids.” (*Rodney Fong, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Fong-01]*)

“That said, like alternative sites, I don’t know. If this is a facility that’s supposed to serve the entire city, then maybe the EIR needs to take a look at not just sites around Golden Gate Park and the western part of the city but McLaren and other parts of the city as well.” (*Hisashi Sugaya, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Sugaya-03]*)

“that the proposed project is ‘elitist’ given this part of the park is not accessible by public transportation, thus does not serve the needs of all the people in the City.” (*Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-06]*)

“These youth leagues represent over 6000 boys and girls living in San Francisco who depend on the city of San Francisco for safe places to play.

The parents of these 6000 kids are all San Francisco taxpayers, and deserve to have their tax dollars spent wisely to provide safe fields for play.

The Beach Chalet Athletic facility is one of the primary facilities in San Francisco for ground sports and the proposed project offers a significant resource for public recreation. There exists no shortage of ground sports athletic field users in this city. There only exists a shortage of usable facilities.

Although these thousands of players, coaches, and parents cannot be here to testify, I’m sure they would offer their votes in favor of the Beach Chalet Athletic Fields Renovation Project by the CityFields Foundation. The draft EIR appears to be thorough and we advocate its certification.

Please fix the chronic maintenance problems that have limited the use of the Beach Chalet.”
(California Youth Soccer Association, letter, November 11, 2011 [O-CYSA-01])

“The proposal addresses the continual problems that have existed at the Beach Chalet field regarding maintenance and scheduling.” (California Youth Soccer Association, letter, December 1, 2011 [O-CYSA2-04])

“...Second, as discussed more fully below, several of the alternatives appear to include provisions intended to bring them into conflict with the project sponsor’s objectives. For example, there is not a good reason given why Alternatives 2,3, and 4 must include the ‘decomposed granite’ border, which may create conflicts with ADA requirements. This kind of positioning appears to be intended to reduce the viability of the alternatives. ...” (Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-34])

“The project objectives are self-fulfilling - that is, they are written to make the Beach Chalet Athletic Fields in Golden Gate Park the only location that fits these goals. For example, ‘Improve safety and increase nighttime use of the west end of Golden Gate Park ...’ (p. 11-5). This objective precludes placing the project in another location.

Project objectives are not substantiated:

- **Why is increased night use a benefit for the Park?** What is the justification for this goal? There have been many problems with visitors in the park at night for the large festivals - - Why is it a goal now to encourage night use of an area that the DEIR describes as isolated? Would this cause more problems to occur? Night lighting does not always result in security. Where is the study of the actual crime that occurs in this area and the need for lighting specifically of the type used in the sports fields to control it? The on-line crime statistics show that most crime occurs in areas that are lighted - around the Park Chalet and on the roads in the park. Where are the reports of crime at Beach Chalet Athletic Fields compared to the rest of Golden Gate Park and to other parks and areas of the City? Why is it necessary to install artificial turf and the other built elements to provide security? What is the police presence now and what will it be in the future? What other alternatives to this project might meet this goal?” (Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-05])

“A second project objective is to **provide a sports facility in the northern part of San Francisco.** **What is the data that substantiates that this is needed in this area?** The DEIR traffic report states that most of the players will arrive at the Beach Chalet Athletic Fields by car. This is backed by the project increasing the size of the existing parking lot, which is counter to San Francisco’s goal of being a transit-first city. Personally, we have seen few bicycles at the fields. If everyone is

driving, why does the project have to be located in this area?" (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-06]*)

"Another project objective is **renovating the restroom building** at Beach Chalet Athletic Fields. This is a worthy goal, but hardly worth substantiating the destruction of parkland and the expense of a \$9.8 million project. **What alternative could accomplish this objective?**" (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-07]*)

"....The project objectives oriented towards only the location in Golden Gate Park have caused the DEIR to give little consideration to any alternatives outside of Golden Gate Park. ... the project objective of providing athletic opportunities in the northern part of San Francisco. What is the substantiation for this project objective? The DEIR traffic report states that most of the players will arrive at the Beach Chalet Athletic Fields by car. West Sunset Playground is two miles from Beach Chalet, a matter of a few minutes by car." (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-08]*)

"Project Goal: provide a safe environment is not supported with data. There is no statistics-based justification for this goal. If there is a concern with illegal activities that may take place in the western end of the Park, the DEIR should cover the amount and type of activities with statistics to back this up, a comparison to other parts of Golden Gate Park and other parks for the same types of activities, and a comparison to non-park areas, to see if these activities are occurring at such a high rate that it warrants the loss of parkland to development in order to counter this. The DEIR also assumes that lighting will automatically prevent crime; however, studies show that lighting can provide an environment for more crime. Studies on this topic should be carefully researched and included in the DEIR.

Project Goal: bringing people into the Park at night - No statistical or other justification is given for this project goal. Our experience with the evening concerts is that there is more damage to the park and to the neighborhoods the longer that people are in the park. Nighttime use in the Beach Chalet Athletic Fields area will bring larger crowds into the Park for longer periods of time. Furthermore, the DEIR states that the ground plane in this area is not easily visible from surrounding areas. Any problems with crowds will not be easily visible from surrounding areas, cannot be easily checked by police driving by, nor can problems be reported by surrounding homes, as might happen at an area with higher visibility. Therefore, there is more potential for damage and vandalism to the park and more potential for uncontrolled crowd situations that could spill out into the neighborhoods. We request a study of the impacts on the park and the neighborhood of having more crowds in this area." (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-08]*)

“It is clear from the use of recreational fields throughout the city that we have a shortage of soccer fields. With no new open space available to build new fields, the only viable solution has been to renovate existing fields into year-round, all weather facilities. The renovation of the Golden Gate Park soccer fields will give San Franciscans hundreds of additional hours of recreational time, on safer, easier to maintain fields.” (*San Francisco Chamber of Commerce, letter, December 1, 2011 [O-SFCC-01]*)

“... By installing synthetic turf and lights at Beach Chalet, the City of San Francisco will be able to directly address the issues of field condition, utilization, and availability. It will dramatically improve the experience for not only the three youth lacrosse organizations in San Francisco, but for youth soccer and other leagues as well.” (*San Francisco Lacrosse Club – Riptide, letter, December 12, 2011 [O-SFLCR-02]*)

“Incorrect compass location information. The Project Objectives state incorrectly that this site is ‘on the north side’ of the City and would help to meet the recreation needs in the northern sector of the city. Please note that this site is in the extreme west of the city, and not the north. Thus it cannot be said to meet the athletic needs of the north side.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-11]*)

“Site Defects. The site is too far from the centers of population. Virtually no one will walk there; some youth will bicycle there. Mainly players will arrive by automobile.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-12]*)

“The Project Objectives state incorrectly that this site is ‘on the north side’ of the City and would help to meet the recreation needs in the northern sector of the city! Please note that this site is in the extreme west of the city, and not the north. Thus it cannot be said to meet the athletic needs of the north side. Being on the extreme west side is difficult to reach and the automotive vehicles will be necessary for access because the site is not well served by public transportation.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-10]*)

“Park is for everyone, not just soccer players. They are a small %-age of the population. The distress this will cause to a great number of visitors to the park should be considered when making your recommendations. It is extremely cold and windy out at the beach, anyway. why

would someone want to play or watch soccer in such hostile weather for that sort of activity.”
(*Patricia Arack, letter, December 12, 2011 [I-Arack-07]*)

“For those last 8 years I have also played soccer every weekend on city fields. My soccer group, a collection of dads from around the city, plays for fitness and camaraderie every Sunday morning. (We play at 7 am so as to avoid competing with other field uses at more peak times.)

From 2003 to around 2008, we played on the Beach Chalet fields mostly, using the Parks and Rec reservation system. We would consistently get rained out/locked out of the Beach Chalet fields from December to March each year. We would be lucky to play one weekend out of 4 during those winter months. Our group of about 60 players collectively suffered about a dozen serious ankle, knee, and other related injuries in the gopher holes of the Beach Chalet.

Around 2009, we began booking ourselves into the brand new ‘turf’ fields at Crocker Amazon. Since then, we have experienced no field-related injuries whatsoever. Our fate improved when the ‘turf’ fields opened up at Kimbell, which is a more central location for our group. At both Crocker and Kimbell, we witnessed first-hand how those previously blighted playgrounds were reborn as thriving hubs of sporting activity, in use at 100% capacity throughout the year.

The dads in our group are all sensitive to environmental concerns. There are undoubtedly some tradeoffs, and we respect the concerns of the people who oppose the new turf complex at the Beach Chalet. Personally, I agree that darkness and empty unused parkland can contribute to a better environment for birds and nature lovers. However, there are a few key arguments that sway me towards supporting turf fields at the Beach Chalet.

First, cities like San Francisco are, overall, incredibly environmentally friendly ways to house the human population of our planet. Our planet would be better off if we all concentrated ourselves into cities where we use resources efficiently for work and recreation. I personally see it as a pro-environmental strategy to improve San Francisco facilities and keep people from moving to the suburbs. This includes preserving the essential character of Golden Gate Park - but the acres of grass and trees can tolerate, it seems to me, a small amount of artificial turf that will be in almost constant use for the benefit of our city residents. We have found that the turf is incredibly fun to play on. While in hotter climates, the turf might get too hot for comfort, in San Francisco we can play comfortable on it year-round, including in a downpour (the turf drains instantaneously.)

Second, among the human population of the city, we are at high risk for health problems related to our sedentary habits. Opening up new recreational capacity will enormously improve the health of our residents. Our own group of 60 or so dads are experiencing tremendous health benefits from our weekly 90 minute soccer game. Most of us now run or exercise during the week to be more competitive on the weekends. Our social bonding also benefits the city. In addition to networking among ourselves for friendship and professional reasons, we donate a few thousand dollars each year to the department of parks and recreation to improve their facilities.” (*Jeff Belkora, letter, December 6, 2011 [I-Belkora-01]*)

“...Although I think we were all impressed with the two young adults who voiced their opinion, my 12 year old daughter could not attend as she is now on crutches because she played soccer on the field in question and tore her ACL which is now requiring surgery. It’s the gopher holes that are the real problem. My daughter went down with no contact from another person. She got her foot caught in a hole. One person at the meeting referenced an article that researched injuries on grass vs. artificial turf. This article looked at consistent grass fields, not ones with many gopher holes in them.

My wife and I have chosen to raise our family here in SF. Because we could not get into the public schools close to our house, we chose a small private school affiliated with our church, Zion Lutheran on Anza. The school is very small with no yard and a small play ground as part of the parking lot. We understood we’d have to find other outlets for our children’s athletic endeavors, which was fine as SF offers many sport programs including soccer, baseball, football ... however they offer these choices on fields that are simply dangerous. When my children I first saw some of the conditions of these fields and was shocked. I was just waiting for injuries to occur. Then I saw some of the fields being renovated with turf which has made a better experience for everyone, but there needs to be more fields like this. The Beach Chalet would be huge. If you want families like ours to continue to stay in SF, these options need to be available. We wouldn’t sign our kids up in leagues outside of the city and drive continually. I know many families who have moved out for this reason specifically.” (*Stephen Boskin, letter, December 12, 2011 [I-Boskin-01]*)

“I now have a grandchild who will soon be able to play at those fields. He will be getting a soccer ball for Christmas, from me.

Cities are green environments because their density helps curtail sub-urban sprawl into agriculture and wilderness areas. Improvements such as this would contribute in a positive way to the urban environment.

When I first moved to San Francisco in 1975, there were bathrooms north of Lincoln at the beach and there were hot showers at China Beach and Aquatic Park. At the time I was disappointed that I had missed Fleishhacker pool and the Sutro Baths.

On a very hot day when the beach is packed to standing room only I notice a very small impact to my neighborhood.

I find it difficult to believe that people are concerned about the lights. Most people keep their shades drawn, day and night.

I say build it, build more, rebuild Sutro baths, bring bathrooms back, add a gymnasium; the western edge of San Francisco should become an athletic heaven." (*Charles Buckbee, letter, December 9, 2011 [I-Buckbee-01]*)

"The DEIR proposed schedule lacks an increase in appropriate soccer playing time for children under eight years old (U 8) and children under ten years old (U 10) during the school year. Lack of playing time needs to be researched and analyzed. It is recommended that priority reservation times Monday through Friday and on Saturdays and Sundays be guaranteed for these children." (*Ann Clark, letter, December 12, 2011 [I-AClark-05]*)

"One stated objective remains to be addressed: 'Improve safety and increase night-time use of Golden Gate Park by installing new lighting and bringing more recreational facility users to the area'. Contained within this are many unsubstantiated assumptions. Here are some of these assumptions and counter-arguments that demonstrate that **this objective is essentially an attempt by the sponsor to unreasonably restrict the range of alternatives under consideration.**

- Assumption: More recreational facility users in the park at night will increase safety. Counter-argument: Simple logic indicates that an area with no night-time use has no crime or safety issues. SFPD statistics show that the areas with most crime and injuries at night are those where most people congregate at night.
- Assumption: Night lighting will increase safety. Counter-argument: While we generally feel safer in well-lit areas at night, there are many studies that show that the link between lighting and safety is far more complex. Clearly night-lighting increases night-use, which increases the potential for crime and injury. Also, bright sports lighting has the effect of obscuring the surrounding dark shadows and facilitating crime in those areas.
- Assumption: Increasing night-time use of the west end of Golden Gate Park is consistent with the Golden Gate Park Master Plan. Counter-argument: The master plan states that *Lighting is for safety purposes and is not intended to increase night use.* (GGPMP: 9-5). The Beach Chalet fields are not included in either the night-use areas or potential night-use areas. There is no night use planned at any athletic facility west of Crossover Drive.

Therefore, it seems that any alternative that meets the objective as written must necessarily violate both CEQA and the Golden Gate Park Master Plan. Despite this, the Compromise Alternative does provide an opportunity to improve the safety of both sites (through better design) and night-time use of the off-site location." (*Rupert Clayton, letter, December 10, 2011 [I-Clayton-09]*)

"I am stunned that a small minority of folks has been able to stymie an initiative that offers so many benefits to so many families. Access to good quality playing fields is an area where San

Francisco is at a big disadvantage compared to the suburbs. Increased access to playing fields would become a factor in helping attract and retain families with children. The City Fields opponents simply have no solution for all those that would be denied the opportunity to play outdoor sports. It is the few shutting out the many.

An independent recreation assessment in 2004 found that San Francisco needs 33 more soccer fields and 27 more baseball and softball fields just to meet current demand. We could help meet this demand if City Fields were allowed to renovate the fields at Beach Chalet." (*Tim Colen, letter, November 18, 2011 [I-Colen-02]*)

"I cannot count the many injuries my players incurred, some quite serious, over those years. Many times we were unable to practice or play because the fields were rained out or in such bad condition they had to be closed. These closures sometimes lasted for months.

The Beach Chalet fields have been SOCCER fields for the past 70 years. No matter the outcome of the current issue on your table, they will continue to be soccer fields. And, if the turf fields are NOT installed, the condition will never change and the players will continue to have to seek quality playing experiences outside of San Francisco.

Chris Duderstat very convincingly present what will happen again if we do not allow for a more permanent and extended time of play by way of the artificial fields. He presented photos of the fields when they were renovated by Mayor Willie Brown's decree. Then he presented photos of the fields just one year later. They were abysmal and had again been closed for repairs. Without the financial support of the City Fields Foundation, by installing the artificial turf, we will gain nothing. City Fields Foundation certainly doesn't want to fund such a temporary and 'doomed to fail' plan. Where will the money come from without City Fields Foundation's help? The city certainly can't afford the renovation and the continual upkeep. So, it will again fall into disrepair.

The plan is to provide over 9500 more hours of play for the player (predominately kids). By staying with grass, that objective will never be met. The grass fields would still need to be reseeded and a rain would close them, just like now.

The city charges from \$25 to \$65 per hour depending on the group (youth, adult, non-profit, etc). If and additional 9500 hours were made available and the city were to charge an average of \$35 per, we could generate an additional \$332,500 per year to put back into maintenance of other park needs.

I encourage you to accept the DEIR as prepared and continue to help the youth of San Francisco." (*Richard O. Cross, letter, December 12, 2011 [I-Cross-01]*)

"I don't usually write letters, but this is a project I know well because my daughter is an active soccer player using all of the fields across the city for her games. I have attached a photo of Stella in her gear -- for those of you who haven't seen her lately, she's a healthy 8-year-old who enjoys playing goalie.

This season we've spent a considerable amount of time at Kimball, which has been a fantastic place to play. We believe this upgrade is a good thing and will benefit many, many people who enjoy sports, not just families with kids. I see no reason why this dilapidated field should be deemed historic or preserved 'as is' for any reason. Like our children, these facilities have to grow and change to continue to relate to the world around them.

I hope you will approve the EIR and help create yet another space where people can come together to enjoy athletic activities." (*Evette Davis, Letter, December 6, 2011 [I-EDavis-01]*)

"I am the parent of 3 kids, 11, 9 and 7 who play both Soccer and Lacrosse on SF fields. We have spent a lot of time at the Crocker Amazon fields and its a great field facility, rain or shine. Converting the beach chalet into a similar facility would be a huge advantage to the children of the city and I am a large supporter." (*Christopher S. Dean, Letter, December 13, 2011 [I-Dean-01]*)

"In the same way that tennis courts in the Park need to be hard courts, in the same way that roads to the Park need to be paved to meet the demands of city usage, turfing these fields allows the most people to benefit from the Park and all its intended uses. And team sports is one of them. In a city that has a huge shortage of playing fields, has an active athletic population and has a major problem giving families a solution, this solution is nothing short of obvious." (*Michael Gerrity, letter [I-MGerrity2-03]*)

"I am here because I have experienced firsthand the positive impact that sports, especially soccer, and recreation have had on my life.

I was one of the kids who after school let out went to play recreational or organized sports with my friends. Often we did not have immediate access to safe spaces to play.

A renovation like the one Parks & Recreation and City Fields advocate at Beach Chalet would have been warmly welcome by me, my friends and my family.

Why?

Because the renovation will add significant additional hours of playtime, especially as time for recreation and recess is increasingly limited for kids these days.

The opportunity for boys and girls of all backgrounds to play soccer, to learn from each other, from coaches, establishes a greater sense of character, discipline, teamwork and improved mental and physical health.

In today's world kids and youth, the future of our city, often feel overlooked. A limited number of available safe spaces play only reemphasizes this feeling.

As with the previous projects to develop safe spaces for sports and recreation in San Francisco, renovating the Beach Chalet fields is a strong and positive message of support and interest in the growth of kids, families and our shared future." (*Jeremy Goldberg, Letter, December 7, 2011 [I-JeGoldberg-01]*)

"My family resides in Noe Valley. We have two kids, 17 and 19 years old, both of whom have played soccer on the Beach Chalet field and other public fields in the city over the years. Both of my kids are serious athletes who have had to pursue opportunities to play competitive team sports outside of the City, partly because San Francisco cannot offer its families the kinds of amenities that suburban communities do with respect to sports facilities. Due to the lack of year-round playing fields, San Francisco supports relatively few recreational and competitive sports teams for a population of its size, negatively impacting kids' health and diminishing opportunities for them to learn the many skills and life lessons that come from participating in team sports. And the athletic clubs that do field teams in San Francisco find it more difficult to build strong and competitive organizations lacking adequate facilities, nor can they host as many regional tournaments as their suburban counterparts, causing the City to miss out on the economic benefit of tournament-related hotel stays, restaurant patronage and additional tourism.

San Francisco needs to diversify the uses of its public park space to support the needs of ALL of its residents and to create a family-friendly urban environment that will stem the flight of families from the City. The Beach Chalet renovation project is a small, critical step in the right direction. Please support this project and allow it to move ahead as quickly as possible." (*Susan Green, Letter, December 9, 2011 [I-Green-01]*)

"That the soccer field would be inappropriately located in this part of Golden Gate Park, possibly in any part of Golden Gate Park. This is a 'taking' of public parkland from the many and giving it to one interest group. Construction of this project in this sensitive area would seal its fate as an intensely lit, artificial environment designated solely for the enjoyment of Bay Area soccer players." (*Thomas Hahn, letter, December 9, 2011 [I-Hahn-06]*)

"Also, this project will attract players and spectators from a variety of locations, both in and outside of San Francisco who must drive automobiles to the Beach Chalet Athletic Fields due to

the distance of this soccer field from public transit. This is contrary to transit-first goals for San Francisco.” (Thomas Hahn, letter, December 9, 2011 [I-Hahn-07])

“If you look at the Beach Chalet area right now, it is quite dark. And this only contributes to the homelessness, encampments, drug use and other illicit sexual activity happening around the perimeter of the Park.

So the point I was trying to make is that the lighting in the Park increases the enjoyment for the SF residents and increases the safety for those residents.” (Eric Hansen, public hearing comment [I-Hansen-03])

“Our city needs more turf fields like Crocker and Kimball. My husband (who is 50) has played soccer with a group of professional men every Sunday for the last 10 years and really appreciates all the city has done to install the Crocker and Kimball fields.

We need more turf fields with lighting in the city to accommodate all the adults and kids who like to play soccer. With lights, the hours of play can be extended and with turf, we won't have to deal with all the rain outs and gopher holes that we had to negotiate. Great things can result from good accessible fields close to the residents who use them. Without the availability of good fields during their formative years, I'm sure my twins would not have achieved the high level of athletic success they now enjoy. Please approve this improvement.” (Paige Hart, letter, December 7, 2011 [I-Hart-01])

“We need the field space, especially turfed so that the children can play in the rain.” (Helen Hobbs, letter, December 8, 2011 [I-Hobbs-01])

“As the parent of two active kids, the coach of two teams (soccer and lacrosse), a long time resident and the owner of a business in the city I feel it is vital that we improve access to playing fields to improve the health and social fabric of our community. The work done on other playgrounds and fields has been a huge step towards improving life here and we need more. Field space is in very tight supply and is essential to building a strong and healthy population. One only needs to see the smiling faces of players (8 to 58!) on the pitch to realize what a huge value this is to the city.” (Rob Hurlbut, email, December 12, 2011 [I-Hurlbut-01])

“Although the Executive Summary does discuss project objectives within each of the proposed Alternatives, it would be more useful to the reader to list the project objectives at or near the beginning of the Executive Summary. These objectives are listed in bullet format at page II-5

(within the Project Summary section of the Draft EIR). Whether these objectives are worthwhile may be beyond the scope of an EIR, but it would be useful to know who makes the determination. I am not certain that increasing nighttime use of the west end of Golden Gate Park is a worthwhile objective. I also have doubts as to whether increasing play time on the Beach Chalet Athletic Fields to the extent proposed is worthwhile—I can agree with additional daytime use, but not with these fields being used as late as 10 p.m.” (*Richard Ivanhoe, letter, December 13, 2011 [I-Ivanhoe-01]*)

“The executive summary mentions whether things need objectives, the objectives are somewhere else and I’m not clear whose objectives they are.” (*Richard Ivanhoe, public hearing comment [I-Ivanhoe2-02]*)

“The plan requires the installation of permanent lighting, additional seating, additional parking, additional ingress and egress, and additional amenities: there is no analysis of the risk of activities other than soccer taking place at the site.

The plan requires the installation of permanent lighting, additional seating, additional parking, additional ingress and egress, and additional amenities: there is no analysis of the impacts on the environment, transportation, and residents if activities other than soccer taking place at the site.

The plan requires the installation of permanent lighting, additional seating, additional parking, additional ingress and egress, and additional amenities: there is no analysis of the alternatives if activities other than soccer taking place at the site.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-14]*)

“The plan has a false premise, based upon a bait and switch, that it will offer more opportunity for youth soccer, when in fact a review of the increased playing time reveals that the present fields provide a full schedule of youth soccer activities, and the expanded playing time will essentially be for adults at night: there is insufficient analysis of the impact of adults being in the western end of Golden Gate Park at night and the risk of mayhem that might thereby ensue.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-22]*)

“The DEIR states that a project goal is to provide a safe environment in the western end of Golden Gate Park: there is insufficient analysis as to any present lack of safety and there is insufficient analysis as to how the plan assures that the environment would be safer.

The DEIR states that a project goal is to bring more people into Golden Gate Park at night: there is insufficient analysis as to why this is a project goal." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-39]*)

"I know all too well the paucity of playing fields for our children, no to mention active adults. It's like entering an entirely different universe to travel anywhere outside of the city and see the quality and number of fields available to children and adults in all of the communities that surround us." (*Noel Kaufman, email, December 6, 2011 [I-Kaufman-01]*)

"While it is true that a natural resource will be lost in Golden Gate Park as a result of the renovation, the resulting changes will be a huge boon to the city as has been the case with the renovations at Crocker Amazon, Silver Terrace, and elsewhere. The benefits far outweigh the costs. The city needs more fields that are durable. Of that, there can be no doubt." (*Noel Kaufman, email, December 6, 2011 [I-Kaufman-02]*)

"Why are the fields not open on weekdays until 3:30 p.m.? Why are they closed 3-4 months out of the year? If grass fields are properly planted and managed, they don't need to be out of use this much, according to multiple natural turf sources nationally and internationally." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-41]*)

"II-5: Project Sponsor's Objectives: Remain Consistent with Golden Gate Park Master Plan (GGPMP). As noted elsewhere in the DEIR, installation of field lights at the Beach Chalet Soccer Field is not consistent with the GGPMP. It might be noted that the project sponsor's objectives are somewhat contradictory." (*Deborah Learner, letter, November 29, 2011 [I-Learner-01]*)

"Also, this project will attract players and spectators from a variety of locations, both in and outside of San Francisco who must drive automobiles to the Beach Chalet Athletic Fields due to the distance of this soccer field from public transit. This is contrary to transit-first goals for San Francisco." (*Beth Lewis, letter, December 4, 2011 [I-BLewis-09]*)

"...as the father of three school-age children who regularly play on the fields throughout the city, I am certain that the right side of this issue is the one that promotes healthy lifestyles for our youth.

There is no doubt that artificial turf is what makes the difference between being able to play and getting rained out when the weather is inclement (which seems to be increasing in recent years). Childhood obesity is a real problem, and having kids stuck at home in front of a TV because there is no place to let them play--even when it has rained--is avoidable. One of my children has seen this firsthand. He plays soccer at the wonderful fields at Crocker Amazon and he plays Lacrosse at Kimbel. Both are amazing, but they often have to play at odd hours because there are never enough slots--not to mention the extra gas one needs to consume to get there from the other side of town." (Ron Lissak, email, December 12, 2011 [I-Lissak-01])

"I'm also a coach for the San Francisco Riptide youth lacrosse club. During my role as a coach, we've often been given access to the fields at Beach Chalet, especially during the early spring months of February and March. I can recall many seasons where our designated practice times were rained out 80% of the time due to unusable, wet grass fields.

The citizens of San Francisco need high-use, artificial turf fields at the Beach Chalet location. Given the almost constant use of other artificial turf fields in San Francisco (Crocker Amazon, Kimbell, etc), it should be clear there is a serious need for more usable field space." (Dan Lockwood, email, December 12, 2011 [I-Lockwood-01])

"When I started coaching Youth Soccer 25 years ago, we were allotted Two 1 and 1/2 practices for my youth teams. The sport of soccer was just getting its start. Since then it has exponentially grown, to the point where now my youth teams only get One 1 hour slot, shared with 4 other teams. We are shuffled from one type of field to another for games- sometimes with big goals sometimes with small goals- it is ridiculous- and often leaves our San Francisco kids lacking where other counties teams thrive. (And why many families with talented athletic children leave the city)

An easy example would be to look at team rankings for youth teams in Northern California- out of 400 teams only 1 was from San Francisco, and only because that coach, whom I know, found extra field time on the side for his team." (Jill Lounsbury, email, December 6, 2011 [I-Lounsbury-01])

"If anyone has seen the affect that turfing and lighting has had on Silver Terrace, Mission, and Crocker Amazon, you would think this is a no- brainer. All of these sites have become safer both in preventing awful sprains and breaks from gopher holes and overuse, but from eliminating the undesirable riffraff that used to inhabit the parks; Light, cleanliness and happy families seems to scare away the drug dealers and sexual predators." (Jill Lounsbury, email, December 6, 2011 [I-Lounsbury-03])

"I was at an Old timers Hall of fame Dinner Sunday Night, and they all spoke up about this meeting- Talking about how they have such fond memories of the Beach Chalet, but that no one ever imagined the sport would grow so large that we cannot accommodate all the teams, their practice and games. As of this moment we are running soccer at 400% (compared to golf at 40%) We are seriously underserved in fields, and according to the national standards we should have 148 fields to serve our citizens. We have approximately 34. Teams are only allotted 1 hour of practice per week. And for youth teams this mean 1/4 of a field, in which they must split a goal. How do you split a goal?

Renovating this field would not only give us one extra field (one is always closed for reseeding) but 2 extra seasons, not to mention evening available with lights to benefit adults who need recreation as much if not more than children do." (*Jill Lounsbury, email, December 6, 2011 [I-Lounsbury-04]*)

"And I feel that we need more playing fields in San Francisco so our older kids who are teenagers will have something to do. And not only during the day and also at night it would be nice if there was lights out there and if it was cleaned up.

Right now the only people that go out to the Beach Chalet soccer fields are the players themselves and the parents. And it is dark out there. And it is kind of a strange area, so I think it would be great if we could clean it up and help our older kids have a place to practice. And we need more fields in San Francisco. And so I do feel it is a community good." (*Marcia Madrigal, public hearing comment [I-Madrigal-01]*)

"We pretty much have 32 years since the league opened. We been playing at Beach Chalet for that long. And we're the one we always play out there in the Beach Chalet because it accommodated the children first and then they give us the Beach Chalet.

He broke his leg twice (indicating). And he's still playing.

We pay insurance so much every year. Unbelievable, go, high, high, high. And our community is not that strong economically to pay so much insurance, but I'm sorry but I'm get emotional all the time. We try to pay most we can of insurance and ask for help. And sometimes it comes and sometimes not.

Our league, most of our players are from the Mission area and we also have the right to use Golden Gate Park." (*Edgar Mayora, public hearing comment [I-Mayora-01]*)

“In a Transit 1st City no public transportation to this project is not in keeping the intent of the policy.” (*Shana McGrew, email, no date [I-McGrew-08]*)

“So please, Commissioners, study the project objectives. They talk about this as being in the north part of the city. It’s in the west. And so you cannot serve this project --you can’t serve northern interests or northern needs. Thank you very much.” (*Mary Anne Miller, public hearing comment [I-MMiller-05]*)

“Full disclosure: I am opposed to the placement of synthetic turf in Golden Gate Park, even to achieve what I understand to be the driving motivations for the project: increase available revenue-producing play time, and decrease maintenance time and costs.” (*Denis Mosgofian, letter, December 11, 2011 [I-Mosgofian-01]*)

“But one of the additional points that I wanted to bring up by delaying this proposal is that we always run the risk when a field is unattended, whether it’s a field, playground or park, that it becomes vulnerable to urban blight.” (*Jane Mudge, public hearing comment [I-Mudge-01]*)

“...gone on to represent the United States who grew up playing on those very fields. And I’d like to see that opportunity afforded to many, many more kids and the members of our community in San Francisco.” (*John Newman, public hearing comment [I-Newman-01]*)

“We have benefitted from the Silver Terrace renovation, Garfield, Crocker, and also Campbell, but it’s just not enough as Colin had mentioned prior.” (*Emily Queliza, public hearing comment [I-Queliza-01]*)

“Please take the time to go out to Crocker Amazon on a weekday night after 7..p.~ and see the the amount of physical activity on all 5 fields. Soccer, Lacrosse, Flag Football, Ultimate Frisbee, Pop Warner Football, Joggers, Walkers, Mothers pushing strollers, Families Strolling, Skateboarding. This amount of activity did not exist at the old Crocker. I know because I’ll be 56 years old next week and I first started playing at Crocker when I was 7 years old. I grew up in Vis Valley. I’ve been coaching or playing at Crocker for almost 50 years.” (*Toby Rappolt, email, December 12, 2011 [I-Rappolt-01]*)

“Proper care of these fields, including regular aeration to reduce compaction would reduce field closures due to rain and reduce the extent to which fields are currently ‘rested.’ The Beach Chalet Soccer Fields rest on sand, beneath the sod’s (compacted) loam layer. Sand provides excellent drainage. If necessary, perforated drainage tubing could be installed under the turf to carry away excess water on heavy rain days, at minor cost. England plays on grass throughout their heavily rainy winters as do many world class countries. Why can’t we? ‘The city that knows how.’ “ (*Jamie Ray, letter, no date [I-Ray3-07]*)

“It is important for families with children to have access to all weather fields for team sports and the outdoor enjoyment of all. As a team parent for the San Francisco Riptide Lacrosse Club, I know first hand what it is like to have to notify a whole team when practices or games have to be cancelled at the last minute due to field closures caused by inclement weather. Having fields that can be used no matter the weather makes a huge difference in my ability as a mom to schedule my time and that of my son. Hundreds of families and children would benefit from these field upgrades.” (*Rosemary Robinson, email, December 9, 2011 [I-Robinson-01]*)

“I’m here with my son Beckett. We live two blocks from Golden Gate Park. He goes to public school and we take the Muni wherever we can. As it is we have to ride four times a week 30 to 40 minutes to the play fields.

Play fields are like schools and libraries. The fields need to be useable and activated so that families who want to stay in the city have healthy, active kids. We’ll be brief because he’s got to get home and do his homework. We believe the study is thorough and should be approved in your report. Thank you.” (*Mark Roskowski, public hearing comment [I-Roskowski-01]*)

“I heard speakers tonight say, ‘What about our experience?’ And ‘the park is for us.’ And ‘nature.’ I just don’t understand. What about the children? Most people opposed to moving on and continuing with this plan do not have young children. Thousands of young children --their learning experience is to go somewhere else.

That young lady who spoke so eloquently tonight, she was great. I love her science interest. She left San Francisco several years ago. She plays on great beautiful turf fields in Burlingame and Redwood City and San Mateo. They’re beautiful. She’s smart for not mentioning that. I really like her, she’s really smart.

So the thing is for me, really, the choice is children, light; young people’s needs, older people’s. It’s a very simple choice and you have a very tough job, but I just ask you and I implore you as an educator, please focus on the children. You cannot walk across that field without tripping and falling. It’s a disaster. It is a disaster. And our children need great turf fields so they have a place to

play and they're fighting for space and I appreciate your time." (*John Rubio, public hearing comment [I-Rubio-01]*)

"I will say our club serves approximately 300 kids right now and the only reason it's not more is because we don't have the field space to accommodate them. Girls' lacrosse is one of the fastest growing sports in the nation right now and I had to cap the number of girls we take because we simply don't have enough fields to practice or play our games on. We would really like to let every kid who wants to play lacrosse play and we've never turned away any child for lack of financial resources. We give quite a bit of financial assistance.

I would love to have another A season ever where none of our games are canceled because it rained at some point during the week. The Beach Chalet project with one additional lacrosse field in the city would go a long way towards making that happen." (*Pam Rupright, public hearing comment [I-Rupright-01]*)

"I can tell you we have some very passionate families that were shut out this year because they don't have a place to play. We don't have enough fields.

We play on Treasure Island. We also pay for time in the Presidio. And we can still use more. Both my boys play a lot of soccer. I'll leave you with this. I was out at Crocker-Amazon this year for two separate tournaments. Being a native San Franciscan, I was proud to be out there for these tournaments. I saw people all over the place in an area that hasn't been improved much. Every ethnicity, every demographic." (*Mike Singer, public hearing comment [I-Singer-01]*)

"I see no rational basis whatever to deny the children and adults of San Francisco the increased recreational opportunities that a new complex of electrically lighted artificial turf fields at Beach Chalet will provide.

The Environmental Impact Report fails to mention that not building the subject artificial sports field complex will result in more children who do not participate in organized athletics which will cause more crime, more health problems and shorter life spans in the general population." (*Andrew Solow, letter, November 16, 2011 [I-Solow-01]*)

"That aside, I have to say that the biggest single impact that got ignored is what happens to children, especially disadvantage children, when they don't have recreational opportunities. The least expensive recreation pretty much always relates to the use of some kind of an athletic field. Athletic fields in San Francisco is what we have been short of ever since I co-founded the Mission

Youth Soccer League back in 1993. And I have been beating my head against this problem of a lack of soccer fields and a lack of proper maintenance of grass soccer fields in San Francisco since then.

The impetus for my spending a lot of my free time and money on youth soccer and athletic field condition and availability in San Francisco was having 20 children who were all in a street gang try to beat me to death with baseball bats in front of my own house. That is the impact of not providing an adequate amount of recreational opportunity for youth.” (*Andrew Solow, public hearing comment [I-Solow3-01]*)

“I think it is an extremely important project for the benefit of San Francisco’s kids and families. There is a lack of soccer fields, not to mention safe ones, in the city. Anyone who has visited the fields at Crocker-Amazon, or any of the other turfed fields in San Francisco, can attest to their superiority over most of the city’s grass fields.

Recreation is a basic need for San Francisco children and families. The renovation of the Beach Chalet fields is a good step toward helping us provide the necessary infrastructure for fulfilling this need.” (*Joel Streicker, email, November 30, 2011 [I-Streicker-01]*)

“When I moved to San Francisco nearly 12 years ago it astounded me that many children asked if we were still in San Francisco and we played lacrosse at the Polo Fields, which, to comment to the person who asked what happened to them, they are pretty much always closed to make sure that they look like a million dollars actually went into it.

Unfortunately, I’m no longer surprised but continue to remain saddened that the most beautiful spaces in our city remain, in essence, closed to the public while the ugliest always seem to be available.

The proposed renovation of Beach Chalet would triple time on the fields, the fields in general of the city and not just Beach Chalet. Playing lacrosse helps kids who are often forgotten feel a part of something. Playing in Golden Gate park along the ocean will make them feel a part of something spectacular.

Lacrosse for Life is often in a stereotype of an inner city program. We practice on the worse fields, don’t have regular bathrooms and are hidden away. The EIR addresses all of these issues in a safe and ecological manner.

When lacrosse fields were lined at Polo Fields, the kids were thrilled. I can’t express the excitement of our team to be on a turf field, to know all our home games would not be rained out, and to feel pride in showcasing the city to our opponents.

Lastly, I would like to remind the Commission that the field and Golden Gate Park in general is not just for the citizens who live on the western end but for all citizens of the city and this would

definitely increase the opportunity for the children who don't have regular access to the Park. Thank you." (*Johanna Thomashefski, public hearing comment [I-Thomashefski-02]*)

"One need spend only five minutes at Crocker Amazon to witness first-hand the positive impact of this type of project in a city that is woefully under-resourced with usable and safe athletic fields." (*David Thompson, email, December 8, 2011 [I-DThompson-01]*)

"The Beach Chalet was always one of our favorite locations to play, except it was horrible having to watch your children through a cyclone fence because the field conditions wouldn't support people parents watching their kids play, or even worse, arriving and finding out that games were cancelled because rain had fallen the day before. Improving the Beach Chalet Fields is EXTREMELY important for the City, its families, its young people, and its citizens. Please do not delay in passing this.

I believe that all San Francisco kids deserve safe, accessible and world-class parks and athletic fields. I wholeheartedly support the proposed renovation at Beach Chalet soccer fields and encourage you to continue supporting the Playfields Initiative partnership between the City Fields Foundation and San Francisco Recreation and Parks Department. The DEIR is a well-researched document and this project has been thoroughly analyzed.

The DEIR shows that installing synthetic turf and lights is the only option that can provide more than 9,500 hours of new play time to the Beach Chalet soccer fields, essentially resolving San Francisco's deficit of athletic fields for youth during the busy after-school hours." (*Richardson Watkins, letter, December 7, 2011 [I-Watkins-01]*)

"And I'd like to point out that one of the project objectives is to say that nighttime use would be a community good. It's not necessarily a community good. I don't think it's a community good for me, that's for sure. And for a lot of children and families in San Francisco." (*Tes Welborn, public hearing comment [I-Welborn-04]*)

"Each spring, PAL provides soccer to more than 2300 San Francisco youth through the dedication of hundreds of adult volunteers. Because of limited amount of recreational fields in our urban area, we turn away hundreds of kids from all over the city every single year. This project will help us serve more kids in San Francisco. With childhood obesity at crisis levels and funding for P.E. slashed in our schools, expanding field access by 300-400% through this renovation, will help thousands of San Francisco kids.

Golden Gate Park has been, and must continue to be, a place that both preserves the best and evolves for future generations." (*Lorraine Woodruff-Long, email, November 16, 2011 [I-Woodruff-Long-02]*)

“When we began this conversation a couple of years ago, my sons were four and six, and just beginning to play soccer. They are now six and eight, and during soccer season, we drive all over the City to play on whatever fields are available. Sometimes, no fields are, and the kids don’t play, while fields right here in our neighborhood are fenced off and paddle-locked shut.” (*John Zwolinski, email, December 8, 2011 [I-Zwolinski-01]*)

Response PD-2

Many comments discuss the need for increased athletic field use opportunities, or the need for safety improvements as further discussed below. It is noted that the project objectives include both increased athletic play time and opportunities, and improved safety. Many comments indicated that the proposed project would be a benefit to City residents, including children, by offering amenities that the City currently lacks (amenities found more easily in the suburbs), and that the project would therefore, be a factor in attracting and retaining families with children in the City. Comments also point out that the expanded recreational opportunities would allow for more child participation in sports, benefitting their mental and physical health and providing a venue for learning life skills, discipline and teamwork and that the existing facility should grow and change to continue to relate to the world around it. These comments are noted.

Several comments disagree with the objectives or request additional information regarding their sources. Comment I-Ivanhoe2-02 requests clarification as to who developed the objectives. Comments O-GGPPA-05, O-GGPPA-06, O-SPEAK3-12 and O-GGPPA-08 state that the project objectives are not substantiated, giving little consideration to the alternatives. Comment I-Learner-01 states that the project is not consistent with the *Park Master Plan*, an objective of the project. Comments O-GGAS2-34 and O-GGPPA-05 state that the project objectives are self-fulfilling, written to make the project the only location to fit these goals. The comments also state that the alternatives have provisions that make them conflict with project sponsor’s objectives and that this kind of positioning is intended to reduce the viability of alternatives. Comment I-Ivanhoe-01 states that objectives should be listed at or near the beginning of the Executive Summary and disagrees that increasing nighttime use of the west end of the park or increasing play time on the project site are worthwhile objectives. The commenter also requests information on who makes the determination on the worthiness of the objectives. Comment I-Jungreis2-39 states there is insufficient analysis as to why bringing more people to Golden Gate Park at night is a goal. Comments I-Jungreis2-39, O-GGPPA-05, and O-PAR3-08 states that the objective of increasing safety is not substantiated, with no analysis presented that shows evidence of lack of safety. Comment Ray3-07 states that the project components go beyond addressing the objective that deals with increasing resident access to the site.

In response to these comments, Section 15124 (b) of CEQA *Guidelines* states that project objectives should be clearly written and should include the underlying purpose of the project. The

statement of objectives will help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and will aid the decision makers in preparing findings or a statement of overriding considerations, if necessary. The EIR is not intended to determine the value or worthiness of the objectives. The statement of objectives for the proposed project was prepared by the project sponsor, SFRPD, per standard EIR protocol and is presented clearly and concisely on page II-5 of the EIR, in the Project Description section. These objectives were developed by the SFRPD based on the experience of users of this and other facilities throughout the City, as well as the physical conditions of the site.

In response to Comments I-Ivanhoe-01 and I-Ivanhoe2-02, the objectives have been included in the Executive Summary and page ES-1, has been revised to include a new paragraph 2:

Project Sponsor's Objectives

The objectives of the proposed project include the following:

- Increase the amount of athletic play time on the Beach Chalet Athletic Fields by renovating the existing athletic fields and adjacent warm-up areas.
- Improve public access to the Beach Chalet Athletic Fields by adding new pathways, increasing the size of the existing parking lot, providing a formal drop-off area, and providing bicycle racks.
- Increase ground-sports athletic opportunities on the north side of San Francisco commensurate with improvements elsewhere in San Francisco.
- Provide a safe, optimal recreation facility and amenities for athletes, spectators, and park users by renovating the existing Beach Chalet Athletic Fields and the existing restroom building, adding bleachers, and installing a new plaza area with visitor amenities.
- Reduce ongoing maintenance and resource needs.
- Comply with current Americans with Disabilities Act (ADA) requirements.
- Improve safety and increase nighttime use of the west end of Golden Gate Park by installing new lighting and bringing more recreation facility users to the area.
- Remain consistent with the *Golden Gate Park Master Plan*.

This revision does not change the analysis or conclusions presented in the EIR.

The objectives are site-specific because the existing project site facility is considered to be in poor condition due to limitations on field use resulting from facility closure for grass regrowth and abundant gopher holes. For these reasons, the site presents an opportunity for improvements. The statement of objectives was presented in as much detail as is appropriate and was used in developing project alternatives, as required by CEQA. See Section X.O regarding project alternatives' abilities to meet most project objectives. Presentation of project objectives and project alternatives in the EIR is accurate and complete.

Comment I-AClark-05 states that the proposed schedule lacks playing time for children under 8 years old and under 10 years old during the school year and recommends that priority reservation times between Monday through Friday and on Saturdays and Sundays be guaranteed for these children. This comment provides a personal suggestion concerning facility scheduling, but does not address the adequacy or accuracy of the analysis presented in the EIR. As such, this comment is noted, however, no further response is required.

Comment A-SFPC-Sugaya-03 asserts that if this facility is to serve the city, the EIR should look at additional sites other than Golden Gate Park and the western part of the city. As stated on page II-5 of the EIR, one of the project objectives is to “increase ground-sports athletic opportunities on the north side of San Francisco commensurate with improvements elsewhere in San Francisco.” See Section X.O regarding alternative project locations, both in and outside of Golden Gate Park.

Comment A-SFHPC-06 states that the project is elitist because the site is not accessible by public transportation and thus does not serve the needs of the City. This is a comment on the merits of the proposed project and not on the accuracy or completeness of the EIR. As stated on page IV.D-10, under Impact TR-2 discussion, while most players, officials, and spectators do not typically use public transit to travel to and from the project site, several Muni bus stops are within a 10-minute walk from the project site, including stops for the 5 Fulton, and 31 Balboa lines.

Several comments assert that usability of the Beach Chalet Athletic Facility would become limited to certain user groups. Comment I-Arack-07 states that soccer players are a small percentage of the population, that the park is for everyone not just for them, and that the project will cause distress to other types of users. Comment I-Hahn-06 states that the project site is not an appropriate location for the soccer fields and that it is considered a “taking” of public parkland from the many and giving it to one interest group. The project site has historically been used as a public sports facility and would continue to be used as such, with increased play time and various other improvements. Additional amenities proposed as part of the project, such as the plaza areas, playground equipment, barbeque pits, and spectator seating, would attract other groups to use the project site that typically do not use the existing facilities. No evidence is provided to substantiate the claim that the project would limit the site’s usability to select groups that do not already use the site. The project site is currently used by the general public, by reservation, and the proposed project would expand public use by increasing the hours of availability of the fields and include open play opportunities on the fields without a permit. Furthermore, the meadows surrounding the project site and many acres of parkland throughout the park would continue to be available for other public use, unhindered by the proposed project.

Several comments assert opposition to various project objectives. Comment I-Mosgofian-01 states opposition to placement of synthetic turf in Golden Gate Park, even to achieve stated project objectives of increasing playtime and decreasing maintenance and cost. Comment O-GGPPA-07 states that the objective of renovating the restroom building cannot be accomplished by any of the alternatives and is not worthy of substantially destroying parkland. Comment I-Welborn-04 disagrees with the objective that assumes that nighttime use of the facility would be a benefit to the community. These comments provide personal opinion regarding project objectives,

specifically disagreements with the stated objectives, but do not address the adequacy or accuracy of the analysis presented in the EIR. As such these comments are noted, however, no further response is required.

Comment I-Jungreis2-22 asserts that the project will increase playing time for adults at night, and that the EIR is insufficient in its analysis of impacts of adults congregating in the western end of Golden Gate Park at night and associated risks. Comments I-Clayton-09 and O-GGPPA-05 add that the assumption that safety and use of Golden Gate Park at night would increase by installing lighting is incorrect. The comments further state that areas that are not heavily used do not have crime, whereas areas where many people congregate have crime and injuries. In addition, bright lights will obscure the surrounding dark areas, facilitating crime there. The EIR provides estimates of existing and future uses of the Beach Chalet Athletic Facility, assuming that both adults and children would use the facility. On page II-10, in describing existing conditions, the EIR states that the “fields are used primarily through reservation by school teams, youth soccer leagues, and adult leagues.” On page II-21, in describing the proposed project, the EIR states “The types of groups that now use the existing athletic fields by reservation (i.e., school teams, youth leagues and adult leagues) would continue to use the renovated facilities.” Because the analysis presented in the Initial Study and in Chapter IV, Environmental Setting and Impacts (particularly for environmental topics such as Transportation and Circulation, which is based on user numbers), is based on these assumptions, the EIR therefore provides sufficient analysis with respect to use of the facility in the evening hours by adults. The comments also state that there are risks associated with adult use of the facility at night and congregating in Golden Gate Park during the evening hours. Social issues such as potential behavior problems or crime are outside of the domain of CEQA. Regardless, standard protocols exist that would address any such risks in the future, including calling 9-1-1 and/or filing complaints with the San Francisco Police Department. However, no evidence is presented to substantiate the claims that such risks would increase as a result of the proposed project and, as stated on page II-5, increasing nighttime use of the west end of Golden Gate Park and improving safety in the project area are two of the project objectives. Also see the last paragraph of response to Comment ERP-3.

Comments O-SPEAK3-11, O-SPEAK4-10, and I-MMiller-05 disagree with the characterization of the project site as being in the north side of the City and state that the site is in the extreme west of the city. Thus, the comments state that the objective of increasing ground-sports athletic opportunities on the north side of the City would not be met. The locational reference derives from the fact that the San Francisco Recreation and Park Department views Golden Gate Park as the primary site to serve the recreational needs of Richmond District and other neighborhoods in the northern portion of the City (in addition to being a citywide designation). Moreover, as stated on page IV.A-1 of the EIR, the “project area is within the City and County of San Francisco’s (CCSF) *northwest quadrant*, at the western end of the 1,017-acre Golden Gate Park, and is approximately 11.2 acres in size.” The map provided in Figure II-1, on p. II-2, supports this classification of the site location as being both in the western and northern portions of the City. Moreover, the fact remains that the project site is located at a considerable distance from other artificial turf facilities in San Francisco.

Comment I-Koivisto-41 states that, according to multiple natural turf sources, if grass fields are properly planted and managed they would not need to be closed as much as they are now. Similarly, O-CYSA2-04 requests that the chronic maintenance problems that have limited the use of the Beach Chalet Athletic Fields be fixed, and that the fields be made safe due to elimination of gopher holes. The commenter asserts that there are no shortage of ground sports athletic field users in the city. This information has been forwarded to decision-makers; no further response is required per CEQA as it does not address the adequacy of the EIR. Regarding maintenance issues, please see Response PD-3 on page X.D-41, below.

D.4 Project Site Characteristics and Setting [PD-3]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-SFLCR-01	I-MGerrity2-02	I-Lampert2-03	I-GMiller3-09
O-SFLL-01	I-Hemphill-02	I-McCowin-01	I-Ray-02
I-Cherny-02	I-Ivanhoe2-01	I-McGrew-02	I-Schmidt-01
I-Colen-01	I-Koivisto-06	I-GMiller3-05	I-Solow2-04
I-D'Angelo-01	I-Koivisto-07	I-GMiller3-06	I-Woodruff-Long2-01
I-GGerrity-01	I-Kushner2-03	I-GMiller3-08	I-Woodruff-Long2-03
I-MGerrity-02			

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- “1) Field Condition - The grass fields at Beach Chalet and until recently, the Polo Fields, are filled with gopher holes, dead grass, and are worn because of the consistent use by many different sports organizations. We usually have one or two players twist their ankles and miss a couple weeks due to the condition of the grass fields. The risk of more serious injury is a great possibility.
 - 2) Utilization - Lacrosse season starts in February and runs through May. The fields are often closed in February and March because of rain. There have been entire weeks where we have not been able to get on the fields for practices and have had to cancel games as well. We are only allocated two days a week for practice, so every opportunity to play is essential and we often do not get to re-schedule games due to limited field space availability throughout our league.
 - 3) Availability - Polo Field #7 is the only public field in Golden Gate Park that is currently lined for lacrosse. It is shared by multiple public / private high schools as well as three different youth lacrosse clubs in San Francisco. As you can imagine, finding time slots for games is a persistent challenge and the field is often in disarray by the end of the season. Lacrosse is the fastest growing sport in America and the field space issue is only going to compound in the coming years.

- 4) Positive Experience with Raymond Kimball Field - During our 2011 season, we had the ability to utilize the new field turf fields at Raymond Kimball Field due to the delay in the renovation of the Polo Fields. During the days we had access to the Kimball Field, we able to utilize our full time limit due to the availability of lighting and did not have to cancel a single game or practice due to rain during the month of February or March." (*San Francisco Lacrosse Club – Riptide, letter, December 12, 2011 [O-SFLCR-01]*)

"Little League teams share multi-use athletic fields throughout the City with a variety of youth sports played in the spring, including lacrosse and soccer. By renovating the Beach Chalet Athletic Fields with synthetic turf and field lights, more spring soccer and lacrosse can be accommodated at that site, making more multi-use fields available for baseball and Girls' softball.

And Little League desperately needs the fields. We provide kids of every demographic from all over the city the opportunity to play ball; unfortunately, we are turning away hundreds of kids because we don't have enough ball fields in San Francisco. A couple of weeks ago we opened and closed our age 12 and under youth baseball in less than 7 hours with over 900 kids registering. By way of comparison, the year prior we closed at our earliest ever in almost 3 weeks, and that was with the extra interest generated by the SF Giants winning the World Series. Within a few days after we closed tills year we received over 200 complaints with people who took the time to write us. They continue to come in and we now believe there are hundreds more families that would like to participate but did not take the time to contact us.

We are a nonprofit, volunteer organization that is committed to youth sports in San Francisco. It is distressing to know that a world class city like ours does not have enough fields to service the needs of all the kids that wish to participate in programs like ours." (*San Francisco Little League, letter, December 1, 2011 [O-SFLL-01]*)

"I'm especially upset that the poor maintenance by the Recreation and Park Department of the existing soccer fields is being used as justification for this significant change in the nature of the park. To accept that justification is to provide a green light to the park administration to withdraw maintenance from any part of the park where the administration wants to force through future changes regardless of its own master plan." (*Robert Cherny, letter, November 30, 2011 [I-Cherny-02]*)

"Decades ago, I played in the City's soccer leagues at Beach Chalet and clearly remember the gopher holes and the poor condition of the fields. Because of the extremely heavy demands placed on them, this is still sadly the case.

Because of my 14-year-old son's deep involvement with baseball over the last six years, my family is all too familiar with the condition of the Department of Recreation and Park's (DRP's) baseball fields. We also have gotten to know a large number of youth baseball families. I regret to say that the boys universally despise San Francisco's public fields because their poor condition means that both fielding and footing are treacherous. This is not a trivial matter when playing with a hard ball. Many of these boys have played baseball on turf fields outside of the City and without exception they prefer them to our own fields.

I recognize that our economic crisis has decimated DRP's budget - this makes proper maintenance of our playing fields difficult. In addition, the heavy demands made by all our sports programs on our limited playing fields make this task almost impossible. The only way to improve the grass fields is to shut them down for extended periods. Then what?" (*Tim Colen, letter, November 18, 2011 [I-Colen-01]*)

"As a 69 year old native San Franciscan including four generations of soccer players utilizing the BC and enduring gofer hole injuries to both myself I family and the SF High School teams I've coached, It is time to bring this Historic Soccer Football site into the modern era. Participation has grown exponentially since the Military gave up its small space and the Pitch (Field) count grew by 50% (from 2 to 3). All manner and form of creative gardening has not solved the increased use and resulting lack of turf. Even the creative mixture of sawdust and dirt in front of the Goals was a bust." (*Jack E. D'Angelo, Letter, November 29, 2011 [I-D'Angelo-01]*)

"I play lacrosse on the fields at the Beach Chalet. And one of the things, it's really hard to use. I know that I can't --when I try to play there I can't scoop the ball. The grass is sometimes really overgrown in places. There's gopher holes; we step in them; we get hurt occasionally.

One time in another park that the grass is in a lot of the same state, my friend and I were running there. We had a soccer practice, he stepped in a gopher hole and broke his ankle. And it's not --sometimes it's not very safe like that. And it's also hard to use for us, as I just said.

And one of the things that --it would be a lot easier if we had a turf field because we wouldn't have to water it as much, for one, and it's obvious that we would get a lot more use out of it if it was like that, and if we had the lights there we could also play after dark.

And if you look at, say, Kimball fields where now is Astroturf, it's got a lot of use. And I know because I practice there too. And I see people everywhere playing there and it's really easy to work on and it's fun.

And I think the point of the fields there is really --I'm not sure, I'm no environmental expert, but I really think the main thing that it's used for is for sports and so if we really want something that works for sports, I think we should have one of the things that's easiest for sports to be played

on. And now if the grass could be kept in perfect upkeep very easily, then that would be nice, but I think it's a lot easier to keep a turf field nice, ready to go every time and really it would just be a lot easier and I think we would all have a lot more fun playing on it if that's really the point to these fields. Thank you." (*Graham Gerrity, public hearing comment [I-GGerrity-01]*)

"The reason we are here is that for large parts of the year those fields are closed or in poor condition and frankly are not capable of fulfilling the original planners' intent. Go out there right now and you will see a chain link fence and a sign that says you can't play. Go out there in February/march when my lacrosse team is assigned to practice at this field and you will see this sign almost 50% of the time.

I like a nice grass field as much as the next guy, but in a city with this much demand for field space even if we had a maintenance budget - the only way to make grass fields viable is to close them for large chunks of time so they can rehab, and then close them again every time there is a substantial rain. That means the field can only be used in certain seasons, and games and practices are regularly cancelled. It happens all the time - even if its sunny outside, if the fields are wet, they are closed and the thousands of kids and adults who use these fields each week are out of luck. ' I recognize there is lots emotion around Golden Gate Park, but the bottom line is this space is already dedicated to athletic fields. Over 75 years ago someone decided that one of the many things the park should provide is space for team sports, and they devoted about 1% of the parks acreage to this purpose. It is not one of the many grassy meadows, it is not set aside as part of the serene landscaping of the western edge of the park -this small piece of the park was set aside specifically for field sports and that purpose is its historic value." (*Michael Gerrity, Letter, December 1, 2011 [I-MGerrity-02]*)

"The reason we're here tonight is that for large parts of the year those fields are closed or in poor condition and, frankly, are not capable of fulfilling the original planners' intent to have that used for teen sports. Go out there right now and you'll see a chain link fence and a sign that says you can't play. Go out there in February and March when my lacrosse team is assigned to practice in this field and you'll see that sign almost 50 percent of the time.

I like a nice grass field as much as the next guy, but in a city with this much demand for field space, even if we had a maintenance budget, the only way to make grass fields viable is to close them for large chunks of time so that they can rehab and then close them again every time there's substantial rain.

That means the field can only be used in certain seasons and games and practices are regularly canceled. And this happens all the time, even if it's sunny outside. If the fields are wet, they're closed and thousands of kids and adults that use the fields each week are out of luck. Turfing the Beach Chalet fields simply means we'll be able to use the space that has already been provided for teen sports." (*Michael Gerrity, public hearing comment [I-MGerrity2-02]*)

“San Francisco has also failed to maintain many of its natural grass playing fields well. The knowledge to do that is clearly available as demonstrated by the turf at Kezar.” (*Pam Hemphill MD, letter, December 12, 2011 [I-Hemphill-02]*)

“In the EIR there was a chart about the current uses of the Beach Chalet fields. I kind of like to see more detail on that, you know, who actually uses the fields, where do they come from, what ages are they? And the same for the proposed new users. In that chart it showed that there was little or no use between 9:00 a.m. and 3:00 p.m. And that makes sense for school days, but I don’t understand why not on the weekends or in the summer?” (*Richard Ivanhoe, public hearing comment [I-Ivanhoe2-01]*)

“Since Golden Gate Park is an international treasure but a San Francisco resource, it would be useful to know for economic, safety, and environmental purposes the amount of league play already booked into the park fields by non-San Francisco groups. Living here, we often see soccer teams from out of the area, even teams from out of the country, playing on fields we can no longer access. This information, then, is important in how much consideration we should give to altering our park for these leagues. This issue is not addressed in the DEIR, but was brought up in many informational sessions with SFRP in advance of the DEIR.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-06]*)

“In Table II-I it states that the fields are closed T -F until 3 :30 p.m. These are daytime-use fields. Why are they closed then? They weren’t before the fence went up. Is it so that no humans, except league players, can use them?” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-07]*)

“The fact that Rec and Park rehabilitated that in 1998 and probably hasn’t touched it since in a dense urban environment tells you something about the state of affairs in Rec and Park, that they would propose artificial turf instead of doing normal upkeep. Thank you very much.” (*Pinky Kushner, public hearing comment [I-Kushner2-03]*)

“In particular, is there any idea of where players do live? If, say, it is the Pacific Heights/Laurel Heights/Presidio Heights area of the city, then can you compare the environmental impact of the Beach Chalet proposal vs. a location in the Presidio?” (*Gabriel Lampert, email, December 4, 2011 [I-Lampert2-03]*)

“We live near the Beach Chalet fields, and I bike past them on the way to the Safeway for our groceries. In my experience, the current paths work just fine for passage by bike from one windmill to the other, even in rainy weather.” (*Kathleen McCowin, email, December 8, 2011 [I-McCowan-01]*)

“Ask yourselves why has the SFRPD put a fence around the Beach Chalet and almost stopped all maintenance on the fields? As a 20 year supervisor with the SFRPD I supervised Wt. Sunset. Maintenance on soccer fields does not require a lot of work. A mower mows maybe every 2 weeks, a line painter once a season, watering the fields is done by automatic sprinklers only depending on the need (6 months of the year watering is really not needed that much). At the end of the season maybe some grass seeding if needed.” (*Shana McGrew, email, no date [I-McGrew-02]*)

“Page II-9 discusses field closure policies for the existing Beach Chalet fields, ‘To allow the grass to rest and re-grow, only three of the facility’s four athletic fields are open at anyone time and all the fields are closed to the public 3-4 months each fall and/or winter.’

This adds up to a great deal of field rest:

Total Rest Per Year = Winter Rest + 1 out of 4 fields resting at other times
= 4/12 + (8/12) * (1/4)
= 1/2 year (26 weeks) for scheduled field rest

Is this a typical field rest regime for grass athletic fields or is it specific to the existing Beach Chalet fields because of site location/environment, deficiencies in field construction, or cumulative deferred maintenance? The grass playing fields at West Sunset are also located close to the ocean. What has been the field closure history for those fields over the past three years?

Page II -9 also states, ‘ ... in the past two years, the fields were closed in the summer for rest and re-growth due to scheduling conflicts’. Was the normal 3-4 month winter field rest period eliminated in these two years? How did a scheduling conflict cause a shift/addition in the field resting schedule?” (*Greg Miller, letter, December 11, 2011 [I-GMiller3-05]*)

“Page II-9 states that the existing fields are closed every Monday for maintenance and page II- 10 reports that 1/3 FTE is used for maintenance on a continual basis. Over the past several years, I have often passed the fields on informal walks of on my way to the local Safeway. I have only seen SFRPD gardeners working on the fields one time, when the fields were being re-stripped. While I did see the assigned gardener many times, he was always in his maintenance room, next

to the field rest rooms. Why are the existing fields closed every Monday, all day?" (Greg Miller, letter, December 11, 2011 [I-GMiller3-06])

"Table I-I presents an 'Existing Weekly Schedule During High Use Periods (Spring)'. Is this information historical scheduling data for the Beach Chalet Fields as experienced on a particular week in the past or is this some type of average? What is the source of the data?

Page II-I0 reports two high use periods (9/1 - 11/30 and 3/1 - 5/31). Is this pattern particular to the Beach Chalet facility or does it apply to field demand patterns for all of San Francisco? How variable is total field demand over the course of a year?" (Greg Miller, letter, December 11, 2011 [I-GMiller3-08])

"Please use this system and/or other information to report aggregate soccer field utilization over time - by this, I mean the percent of all City soccer fields actually used in each month for at least one recent consecutive 12 month period. The main statistic for any given month would be the ratio of total field hours used to total field hours available. Please show how much of the demand came from the major user groups discussed in the DEIR - school teams, youth soccer leagues, and adult leagues. For each group, please indicate the proportion of each category representing San Francisco residents. Figure 1 of this paper illustrates the report I have in mind." (Greg Miller, letter, December 11, 2011 [I-GMiller3-09])

"The question is whether soccer is best played on artificial turf, or grass?

Soccer is typically a winter sport. While artificial turf may be appropriate for many areas of the US where winter conditions make playing on grass fields difficult or impossible, San Francisco's benign climate lends itself perfectly to use a natural grass surface." (Jamie Ray, letter, December 12, 2011 [I-Ray-02])

"Half of our games are on turf, half of the games are on grass, a quarter of the games that are on grass get canceled, and at times the kids who play on 14 the turf, we have 60 kids playing on a space that's made for 20 kids. We represent the overcapacity." (Colin Schmidt, public hearing comment [I-Schmidt-01])

"I have personally visited Beach Chalet hundreds of times since I moved to San Francisco in 1983. And, the Beach Chalet fields have always been in extremely poor and dangerous condition. The Beach Chalet soccer fields were built on top of a sandy swamp that doesn't drain. It's been a lake

or a mud bog four months out of every year since it was built.” (*Andrew Solow, email, December 1, 2011 [I-Solow2-04]*)

“... those families overwhelmingly prefer Crocker-Amazon and the turf fields and in fact we’re now having families saying we refuse to go to grass fields because they’re dangerous and people are getting hurt. And we have a very serious issue of that and those families aren’t here because they’re home with their kids right now.” (*Lorraine Woodruff-Long, public hearing comment [I-Woodruff-Long2-01]*)

“One of the things that’s different from 1959 is our city had resources and money and the ability to completely keep grass fields up. We don’t have that ability anymore. Through the generosity of the City Fields Foundation, we’ve made huge improvements to fields, provided much more access to sports for families and kids...” (*Lorraine Woodruff-Long, public hearing comment [I-Woodruff-Long2-03]*)

Response PD-3

A number of comments discuss various shortcomings of the existing fields, the difficulty in using them as intended, and injuries of users of the fields. Comment I-Woodruff-Long2-03 notes that in 1958 the City had the resources, money, and ability to maintain grass fields but that those funds are no longer available. The commenter notes that some improvements have been made with assistance from the City Fields Foundation. Comment O-SFLL-01 states that, by renovating the Beach Chalet Athletic fields, they will be available to more lacrosse and soccer users during the spring, which would open up the limited number of existing multi-use fields throughout the city for more baseball and girls’ softball use. These comments are personal opinions in regard to existing field conditions and/or in regard to other facilities where synthetic turf has been installed, and will be forwarded to the decision-makers.

The existing conditions and deficiencies of the facility are described in the EIR, and page II-1 indicates that the proposed project would be intended to address the following deficiencies at the facility: limitations on field use resulting from facility closure for grass re-growth; presence of gopher holes on the play fields; and lack of clean public restrooms, changing stations, play/picnic areas, and spectator seating.

Comment I-GMiller3-05 inquires whether the typical winter three- to four-month regrow period was eliminated over the past two years when the field was closed for the summer due to scheduling conflicts and whether such rest time is typical or specific to this project site. In response, the regrow schedule varies from year to year depending on which other fields are open or closed. The regrow schedule is specific to this project site. Every December and June, the SFRPD sets the

field closure times for the six to nine upcoming months, aiming to have a regrow period during the warmer months of ideally eight weeks when new seed can be put down and grown, and aiming to have extra rest in the winter since the fields are typically wet. For instance in 2011-2012, SFRPD could not close the Beach Chalet site in the winter because of the Polo Fields renovation. As a result, it was closed from May 30 to July 31 to allow for a long regrow period during the warm season. In addition, knowing that it would be open over the winter (to avoid using Polo Fields), it was closed on weekends in October and November. During the winter, it was closed on weekends almost all weeks and was used for limited hours during the winter after school. SFRPD currently plans to close the Beach Chalet site from July 2 until August 3, 2012 to give time over the summer growing season.

Comment I-GMiller3-06 states that the gardener is not often seen working on the fields and questions why the fields are closed every Monday, all day. As noted on EIR pages II-9 and II-10, the fields are closed on Mondays for maintenance activities, including allowing the fields time to rest and regrow, and SFRPD has staffing capacity for one 1/3 full-time equivalent employee for maintenance of the fields on a continual basis. The commenter's personal experience of not seeing the gardener at the site often is noted; however, no further response is required.

Several comments request additional information regarding the site's existing usage. Comment I-GMiller3-08 requests the source of the "Existing Weekly Schedule During High Use Periods (Spring)" table and questions whether it is based on historical scheduling data or some other type of average. The comment also questions whether the high use periods associated with existing use are particular to Beach Chalet facility or if it applies to field demand patterns for all of San Francisco. Comment I-GMiller3-09 requests information regarding field usage and field availability over a 12-month period, broken down by major use groups (the commenter includes a blank form to be filled out as a response). Comment I-Ivanhoe2-01 requests additional detail on who uses the fields, where they come from and what ages they are and requests that same information be provided for proposed new users. Commenter points out that there is little to no use between 9:00 a.m. and 3:00 p.m., which does not make sense for weekends or the summer. As noted in the title of Table II-1, EIR page II-11, the usage estimates in the EIR are for the spring, which is a period of high usage of the fields. Additionally, the table provides separate usage estimates for weekdays and weekend days. The estimates for existing facility use provided in the EIR were made based on information provided by the SFRPD about existing use schedules for the athletic fields, using an approach consistent with travel demand estimates for athletic fields in the Beach Chalet Athletic Fields Renovation Project Transportation Impact Study (September 2011), and the Treasure Island and Yerba Buena Island Redevelopment Plan Draft EIR (July 2010). SFRPD Permits and Reservation staff provided existing reservations schedule information and observations of existing use. This approach is consistent and appropriate for CEQA review and is at an appropriate level of detail for conducting environmental analysis. Information regarding user demographics (in terms of ages and where the users come from) is provided below.

Comment I-Koivisto-06 requests information regarding the amount of league play booked into the park fields by non-SF groups and comment I-Lampert2-03 inquires where players live. There are currently no non-San Francisco groups permitted in the SFRPD's system given the City's

short supply of playing fields. All of the leagues and programs are based out of San Francisco. In terms of where the actual participants come from, the youth teams must be 90% San Francisco residents and spot checks are made by SFRPD to ensure compliance. The few exceptions are for children who attend San Francisco schools but live outside of the city. Based on SFRPD estimates and spot checks, over 90% of the youth players are from San Francisco and there are no teams that are based outside of San Francisco that use SFRPD fields as home fields.

In terms of adults, the San Francisco leagues pay one of two rates. They either pay the approved public benefit rate, which means that all organizers are volunteers and 90% of the participants are San Francisco residents or they pay the higher nonqualifying rate. No information exists as to why many of the leagues pay the higher rate, but it is either because the organizer is being compensated or because the league does not meet the “no more than 10% nonresidents” standard. However, based on their schedules, the vast majority of teams appear to be based in San Francisco. In addition, some of the leagues, like the Women’s Soccer League has teams from outside San Francisco but they play games outside San Francisco in the East Bay, Marin, and South Bay because the teams from those areas do not want to travel. It is important to point out that SFRPD rotates users among the different full-size fields so it would be inaccurate to only look at those actually playing at Beach Chalet (for instance during the closure of Polo Fields, some teams played at Beach Chalet that would normally use the Polo Fields site).

Comment I-Koivisto-07 questions why the fields are closed Tuesday through Friday until 3:30 p.m. The assumption that they are closed during this time is inaccurate. As stated on pages II-9-11 of the EIR, the fields are open until dark Tuesday through Friday and are used primarily through a reservation system – either an advanced reservation system or a first-come, first-served occasional reservation system. As stated in footnote “a” on page II-11, “SFRPD indicates that fields can be reserved on weekdays before 3:00 p.m., but requests for that time period have not occurred.”

Several comments concern current and proposed maintenance at the project site. Comment I-McGrew-02 questions why the SFRPD put a fence around the facility and almost stopped all maintenance on the field when such maintenance does not require a lot of work. Comment I-Kushner2-03 asserts that the fact that SFRPD rehabilitated the site in 1998 and probably hasn’t maintained it since means that they would rather propose synthetic turf instead of doing normal upkeep. As stated on page II-1 of the EIR, the fence was installed as part of 1998 renovations to limit access to the fields by unauthorized persons and to assist in managing the heavy use of the fields (the fence allows SFRPD to control athletic and other field activities and also provides staff with ability to control the area during maintenance periods). Furthermore, as stated on page II-9, regular maintenance occurs on the site every Monday. The EIR notes on page II-10, the SFRPD has staffing capacity for one 1/3 full-time equivalent employee for maintenance of the fields on a continual basis. As stated on page II-24, maintenance of the project site would continue to occur by 1/3 full-time equivalent employee staff, but would not increase over existing conditions. Synthetic turf would require less maintenance than is currently conducted on the project site. Thus, “normal upkeep” of the site would continue with project implementation.

Comment I-Cherny-02 states that poor maintenance by SFRPD of the existing soccer fields is being used to justify the project and that to accept that justification is to allow park administrators to withdraw maintenance from other parks where future changes will be forced in the future. This comment provides a personal opinion concerning the amount of maintenance currently conducted at the site, but does not address the adequacy or accuracy of the analysis presented in the EIR. No evidence is provided to substantiate the claim that project implementation would justify allowing park administrators to withdraw maintenance from other parks where future changes will be forced in the future. Moreover, this comment is not relevant to environmental review. As such, these comments are noted; however, no further response is required.

Comment I-MGerrity-02 states that this space has already been dedicated to athletic fields when, over 75 years ago, someone decided that one of the many things the park should provide is a space for teen sports and one percent of space was devoted to such uses. The comment adds that the project site was not set aside as part of the serene landscaping of the western edge of the Golden Gate Park. These comments are noted; however, no further response is required.

Comment I-Ray-02 questions whether soccer is best played on synthetic turf, or grass and states that while synthetic turf may be appropriate for many areas of the United States where winter conditions make playing on grass fields difficult or impossible, San Francisco's benign climate lends itself perfectly to use a natural grass surface. The EIR states on page II-2 that the fields contain abundant gopher holes and require field closure for grass re-growth, are considered to be in poor condition, and require considerable maintenance. The overarching purpose for the proposed project is not tied only to winter conditions at the project site. Moreover, it is not only harsher climatic conditions than San Francisco's that can be problematic. As noted on EIR page II-19, the Beach Chalet fields "are closed during and following rain events." This is to prevent damage to the fields. Further, our temperate climate allows for year-round athletic use subjecting the City's public play fields to constant use not seen in climates where outdoor ground sports aren't widely played during the winter months.

D.5 Project Components, Including Proposed Operations and Maintenance [PD-4]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Antonini-04	I-Barish-22	I-Edelson-19	I-GMiller3-10
A-SFPC-Antonini-12	I-Barish-24	I-Englander2-03	I-Minivielle-01
A-SFPC-Miguel-04	I-Barish-26	I-Foree-Henson-03	I-Moss2-06
A-SFPC-Sugaya-04	I-Barish-31	I-GGerrity-01	I-Ogilvie-05
A-SFPUC-01	I-Barish-35	I-GIHoward-05	I-Ogilvie-07
A-SFPUC-02	I-Buffum-05	I-GIHoward-07	I-Ogilvie-10
A-SFPUC-03	I-Citron-06	I-GIHoward-08	I-O'Leary-07
O-CSFN-03	I-Citron-16	I-GoHoward-06	I-O'Leary-13

O-PAR2-07	I-Citron-18	I-Hyde-05	I-Ray-06
O-PAR3-03	I-AClark-01	I-Joaquin-Wood-01	I-Ray-08
O-PAR3-05	I-AClark-03	I-Khan-05	I-Ray-11
O-PAR5-02	I-AClark-06	I-Khan-16	I-Ray2-01
O-RCA-04	I-AClark-08	I-Khan-18	I-Ray3-10
O-SPEAK2-07	I-AClark-11	I-Kirshenbaum-02	I-Ray3-11
O-SPEAK3-06	I-AClark-12	I-Koivisto-08	I-Ray3-12
O-SPEAK3-14	I-AClark-13	I-Learner-12	I-Richman-07
O-SPEAK4-07	I-AClark-14	I-Learner-15	I-Rivera-04
I-Anderson-04	I-AClark-15	I-Learner-21	I-MRRussell-03
I-Anderson-16	I-AClark2-01	I-BLewis-06	I-Schultz-11
I-Anderson-18	I-Darrigrand &	I-Litehiser-02	I-Solow2-05
I-Anderson-19	Claflin-04	I-Litehiser-05	I-Solow2-06
I-Bar-David-02	I-Dennenberg-04	I-McDevitt-04	I-Spoelstra-08
I-Bar-David-04	I-Dennenberg-15	I-McGrew-04	I-Staben-01
I-Bar-David-05	I-Dennenberg-17	I-GMiller3-01	I-Staben-02
I-Barish-01	I-Edelson-06	I-GMiller3-04	I-Van Riel-02
I-Barish-02	I-Edelson-17	I-GMiller3-07	

“And the other thing was not addressed in here, we talked about the lighting and there was an alternative that would use less lighting. I think there is an amount of light you have to have. I mean, you have to be able to see. You know, it does not have to be daylight quality, so there is probably that alternative that was analyzed. ...

So the lighting is really important to allow these practices. In fact a number of schools, private and I don’t know about public, but they actually use a lot of energy and cause a lot of pollution by having to take their students to Daly City and Pacifica to practice because they can go to lighted fields that are available there and we don’t have enough in San Francisco for practicing.

So there is an environmental benefit even though you’re going to have lights and you’re going to have the down side to the environment of having lights, you’re going to have the up side of people not having to travel as far to practice. So there’s two sides to this, of course.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-04]*)

“Also there was a question about non-sporting events. This does not analyze non-sporting events as far as I can see. The analysis is for sporting events only at this field.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-12]*)

“As to Commissioner Sugaya’s comment and Ray Holland’s comment on the possible other non-athletic --because music may be considered recreational --non-athletic uses that may come to this area if it is improved as proposed, I do think that should be commented upon in the responses

document because outside lands and bluegrass would glom onto this in a second if it was as proposed. And I will have more comments about that.” (Ron Miguel, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Miguel-04])

“And then another thing I think is, and Commissioner Antonini pointed it out, the potential for the use of this site for other activities other than athletic events. And I don’t know how the EIR deals with that or if it has to deal with that. A response to my comment, I’m sure, will tell me whether that’s a legitimate concern or not because, as we know, any flat space in Golden Gate Park seems to be ripe for events other than athletic events. And you can be sure that Hardly Bluegrass is going to move into that space if it’s available and also, what is the other one? Outside Lands or whatever it’s called?” (Hisashi Sugaya, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Sugaya-04])

“The SFPUC would allow the management of storm water runoff from the artificial turf surface to be managed **separately** from the stormwater runoff from all other site improvements with regard to compliance to the Stormwater Design Guidelines. SFPUC will allow the artificial turf runoff to discharge to the combined sewer system until results of the proposed water quality monitoring are determined. The SFPUC will coordinate with the San Francisco Recreation & Parks Department (SFRPD) on potentially feasible options to manage the stormwater runoff from the artificial turf underdrain system onsite; if and when it is determined that artificial turf runoff can be infiltrated and managed onsite.” (Irina P. Torrey, Manager, Bureau of Environmental Management, San Francisco Public Utilities Commission, letter, December 9, 2011 [A-SFPUC-01])

“It is required that stormwater runoff from all proposed disturbed impervious and pervious surfaces such as the landscaping, new parking, concrete, buildings, and plaza, etc. (excluding the artificial turf area and associated underdrain system discharge) comply with the requirements of the Stormwater Design Guidelines to meet the existing peak runoff rate and total runoff volume from the proposed project site.” (Irina P. Torrey, Manager, Bureau of Environmental Management, San Francisco Public Utilities Commission, letter, December 9, 2011 [A-SFPUC-02])

“The overall project area (excluding the artificial turf area) must meet the requirements of the Stormwater Design Guidelines. Revise 3rd Paragraph to clearly state that: This project will trigger compliance with the Stormwater Design Guidelines (SDG) based on all new ground disturbance (excluding the artificial turf area). As per the requirements of the SDG, this project must implement a stormwater management approach to prevent stormwater runoff flow rate and volume from exceeding existing conditions. The SFPUC prefers that stormwater runoff from the new and existing impervious surfaces are directed to naturalized BMPs such as infiltration

swales or bio-infiltration facilities to reduce the peak runoff rate and runoff total volume prior to discharge to the combined sewer system.” (*Irina P. Torrey, Manager, Bureau of Environmental Management, San Francisco Public Utilities Commission, letter, December 9, 2011 [A-SFPUC-03]*)

“The new pathways do not meet ADA standards.” (*Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-03]*)

“Other Potential Uses of the Soccer Fields. The DEIR assumes that, if the soccer field project proceeds as proposed, soccer and other related athletic events would be the only activities that the Recreation and Parks Commission would permit on them. There is abundant evidence that, if there are significant financial benefits, other nighttime activities (e.g., concerts, etc.) may be permitted because of the fields’ permanent lights and stadium seats.

The environmental impacts of such events would be substantially different from the activities assumed in the DEIR. As a result, PAR suggests the Recreation and Parks Commission either be requested to prohibit events other than athletic activities or, if it were to consider permitting them, it be required to obtain a supplemental EIR first.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-07]*)

“Intensity of use - The fields should close at 9pm on Friday and Saturday evenings and at 8pm, at the absolute latest, on all other evenings. 10 pm is unacceptable. Maximum decibel guidelines should be set and enforced for amplified sound.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-03]*)

“Past requests by PAR for limits to night activity and noise in Golden Gate Park have been ignored. In our letter of December 11, 2009 (copy attached), PAR requested that the Dark Sky environment of Ocean Beach be maintained and that a/l fights should be on motion sensors, that the fields close at 9 p.m. on Friday and Saturday, and by 8:00 p.m. on all other evenings, and that maximum decibel guidelines be set and enforced for amplified sound. None of these requests have been complied with. With the resultant problems from recent music festivals, these requests are even more important and must be included with an enforcement policy as a requirement for approval of the final EIR.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-05]*)

“One thing we have with regard to the present Draft EIR that sort of stood out for us that concerned us was there’s an implication in the current Draft EIR for the soccer fields that the only

things that would take place on them when the lights are up would be sports activities. We hope that's the case. There's all too much evidence lately that when you have an open field and you have permanent lights, gee, concerts. Bill Graham comes back to life. And we hope that's not the case. Thank you." (*Raymond Holland, Planning Association for the Richmond, public hearing comment (O-PAR5-02)*)

"I can understand young soccer players pleading for more soccer fields, but I am not understanding with the light towers, because that is primarily for adults. Youth soccer ends at about 6 PM. The adult leagues will include many non-residents ... We should not sacrifice parkland when other alternatives are available." (*Richmond Community Association, letter, December 12, 2011 [O-RCA-04]*)

"the impacts of this project are a large amount of excavation and removal of soil which would make the change from grass fields to artificial turf an irreversible barrier to restoration at some future time; and," (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-07]*)

"The 'Users' of the proposed fields are not adequately described. Project proponents claim that an expanded sports facility with stadium lights will benefit children. However, children play mainly after school, as they do now on playing fields all over the city. The goal of this new facility will not be to schedule many more hours of play for school children. The goal is to create a magnet for adult soccer clubs whose members play after work and in the evening hours until 10 p.m. The DEIR must study objectively the claims that this facility is designed to serve children and that they are the main beneficiary user group; in fact, it is designed for a population of adults who belong to leagues which play competitively all over the greater Bay Area.

Comparable data should be obtained from the records of Recreation and Parks Department to show the program of usage at other similar soccer facilities as compared with the program for this facility. The lights will be on whether or not a field has subscribers who use it. For example, it is demonstrable that the South Sunset Soccer Fields are not used on a regular basis 365 days and nights a year. Yet the lights are automatically set to turn on 365 days a year. The EIR should record the pattern of usage on a monthly basis throughout the year in order to provide a reliable forecast of how the Beach Chalet facility would be used. Department records should be obtained to show hours of operation at each comparable facility, type of user served (schools clubs individuals), hours that a particular field was used. Seasonal use will vary; therefore the data that would be most useful would be broken down as to season of the year or months of the year." (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-06]*)

“Irreversible and unsustainable. The changes that would occur are irreversible and unsustainable. The document does not address the irreversible character of the construction of these soccer fields. There will be a large amount of excavation (how much?) and removal of soil which would make the change from grass fields to artificial turf an irreversible barrier to restoration at some future time. If a decision were made later to reverse this unsustainable process, and remove the artificial materials, it is hardly conceivable that suitable soil for growing natural turf again could be obtained at a price and in such a large quantity, except at very high cost. ...; the material is not real soil and therefore not renewable. It cannot be renewed, it must be replaced. ... What does the EIR say about this forecast? Would the fields have to be cordoned off with ‘Keep Out’ and ‘Hazardous Materials’ and removed from use?

The hazards of agreeing to this cycle of replacement without sufficient funds to do the replacement, means that the project would not be viable except for the first five to seven years. No funds are set aside for the replacement of the artificial turf every eight years. The breakdown and deterioration of the artificial materials would cause this project to be unsustainable; the artificial playing surface has to be replaced approximately every eight years. There would be cycles of eight years for the foreseeable future; each time, the plastic and latex materials would have to be removed for transport to a toxic waste disposal area. There is no mitigation for this impact unless city funds are earmarked for the purpose.

Other artificially surfaced fields in the Park have proved irreversible and unsustainable. The EIR should compare the artificial surfaces that were installed at the Golden Gate Park Horse Stables practice ring, constructed approximately twenty years ago at the east end of Little Speedway Meadow which illustrate this unsustainable situation. This practice ring was excavated, lined with gravel and topped with ground-up rubber tires (similar to the project proposal) and now has not been used or renovated for many years. The resulting removal from public use of an area which was a simple grassy meadow for casual play should be studied for its precedent in the case of this project, where grassy meadow land is proposed to be removed and replaced with a hard artificial surface which may not be usable after some years. The EIR should assess this eventuality. The horse stable practice field cannot now be used for anything, weeds have grown through some of the ground rubber and the area is fenced off from public access.” (Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-14])

“The impacts of this project are a large amount of excavation and removal of soil which would make the change from grass fields to artificial turf an irreversible barrier to restoration at some future time.” (Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-07])

“The DEIR says RPD can change the circulation paths to decomposed granite CDG) and make them more curvilinear; but ADA in San Francisco won’t accept DG. What materials does RPD propose to use? What will these paths look like? Provide an illustration.

Why are there so many paved paths in a park that is supposed to be naturalistic parkland?" (*Raja Anderson, letter, December 12, 2011 [I-Anderson-04]*)

"What level of maintenance will be required with the new artificial turf fields? What kinds of activities will be included in this maintenance, and how many hours will be spent on each activity?"

What level of maintenance will be required if natural grass is planted at Beach Chalet? What kinds of activities and how many hours will be spent on each activity?" (*Raja Anderson, letter, December 12, 2011 [I-Anderson-16]*)

"How will maintenance be handled with more traffic and higher use of the area?"

What will be the new, compared to the prior, custodian hours?..." (*Raja Anderson, letter, December 12, 2011 [I-Anderson-18]*)

"The DEIR says that the new project will result in clean restrooms --what is the correlation between artificial turf and clean restrooms? What is the correlation between night time stadium lighting and more usage, and clean restrooms? Why can't RPD clean up the bathrooms ... artificial turf and night lighting?" (*Raja Anderson, letter, December 12, 2011 [I-Anderson-19]*)

"What level of maintenance will be required with the new artificial turf fields? What kinds of activities will be included in this maintenance, and how many hours will be spent on each activity?" (*Ilana Bar-David, letter, December 12, 2011 [I-Bar-David-02]*)

"How will maintenance be handled with more traffic and higher use of the area?"

What will be the new, compared to the prior, custodian hours? ..." (*Ilana Bar-David, letter, December 12, 2011 [I-Bar-David-04]*)

"The DEIR says that the new project will result in clean restrooms --what is the correlation between artificial turf and clean restrooms? What is the correlation between night time stadium lighting and more usage, and clean restrooms? Why can't RPD clean up the bathrooms without ... artificial turf and night lighting?" (*Ilana Bar-David, letter, December 12, 2011 [I-Bar-David-05]*)

“According to Table 11-1, page 11-11, the fields are currently closed between 9 am - 3 pm Monday-Friday. According to Table 11-4, one or two the fields will be used during these weekday hours. If fields are currently not used until 3 pm during the week, what will be the source of the anticipated increase?”

How much of the estimated increase in play time will be adult soccer teams, and how much will be youth teams?” (*Jean Barish, letter, December 12, 2011 [I-Barish-01]*)

“According to Table 11-2, the Project Site will increase from 9.4 to 11.2 acres, of which 0.4 acres is an increase in size of playing fields. What accounts for the remaining 1.4 acre increase, and how much of this increase in project size will be paved?” (*Jean Barish, letter, December 12, 2011 [I-Barish-02]*)

“Maintenance of artificial turf, including the use of detergents, cleansers, and the like.” (*Jean Barish, letter, December 12, 2011 [I-Barish-22]*)

“What is the amount, by weight, of artificial turf that will be used in the construction of the Beach Chalet athletic fields?” (*Jean Barish, letter, December 12, 2011 [I-Barish-24]*)

“What is the amount, by weight, of tire crumb infill that will be used in the construction of the artificial turf fields?”

How many tires will be used to generate the tire crumb infill that will be used in the construction of the artificial turf fields?

What is the source of the tires that will be used in the construction of the artificial turf fields?

How often will tire crumb infill need to be replaced?” (*Jean Barish, letter, December 12, 2011 [I-Barish-26]*)

“Agents such as cleaning solutions, disinfectants, anti-static agents, flame retardants, and the like are used on artificial turf. An artificial turf field, for example, must be disinfected regularly to remove body fluid spills as well as bacteria that cannot be naturally removed through the action of rainfall and natural processes found in the soil biology.”

- Please name all the agents, such as cleaners, disinfectants, anti-static agents, flame retardants, and the like, that will be used to treat the artificial turf.
- Please identify all the ingredients of each of these agents, and indicate which ones are listed under Proposition 65.
- How frequently and in what amounts will these agents be used on the artificial turf?
- What is the amount of human and environmental exposure to these substances during the lifetime of the product, due either to direct exposure to artificial turf and tire crumb infill and/or due to migration of product due to tracking on shoes and clothes, leaching, wind transport, and the like?
- What are all the risks of exposure to these substances to those playing on the fields, spectators, and others not playing on the fields, including but not limited to the risk of allergic reactions, thyroid and other endocrine effects, neurological effects, skin, eye and/or respiratory irritation, and increased risk of cancer, during the lifetime of the fields? Please indicate if the risks vary by age and/or gender.
- What are all the risks of exposure to these substances to human health, including but not limited to the risk of allergic reactions, thyroid and other endocrine effects, neurological effects, skin, eye and/or respiratory irritation, and increased risk of cancer, due to migration of artificial turf and/or tire crumb from the primary playing site to other sites during the lifetime of the fields? Please indicate if the risks vary by age and/or gender. " (Jean Barish, letter, December 12, 2011 [I-Barish-31])

Maintenance and Replacement of Artificial Turf. How long is the artificial turf expected to last before it must be replaced?

There have been claims that artificial turf conserves water. Yet water must be used to wash and cool artificial turf. Please compare the amount of water used to clean and maintain artificial turf to the amount of water needed to maintain a natural grass field in Golden Gate Park." (Jean Barish, letter, December 12, 2011 [I-Barish-35])

"What is total coverage in square footage of the artificial fields and the new paved paths? How does this comply with the Golden Gate Master Plan for the West end of the park? Please consider the cumulative impact of the proposed fields along with the footprint of the Wastewater Treatment Plant." (Nancy Buffum, letter, December 12, 2011 [I-Buffum-05])

"The DEIR says RPD can change the circulation paths to decomposed granite (DG) and make them more curvilinear; but ADA in San Francisco won't accept DG. What materials does RPD propose to use? What will these paths look like? Provide an illustration. Why are there so many

paved paths in a park that is supposed to be naturalistic parkland?" (*Ben Citron, letter, December 11, 2011 [I-Citron-06]*)

"What level of maintenance will be required with the new artificial turffield? What kinds of activities will be included in this maintenance, and how many hours will be spent on each activity?"

What level of maintenance will be required if natural grass is planted at Beach Chalet? What kinds of activities and how many hours will be spent on each activity?" (*Ben Citron, letter, December 11, 2011 [I-Citron-16]*)

"How will maintenance be handled with more traffic and higher use of the area?"

What will be the new, compared to the prior, custodian hours? ...

The DEIR says that the new project will result in clean restrooms --what is the correlation between artificial turf and clean restrooms? What is the correlation between night time stadium lighting and more usage, and clean restrooms? Why can't RPD clean up the bathrooms without ... artificial turf and night lighting?" (*Ben Citron, letter, December 11, 2011 [I-Citron-18]*)

"The most critical and significant problem for the entire DEIR is the lack of in-depth and substantive research on the number of people who will use the proposed soccer fields and on the corresponding lack of in-depth and substantive research on the environmental effects and consequences.

Based on the DEIR's proposed use of the Beach Chalet fields, from 8:00am or 9:00am to 10:00pm, Monday-Sunday, 365 days a year, rain or shine, the DEIR's people analysis is weak and confusing, as is the data-which appears to consist of 'up-to's', estimates and 'guess-timates'.

Absent from the DEIR are comprehensive researched numbers of people use and the cumulative on-going effect of people and vehicle use on the environment. It is recommended that the reservation system be one source of data for a comprehensive study about the actual number of teams, team hours and team age groups played per day, per year, including peak periods and tournaments. The significant and critical question is what are the impacts and implications of the proposed people increased use on the environment." (*Ann Clark, letter, December 12, 2011 [I-AClark-01]*)

“A second critical problem is the lack of environmental and sustainable maintenance, protection, upkeep and preservation of the current and proposed Beach Chalet project.

The DEIR maintenance is the same for the proposed increased scheduled people use as it is for the current people use.

Staffing consists now and will consist of a 1/3 FTE maintenance position for the soccer complex. Based on a 40 hour week, the work schedule results in 2.6 hours per day for five days a week; 1.8 hours per day for seven days a week.

Given the extensive scope of the current and proposed Beach Chalet project, the extremely limited maintenance staffing is unacceptable for environmental protection and preservation and has a highly significant environmental impact.” (*Ann Clark, letter, December 12, 2011 [I-AClark-03]*)

“Significantly lacking in the DEIR proposed plan is an accounting and analyses of the people use of the Beach Chalet soccer field complex. As a result, I did a beginning initial preliminary study of people use. More research needs to be done.

Initial Preliminary Study on impact of Increased Soccer Playing Hours and People Use and Attendance: Beach Chalet Soccer Fields (IPS)

The initial preliminary study begins to examine the impact of the proposed increased soccer playing and the environmental effects of increased people use. The study and the results are reported in Appendix A.

Two sources were used to construct the IPS research model: the DEIR report and commonly accepted soccer league standards.

The results of the IPS clearly indicate the need for additional research and analyses of the impact of increased soccer playing and the environmental effects of increased people use and vehicle use on the Beach Chalet and the nearby park, ocean, beach, residential and business areas.

Initial Preliminary Study Summary

The DEIR proposal underestimates significantly the number of people and the people use on the Beach Chalet soccer complex and nearby ocean, beach, neighborhoods, businesses and park areas. The DEIR underestimates significantly the scope of the Beach Chalet project and the effects of people on environmental impact, protection and maintenance.

Findings

1,217,210 people total annual people use (factored at 355 days a year) (players, coaches, referees, staff, family, friends and spectators; does not include peak play and tournament statistics because statistics are not available; does not include

	security and first aid and medical emergency staff because statistics are not available.)
304,280 vehicles	total annual vehicles to soccer complex (355 days a year) (average four persons per car, truck or SUV; does not include peak play and tournament statistics because statistics are not available. DEIR findings report minimal use of bikes and public transit.)
304,280 vehicles	total annual vehicles from soccer complex (355 days) (average four persons per car, truck or SUV; does not include peak play and tournament statistics because statistics are not available. DEIR findings report minimal use of bikes and public transit.)
608,560 vehicles	total annual vehicles that need parking during soccer games (355 days per year) (does not include peak play and tournament statistics because statistics are not available. Saturdays and Sundays have high soccer-related vehicle use that spills over to the environments of John F. Kennedy Drive and adjacent beach, ocean, park, business and neighborhood areas.)
18,166 hours	total annual DEIR proposed soccer playing hours (DEIR proposed schedule: Monday-Sunday 8:00am or 9:00am to 1 0:00pm, Monday through Sunday. Factored at 355 days. Does not include warm-up time. The proposed goal in the DEIR report is 14,230 total hours. In the SPUR City Fields report. 11,000 per field; 44,000 for four fields.)

Recommendations and Research

This is an initial preliminary study. Additional in-depth and substantive research and analyses are needed before any action is taken on the DEIR and the Beach Chalet proposed project.

The City Fields Report, [Giving Every Child a Place to Play Ball](#) and the DEIR provide information about the SFRPD soccer play reservation system. The reservation system should be an excellent source of data for schedules, playing time and team age-related play.

It is recommended that the research include three years' (2009-2011) reservation data to track and analyze (1) year-round playing time each day of the week for 365 days, (2) team age designations and playing time each day of the week for 365 days, and (3) team and league zip codes. Because this is public SFRPD play, the information is public, subject to the Sunshine Ordinance.

It is recommended that additional research sources be identified and used to examine, verify and provide in-depth analyses and findings on the environmental impact of the proposed increased public use of the soccer playing fields." (*Ann Clark, letter, December 12, 2011 [I-AClark-06]*)

"The proposed Beach Chalet project consists of 1/3 FTE maintenance person for year-round maintenance on a continuous basis, Monday through Sunday, 8:00am or 9am to 10:00 pm daily

for 365 days, rain or shine. The current Beach Chalet maintenance schedule is the same as the proposed DEIR maintenance schedule.

The 1/3 maintenance work schedule consists of 13 hours a week, based on a 40 hour work week. The work schedule results in 2.6 hours per day for five days; 1.8 hours per day for seven days. There is no indication in the DEIR that there is vacation, overload or holiday replacement time.

Scope of Beach Chalet Proposal that Effects Maintenance and Environmental Sustainability.

The 1/3 maintenance work schedule has resulted already in highly significant deterioration and degraded environmental impacts. (Refer to DEIR and December 1, 2011 public and commission testimony).

Given the current and proposed scope of the project, the maintenance environmental impact will not be mediated in the proposed Beach Chalet plan, despite plans to install synthetic turf to save maintenance costs.

Increased people use (1.2 million annually) will significantly effect the cumulative daily and annual impact of garbage, trash, debris, wear and tear on the environment. The proposed increased people use will have a highly significant cumulative impact on the environment and its protection and sustainability.

Current and Proposed Scope of the Beach Chalet Project

7.2 acres of field play and 5 acres of additional park land; 2 soccer warm up play areas; pedestrian pathways; special treatment and maintenance of synthetic turf; parking lot; ten 60-foot-tall field lights: 47 IS-foot-tall pedestrian pathway lights and 13 18-foot-tall parking lot light; stadium seating for 1,040 daily; 3.5 foot-tall black vinyl fencing around the entire soccer playing field; bathrooms: 11 women's toilet stalls with 6 sinks and 5 men's restroom toilet stalls and 4 urinals with 6 sinks and diaper changing stations; new play structures and BBQ areas with picnic tables; community room; storage and mechanical room. Trash, garbage, debris, wear and tear from 1.2 million annual soccer people, 304,280 annual vehicles (cars, trucks and SUV's), an unknown annual total of people who use the community room, play ground, play structures, picnic and BBQ areas, unknown graffiti removal and consequences of storm and bad weather damage. (DEIR 11-13 and Appendix A: Table Four)

Based on commonly accepted soccer league standards and the DEIR documented year-round proposed playing schedules, there will be an astonishingly significant increase in people and their trash, garbage, debris, wear and tear. This significantly negative cumulative environmental impact is exasperated by the long-term cumulative lack of adequate maintenance and repair from prior years.

Recommendations and Research

It is recommended that the current and proposed maintenance plan be revised.

It is recommended that additional maintenance staff be assigned to provide adequate environmental protection and preservation for the current and proposed Beach Chalet project.”
(Ann Clark, letter, December 12, 2011 [I-AClark-08])

“Unexpected Finding from the IPS Study: Few Soccer Field Playing Times for Kids

There was an unexpected IPS finding related to children.

‘No Kids Allowed’ The Proposed DEIR Lacks Significant Soccer Play time for Children

An analysis of the current and proposed DEIR increased playing schedules (DEIR 11-11 and 11-23) shows that Beach Chalet proposed increased soccer play is scheduled for adults and older teens. The analysis is based on the DEIR and the commonly accepted soccer league standards for age and play.

The soccer playing time for eight years old and under children (U 8) ranges from approximately 45 minutes to 65 minutes. The young kids’ proposed team playing time does not fit the after school Monday through Friday extended 90 and 120 minutes playing time or the Saturday and Sunday extended 120 minutes playing time that are SFRPD reserved time periods for older teens and adult play. (Appendix A. Table I. Table 2, Table 3, Table 5. Table 6 and Table 7 #1)

It is clear from the analysis that there is almost no appropriate soccer playing time for kids under eight years old (U 8) and minimally appropriate soccer playing time for kids under ten years old (U I 0) during the school year. The under eight years old (U 8) and the under ten years old (UI0) have to compete for extended time blocks of 90 minutes with the U 12 and U 14. As a result of the proposed DEIR, most of the younger players will have to continue to search for soccer play outside of Beach Chalet during the school year, even after the proposed new Beach Chalet soccer complex is built. (Verified by DEIR 11-10)

‘No kids’ must come as a disappointment to the Fisher brothers Bob, Bill and John, whose City Fields Foundation dedicates its work to Giving Every Child a Place to Play Ball. Both the kids and the environment lose in this proposed DEIR.

Because of the testimony and comments made during the San Francisco Planning Commission’s Public Hearing on the Draft Environmental Impact Report (December 1, 2011) by some of the commissioners and the public about the unmet demand for children’s soccer play time, the actual proposed soccer play time for eight years old and under children (U 8) and ten years old and under children (U 10) at Beach Chalet needs to be researched and sunshined.

Specific Requests

The DEIR indicates that the under eight and under ten kids will not get the playing time they need during the school year. The DEIR schedule cheats the kids out of access to playing time and

has a serious impact. In order to meet the demand, it is recommended that the SFRPD soccer playing schedule have designated guaranteed after-school priority reservation time Monday through Friday and designated guaranteed priority reservation time on Saturdays and Sundays for kids eight years old and under and ten years old and under for soccer playing field time.” (Ann Clark, letter, December 12, 2011 [I-AClark-11])

“The DEIR project goals are to increase the playing time at the four Beach Chalet soccer fields to year round play (365 days), Monday through Sunday, 8:00am or 9:00am to 10:00pm, rain or shine. The DEIR proposed goal is to reach 14,320 hours total soccer playing time per year for adults and children. (DEIR 11-13,23)

The DEIR soccer playing time schedule does not include warm up time, a commonly accepted soccer league standard.

Seeking Green Report (SPUR)

According to the Seeking Green report (SPUR, July, 2011), the City Fields Foundation, founded by Bob, Bill and John Fisher, has partnered with the city in a \$45 million effort to renovate six soccer fields with an increase of 66,000 hours of soccer play per year for the six soccer fields. This is \$7.5 million per field.

City Fields will sponsor the renovation of the Beach Chalet soccer fields into a Beach Chalet semi-professional soccer stadium complex with stadium fields, lighting and seating-at a cost of \$7.5 million per soccer field: \$30 million for four fields.

The Beach Chalet Semi-Professional Soccer Stadium Complex will generate an increase of 44,000 hours per year for four-field soccer playing time. For the Beach Chalet complex-with the increase from the current use-the total number of playing hours will exceed 48,700 per year.

There are alarming discrepancies among DEIR, Seeking Green and City Fields reports which need to be addressed and resolved during the DEIR process and before decisions are made about (a) impact, (b) mitigation measures and (c) alternatives.” (Ann Clark, letter, December 12, 2011 [I-AClark-12])

“The DEIR proposal does not analyze fully or penetrate deeply into the environmental effects of increasing people use. The DEIR does not improve or increase soccer playing time for children under eight years old and children under ten years old during the school year. The DEIR is not comprehensive and thorough.

The DEIR proposal raises serious, significant questions and problems about the lack of sufficient soccer playing time during the school year for children under eight years old (U 5, 6, 8) and under

ten years old (U 10) and environmental impact of people use and traffic use on the Beach Chalet project. Golden Gate Park and surrounding areas.” (*Ann Clark, letter, December 12, 2011 [I-AClark-13]*)

“In order to be comprehensive and thorough, there must be in-depth, thorough, comprehensive environmental analyses and planning based on people use and environmental impacts. The October 26,2011 DEIR proposal lacks significant research on people use to prove that the Beach Chalet project is in fact environmentally protective and will not lead to significant environmental decline, degradation and destruction.” (*Ann Clark, letter, December 12, 2011 [I-AClark-14]*)

“Thorough and comprehensive research is needed to determine the appropriate and safe times for kids’ play during the school year in order to meet the needs of young children. It is recommended that the Beach Chalet soccer playing schedule have designated guaranteed after-school priority reservation time Monday through Friday and designated guaranteed priority reservations on Saturdays and Sundays during the school year for kids eight years old and under and ten years old and under.” (*Ann Clark, letter, December 12, 2011 [I-AClark-15]*)

“...the most significant problem with the DEIR is the people count. This is a huge problem. People have enormous impact on environment sustainability and preservation. The DEIR people report is fuzzy, incomplete and lacks data. Therefore the whole report is not thorough or comprehensive.

To begin to look at people count, I did an initial preliminary study this November. Three main parameters were used, the DEIR schedule information, 365 days a year, Monday through Sunday 8:00 a.m. or 9:00 a.m. to 10:00 p.m., rain or shine, for 365 days. I actually used 355 days in the study.” (*Ann Clark, Ph.D., public hearing comment [I-AClark2-01]*)

“And the paving of paths--why can’t soccer players and their fans walk on unpaved path? NO MORE please. This is a place where we are allowed to walk on dirt paths. Do not industrialize the west side and call it a cultural plus.” (*Jacqueline Darrigrand and William Claflin, Letter, December 9, 2011 [I-Darrigrand & Claflin-04]*)

“The DEIR says RPD can change the circulation paths to decomposed granite (DG) and make them more curvilinear; but ADA in San Francisco won’t accept DG, What materials does RPD propose to use? What will these paths look like? Provide an illustration.

Why are there so many paved paths in a park that is supposed to be naturalistic parkland?" (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-04]*)

"What level of maintenance will be required with the new artificial turf fields? What kinds of activities will be included in this maintenance, and how many hours will be spent on each activity?" (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-15]*)

"How will maintenance be handled with more traffic and higher use of the area? What will be the new, compared to the prior, custodian hours? ... The DEIR says that the new project will result in clean restrooms – what is the correlation between artificial turf and clean restrooms? What is the correlation between night time stadium lighting and more usage, and clean restrooms? Why can't RPD clean up the bathrooms without ...artificial turf and night lighting?" (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-17]*)

"The DEIR says RPD can change the circulation paths to decomposed granite (DG) and make them more curvilinear; but ADA in San Francisco won't accept DG. What materials does RPD propose to use? .What will these paths look like? Provide an illustration.

Why are there so many paved paths in a park that is supposed to be naturalistic parkland?" (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-06]*)

"What level of maintenance will be required with the new artificial turf fields? What kinds of activities will be included in this maintenance, and how many hours will be spent on each activity? What level of maintenance will be required if natural grass is planted at Beach Chalet? What kinds of activities and how many hours will be spent on each activity." (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-17]*)

"How will maintenance be handled with more traffic and higher use of the area? What will be the new, compared to the prior, custodian hours? ... The DEIR says that the new project will result in clean restrooms --what is the correlation between artificial turf and clean restrooms? What is the correlation between night time stadium lighting and more usage, and clean restrooms? Why can't RPD clean up the bathrooms without ... artificial turf and night lighting?" (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-19]*)

“With the Astroturf we will not save on upkeep. It will commit the City to years of repair and to be a much lower upkeep in terms of preservation. So why switch grass for Astroturf.” (*Susan Englander, public hearing comments [I-Englander2-03]*)

“I am also concerned that the artificial turf must be replaced after so many years; I have heard 10. This creates another expense, another EIR, etc.” (*Elizabeth Foree and Ralph Henson, Letter, December 9, 2011 [I-Foree-Henson-03]*)

“I play lacrosse on the fields at the Beach Chalet. And one of the things, it’s really hard to use. I know that I can’t --when I try to play there I can’t scoop the ball. The grass is sometimes really overgrown in places. There’s gopher holes; we step in them; we get hurt occasionally.

One time in another park that the grass is in a lot of the same state, my friend and I were running there. We had a soccer practice, he stepped in a gopher hole and broke his ankle. And it’s not -- sometimes it’s not very safe like that. And it’s also hard to use for us, as I just said.

And one of the things that --it would be a lot easier if we had a turf field because we wouldn’t have to water it as much, for one, and it’s obvious that we would get a lot more use out of it if it was like that, and if we had the lights there we could also play after dark.

And if you look at, say, Kimball fields where now is Astroturf, it’s got a lot of use. And I know because I practice there too. And I see people everywhere playing there and it’s really easy to work on and it’s fun.

And I think the point of the fields there is really --I’m not sure, I’m no environmental expert, but I really think the main thing that it’s used for is for sports and so if we really want something that works for sports, I think we should have one of the things that’s easiest for sports to be played on. And now if the grass could be kept in perfect upkeep very easily, then that would be nice, but I think it’s a lot easier to keep a turf field nice, ready to go every time and really it would just be a lot easier and I think we would all have a lot more fun playing on it if that’s really the point to these fields. Thank you.” (*Graham Gerrity, public hearing comment [I-GGerrity-01]*)

“In addition there must be provision for handicapped spaces that are proportioned based on the number to total spaces provided and this has to be addressed.

The current lot has 50 spaces, well below what should be there now, and the proposed lot increases that to a total of 70 spaces, 130 to 180 less than most municipal codes require as being adequate. Such an enlargement would have a large impact on the forestation in that area and would need further study. (*Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GIHoward-05]*)

“There are on the proposed parking map 4 handicapped spaces. Yet in the seating plan there are 8 accessible (handicapped) seats proposed. It is rare to have more than one person per car handicapped therefore for 8 seats 8 auto spaces, in the parking area closest to the stands, reserved for the handicapped are required.” (*Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-07]*)

“All synthetic turf fields need routine cleaning and grooming, as well as repairs. The DEIR seems to avoid any mention of the need to clean this material at a minimum of weekly using special equipment. In a direct contact ocean shoreline area such as this, it may be necessary to groom more frequently if storms dump sand on the field. Playing on a fake turf field with sand in the surface structure can abrade the fibers and age the turf more rapidly than in areas where this environmental action is not present.

The main issue that does not appear to be addressed, relating to wear and grooming, is what is done with the material removed from the field.” (*Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-08]*)

“Table 11-2 presents the ‘Maximum Annual Play’ in hours for the ‘Existing Facility’ (4,738 hours per year) and the ‘Proposed Project’ (14,302 hours per year).

Notwithstanding that the Existing Facility is closed each Monday (See Table 11-1) and one of the 4 fields is ‘resting’ (not used) the hours are rigged in *favor* of the Project. While the Project hours of operation are listed as ‘Year-round: 8:00 a.m. or 9:00 a.m. to 10:00 p.m.’, the Existing facility is shown as being closed at 6:30 p.m. on Saturdays and 5:00 p.m. on Sundays.

Play hours should be comparably presented using the same time periods.

The data and methods used to calculate the hours available for play should be presented in the EIR as the ‘extra’ play time over that of the Existing fields is the primary reason given for the Project.

It is illogical to expect that the Project fields will always be available for play or playable at the times indicated. There is no data presented on the number of play periods which were cancelled due fog, thunderstorms or high winds in an average year.)

Without weather related data, it is not possible to compare the available playing times in real world terms. These data should have been presented in the DEIR...” (*Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-06]*)

“Why are there so many paved paths in a park that is supposed to be naturalistic parkland?”
(*Katherine Hyde, email, December 11, 2011 [I-Hyde-05]*)

“This project is a thinly disguised plan for a professional soccer stadium masquerading as a gift for the children of San Francisco. The artificial turf which is a part of the project is far more expensive than proper maintenance of natural grass and will be dangerous besides.” (*Joan Joaquin-Wood, email, December 12, 2011 [I-Joaquin-Wood-01]*)

“The DEIR says RPD can change the circulation paths to decomposed granite CDG) and make them more curvilinear; but ADA in San Francisco won’t accept DG. What materials does RPD propose to use? What will these paths look like? Provide an illustration.

Why are there so many paved paths in a park that is supposed to be naturalistic parkland?”
(*Tehmina Khan, email, December 10, 2011 [I-Khan-05]*)

“What level of maintenance will be required with the new artificial turf fields? What kinds of activities will be included in this maintenance, and how many hours will be spent on each activity? ...” (*Tehmina Khan, email, December 10, 2011 [I-Khan-16]*)

“How will maintenance be handled with more traffic and higher use of the area?

What will be the new, compared to the prior, custodian hours? ...

The DEIR says that the new project will result in clean restrooms --what is the correlation between artificial turf and clean restrooms? What is the correlation between night time stadium lighting and more usage, and clean restrooms? Why can’t RPD clean up the bathrooms without ... artificial turf and night lighting?” (*Tehmina Khan, email, December 10, 2011 [I-Khan-18]*)

“Moreover, not only is the proposed lighting system inimical to the site’s natural surroundings, but the lighting ... appears wasteful and extravagant under the circumstances of the time.” (*Noel Kirshenbaum, email, December 6, 2011 [I-Kirshenbaum-02]*)

“At the end of the project description, in the paragraph beginning, ‘It is expected that staffing ... ‘ is another statement that I could find no evidence for in my cursory examination of the DEIR -

that staffing would not increase and that 1/3 FTE would be sufficient to maintain the facility. While that may be true for synthetic turf in other parts of the city, it is unlikely to be true here. Issues of animal feces, sand-blasting, flooding, and wind all came up during the scoping session, but I cannot find where they are addressed in the DEIR. Even the South Sunset synthetic turf field is not a good indicator of the needs of a synthetic field at this significantly different elevation, in a real ecosystem, with different drainage issues, and very different wind issues.” (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-08])

“II-10-II, 23, Table II-2: The amount of new seating proposed is not consistent. The table cites ‘up to 1046’. The illustrative concept plan indicates 1,104 seats. The anticipated maximum attendance is 288 per reservation period. The amount of seating proposed (1104+) does not seem justified given the current and projected attendance. The EIR should provide more information about attendance at current and projected tournament events, and why the amount of additional seating is justified. It would be helpful to understand what arrangements spectators make currently for seating for regular games and tournament events.” (Deborah Learner, letter, November 29, 2011 [I-Learner-12])

“II-14, IV.G-25: These sections describe the rainwater catchment basin and the mechanism whereby collected rainwater would be allowed to percolate into the ground water basin. The EIR should provide a more complete picture of this concept by showing a profile, or cut-a-way drawing of the underground basin, (as well as the layers of the below surface infrastructure), indicating its capacity and showing the location of the gate valves or other mechanisms that would manage these flows. Would it be the job of a stationary engineer to manage this aspect of the field operation and maintenance?” (Deborah Learner, letter, November 29, 2011 [I-Learner-15])

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- “a. Night Lights: Use guidelines could require a night use permit. If a permit was not issued, the lights could be turned off, thereby saving energy and minimizing the impact of the field lights on the surrounding landscape.
- b. What is the carrying capacity of the fields?
- c. Management and scheduling of tournaments. - How are these handled currently and how will they be regulated in the future? Would they be at night in the future, or daytime on Sat/Sun? This can be spelled out in the permit guidelines.
- d. Such guidelines should be clear that amplified sound is not permitted. Amplified sound would be extremely disruptive in the park’s west end.

- e. Guidelines should indicate coordination of activities so that scheduling of larger events will avoid conflicts with other planned events, both within the park and within and between the GGNRA jurisdiction of Ocean Beach/Great Highway.
- f. The Kezar Stadium scheduling and permit guidelines might provide a reference for the preparation of Beach Chalet Field guidelines." (*Deborah Learner, letter, November 29, 2011 [I-Learner-21]*)

"What will be the impact on the environment if the artificial turf starts to break down and there is no money to replace it? Will the artificial turf be left in place to degrade?" (*Beth Lewis, letter, December 4, 2011 [I-BLewis-06]*)

"The choice to make these fields into a soccer only facility would limit its use by other sports, other activities picnicking, kite flying and even passive activities like sitting in the grass." (*Linda Stark Litehiser, email/letter, December 1, 2011 [I-Litehiser-02]*)

"There are plenty of synthetic turf fields in San Francisco and a new one planned for the Minnie and Lovie Ward Recreation Center in the Ocean View neighborhood. If we are concerned about our children having opportunities to play on them, then we should focus on limiting league (especially out of town league) play and schedule more time for kids." (*Linda Stark Litehiser, email/letter, December 1, 2011 [I-Litehiser-05]*)

"The lack of multi-use- currently the natural grass fields can be used for a variety of events while soccer is the only activity being planned for. If built there should also be designation of fields for softball football etc., along with time slots for same." (*Terry McDevitt, email, January 1, 2012 [I-McDevitt-04]*)

"Who is going to pick up the litter left all over the park after soccer games? After \$1.3 million to renovate the Polo Fields they are locked and only opened if paid for. This will happen at the Beach Chalet fields." (*Shana McGrew, email, no date [I-McGrew-04]*)

"I understand that synthetic turf is quite vulnerable to vandalism such as cutting the netting and burning the turf. ...

As the DEIR points out in several places, the Beach Chalet meadow is surrounded by park forests and is can not be seen from city streets and park roads. Also, it is not directly viewable from any occupied buildings such as the Beach Chalet.

It seems that over 7 acres of costly synthetic turf will be quite vulnerable to malicious damage once the lights are turned out and everyone goes home. A 3 foot high fence will not provide a significant security barrier.

How will the City protect its investment? If the turf is vandalized several times, will the nice-looking short fence proposed in the project be replaced with a much taller, padlocked security fence?" (Greg Miller, letter, December 11, 2011 [I-GMiller3-01])

"Page II-22 states, 'Amplified sound is not included as part of the proposed project'. Considering that site will host tournaments, amplified sound seems like a natural addition. What public process would be required to add a sound system in the future? Will this EIR contain any standards or protections to limit sounds and the use of amplified sound systems?" (Greg Miller, letter, December 11, 2011 [I-GMiller3-04])

"Page II-24 describes the maintenance planned for the new fields, 'It is expected that staffing at the project site would not increase and that 1/3 FTE maintenance staff would continue to maintain the facility. Maintenance would consist of garbage pick-up, and periodic sweeping, and as needed, spot washing of the synthetic turf.. '

On the other hand, Table II-4 does not indicate any required closures for routine maintenance of the new fields. When will the required maintenance be scheduled?" (Greg Miller, letter, December 11, 2011 [I-GMiller3-07])

"Table II-4 shows similar high use period scheduling for the new project. It shows the night time slots made available by the sports lighting system. One of the project objectives is to 'improve safety and increase nighttime use'. No matter how much lighting is used, attracting young children to the park after dark might not be a good idea. What type of teams will be using the fields after dark?" (Greg Miller, letter, December 11, 2011 [I-GMiller3-10])

"Why lighted and artificial turf soccer fields at the Beach?

Continuation of a long time existing use.

Provision of a multi cultural social experience that enriches our community.

Extending the user hours to support working adults.

Safe play surfaces for our kids.

Increasing the number of annual play days and weekly play hours for resources that are in great demand.

Reducing operational costs for field maintenance and future field replacement.

Providing much need resources for physical activity in a neighborhood that IS deficient of field space.

Providing a constructive outlet for youth throughout the city.

Providing quality facilities that will support high levels of play and improve sports programs in schools and recreational clubs.

In my capacity as Director of Recreation at UCSF I did extensive research on both synthetic turf and field lighting. Both have developed over the years to address issues of safety and community impact. Today's turf fields are safer and more economical than any other surface. They provide a top quality playing surface that can be utilized under almost any conditions. They are low maintenance and cost effective to replace.

Contemporary field lighting is down cast and restricted unlike the 'stadium lighting' of years past. In addition to its controlled dispersion the lighting is further restricted by the natural shrubbery in the area and the distance from any residential housing. These fields would be a HUGE asset to our community and should move forward with haste.

Every day of delay is a loss of benefit to our kids and our community." (*Albert Minvielle, email, November 30, 2011 [I-Minvielle-01]*)

"I also fail to find a total amount of new concrete that would cover natural ground. These are just some of the details." (*Rasa Moss, public hearing comment [I-Moss2-06]*)

"Renovating restrooms to replace the toilet stall doors that have been missing for years, adding new mirrors, soap dispensers, modern toilet paper dispensers, hand dryers, sinks and baby changing tables in mens and womens bathrooms.

Adding lockers pose some risk of vandalism, but would not be opposed. Showers will attract homeless park dwellers and require excessive maintenance. Players can bring towels to wipe down, have room to change clothes, and will need to shower when they get home. Given the problems we have in Golden Gate Park, this is a concession players have to live with to play here.

In the UK, soccer is the national game, and hundreds of thousands of players play the game on a regular basis almost all the year around. In every organized soccer game the facilities are available to the players include showers, and in certain cases plunge baths.

In my opinion the bathroom facility would have to be expanded considerably to be able to effectively accommodate the players. This then raises a question of security for valuables, and protection against vandalism which could easily happen.

Building small areas of spectator seating that is in keeping with the naturalistic setting of the west end of Golden Gate Park. There is no room to implement this additional fixture." (*Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-05]*)

"Lengthening the fields will necessitate removing the windscreen hedge between the service road and the fields - contrary to the computer model images that City Fields has presented. (Just as City Fields admitted that the computer generated images they provided to represent the amount of light that will be generated by the stadium lights, and how much light would be seen from Sutro Park, was greatly under- represented.

The fields do not need to be expanded, they are perfectly fine as they stand right now and would meet any soccer leagues requirements.

Enlarging (lengthening) the fields is unnecessary and will take away the small walkway of grass around the fields that were fenced off from the public to walk on in the mid 90's. I walk around these fields on the grass daily. Putting concrete walkways around the artificial turf fields will make this are unattractive for walking for pleasure. The green meadow of these fields is an ideal place to take a quiet walk." (*Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-07]*)

"The amount of garbage generated by soccer tournaments is bad now. Increases exponentially and the garbage is increased exponentially. The overworked gardeners will now become full-time garbage collectors and the park will suffer greatly as a result" (*Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-10]*)

"After years of watching the effects of crumbling, synthetic materials in children's playgrounds, the stuff crumbles and migrates everywhere - onto adjacent grassy spaces, sandboxes, sidewalks, into clubhouses, into adjacent private backyards.

Huge holes rub into the stuff from repeated treading which is the true tripping hazard.

Fake is harder to maintain because of replacement values: Real grass requires spot replanting, fake means removing huge sheets of the stuff and reworking supporting material underneath.

This labor intensive process required specialized and expensive workers instead of regular gardeners." (*Andrea & Rick O'Leary, email, December 11, 2011 [I-O'Leary-07]*)

"Multiple other events will be scheduled on these fields because RPD cannot resist the temptation of charging big-bucks for the use of public park facilities. The result will be multiplication of current big event problems from traffic, trash, noise, disturbances to residents, and over-use of public gardening staff who should be maintaining other parks." (*Andrea & Rick O'Leary, email, December 11, 2011 [I-O'Leary-13]*)

"Renovating restrooms to replace the toilet stall doors that have been missing for years, adding new mirrors, soap dispensers, modern toilet paper dispensers, hand dryers, sinks and baby changing tables in mens and womens bathrooms.

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Building small areas of spectator seating that is in keeping with the naturalistic setting of the west end of Golden Gate Park. There is no room to implement this additional fixture." (*Jamie Ray, letter, December 12, 2011 [I-Ray-06]*)

"Lengthening the fields will necessitate removing the windscreen hedge between the service road and the fields - contrary to the computer model images that City Fields has presented. (Just as City Fields admitted that the computer generated images they provided to represent the amount of light that will be generated by the stadium lights, and how much light would be seen from Sutro Park, was greatly under- represented.

The fields do not need to be expanded, they are perfectly fine as they stand right now and would meet any soccer leagues requirements.

Enlarging (lengthening) the fields is unnecessary and will take away the small walkway of grass around the fields that were fenced off from the public to walk on in the mid 90's. I walk around these fields on the grass daily. Putting concrete walkways around the artificial turf fields will make this area unattractive for walking for pleasure. The green meadow of these fields is an ideal place to take a quiet walk." (*Jamie Ray, letter, December 12, 2011 [I-Ray-08]*)

"The amount of garbage generated by soccer tournaments is bad now. Increases exponentially and the garbage is increased exponentially. The overworked gardeners will now become full-time garbage collectors and the park will suffer greatly as a result" (*Jamie Ray, letter, December 12, 2011 [I-Ray-11]*)

"... create excessive garbage strewn about... amongst other concerns." (*Jamie Ray, letter, no date [I-Ray2-01]*)

"Enlarging the size of the fields is an example of a component of this project that has nothing to do with the stated need- to increase access to the fields. Lengthening these fields will make it harder for our youth to play on these fields. They already struggle to play a full game on the existing full size fields." (*Jamie Ray, letter, no date [I-Ray3-10]*)

"This project is also proposed to decrease maintenance costs. but in fact creates an excessively maintenance-intensive infrastructure for which the city has no funds to maintain.

RPD's Dan Mauer has stated that the existing fields are in less than ideal condition because RPD can't afford to hire a gardener with the necessary knowledge and skill necessary to competently maintain athletic turf. He's also said that artificial turf will reduce maintenance personnel costs. However, artificial turf manufacturers and sales websites clearly state that artificial turf will not require less maintenance than natural turf. They both require a high degree of care. Artificial turf requires sweeping, 'steam' cleaning for removal of bacteria such as MRSA, tear repairing, etc. Artificial turf cannot have sodas or other drinks spilled on it, and is flammable. Bacteria that harbors in artificial turf could cost the city plenty if someone becomes hospitalized for an infection and sues the city. Injuries are also known to increase on artificial turf. (see safety section)

In addition to significant maintenance of the artificial turf and replacement cost necessary in 6-8 years depending on use, this proposed project will add or increase the following maintenance (cost) needs:

- Daily (several times a day) cleaning of the showers, changing rooms and bathrooms. Currently gardeners are required to clean the soccer field and all other park bathrooms.

Union efforts to protest that these maintenance duties are not part of their hired job description failed. This increased maintenance will decrease the quality of the park, as gardeners will spend even less time taking care of the park's vegetation. Park gardener staffing is at a historic low.

- Increased garbage pickup will be required. After games, the amount of garbage strewn around is unbelievable. Currently, park gardeners spend an average of 1/3 of their time picking up garbage, not planting or maintaining the plants that make our parks beautiful.
- Increased garbage collection service will be needed. The garbage can located at the archery field was recently removed to cut the cost of garbage collection service.
- Increased fixture maintenance - lighting fixtures along paths, stadium lights, bathroom fixtures fixed or replaced as damaged, replacing toilet paper, fixing clogged showers and toilets, etc.
- Increased structure maintenance and graffiti control on structures.
- Increased maintenance of the parking lot, pathways, BBQ area, children's play area, etc. The children's play area nearby sorely needs maintenance attention.

Revenue garnered from increasing play from 3 fields to 4 on weekends and some rainy days, and adding night games, cannot possibly meet the increased maintenance costs that this project will create.

It's unlikely that fees will cover the monthly cost of 150,000 watts of lighting each night until 10pm. ..." (*Jamie Ray, letter, no date [I-Ray3-11]*)

"The last area of Need that the project sponsor has stated is the need to reduce water usage.

This is a non-issue from an environmental standpoint when compared to the environmental impacts of the proposed project.

Currently the water used to water the turf comes from a well. Excess water filters through the sand to the aquifer below. No pesticides or herbicides are used, according to RPD's IPM department director (Ralph Montana). He states that golf courses, athletic fields and parks lawns are maintained without herbicides or pesticides, using only compost teas. ...

The benefits of grass in removing greenhouse gasses, emitting oxygen, providing a cool safe playing surface outweighs the water that is used for the benefit of providing athletic fields for the public." (*Jamie Ray, letter, no date [I-Ray3-12]*)

"Now, that term 'public' raises another question. The Report describes the way 'the public' will be able to more safely recreate on artificial grass than on the real McCoy, and the way 'the public'

will be able to in fact, recreate until 10 PM every night of the year beneath those 60-foot-high floodlights. When you say 'the public,' do you mean baseball players? No. These fields would not be designed for baseball. You mean, basketball players? No. Same reason. Football? No. Track sports like broad-jumping? Pole-vaulting? No, again. How about picnicking? No. Not allowed, probably. And anyway, a little simple research turns up much evidence that plastic grass is uncomfortable to sit on, gets hot in the sun, is a breeding ground for bacteria (since there no bacteria-eaters present) and smells funny besides. So, asks the rational person, What segment of the public, besides soccer-players, a sliver of the general population, will be able to use the proposed synthetic fields?" (*Dan Richman, letter, no date [I-Richman-07]*)

"The soccer project turns what should be a meadow available to all into a single-use area.

This is not fair to everyone else out here who would like to use the park for hiking, picnicking, and enjoying nature." (*Diane M. Rivera, email, November 28, 2011 [I-Rivera-04]*)

"Of specific concern are...use of the park after closed hours..." (*Mark Russell, email, November 23, 2011 [I-MRussell-03]*)

"The permanent lighting that is being proposed, the stadium seating being installed and the other proposals to enhance the soccer fields implies but does not ensure that the only activities that would be permitted on those fields would be soccer and other related sporting events, since recent experience demonstrates the likelihood there may be other activities (e.g., concerts, etc.) with very different potential environmental impacts. Therefore, I believe it is necessary that the scope of the DEIR be expanded to include those distinctly different potential impacts and the alternatives that should be considered for them." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-11]*)

"Even with the addition of a leach field drainage system, because of the shortage of athletic fields in San Francisco, there is no natural grass that I am aware of that can possibly survive the amount of use that the Beach Chalet Athletic Fields get, even without field lights.

The proposed undertaking is to build new Beach Chalet fields that can provide increased playing time, not more natural grass fields full of gofer holes, pot holes and ruts that are impossible to maintain unless they are fenced and closed 4 months a year. {FYI: It's hard to kill gofers without poison or lethal traps.}" (*Andrew Solow, email, December 1, 2011 [I-Solow2-05]*)

“The only question I have about the proposed Beach Chalet Renovation project is exactly how tall the field light poles have to be to properly illuminate the new artificial field complex. Shorter would be better if an adequate amount of illumination can still be achieved.

If they have not already done so, I request that the City Fields Foundation provide technical comparison of the efficiency (and cost) of 60', 45' and 32' light poles to light Beach Chalet including the proposed locations for the different height light poles, the type of light fixtures to be used on the different size light poles, and some estimate of the amount of spill over and reflected light for the different height light poles and fixtures (light pole heights are approximate). Again, if it has not already been done, perhaps a field lighting contractor could provide the requested lighting comparison.

At the recent HPC meeting regarding the Beach Chalet Field Renovation project, one of the speakers alleged that an artificial soccer complex with field lights was recently constructed in an avian flyway somewhere in Marin County with 32' light poles. Has anyone verified the veracity of this rumor yet???” (*Andrew Solow, email, December 1, 2011 [I-Solow2-06]*)

“EIR page 11-15: All lighting would be controlled by an online automated control system, which would turn lights on at sunset and turn all the lights off upon field closure at 10:00 p.m. daily. In addition to the field light standards, the project includes 47 approximately 15-foot-tall pedestrian pathway light standards and 13 approximately 18-foot-tall parking lot light standards. These also would be controlled by an online automated control system.

EIR IVB-30: All lighting would be controlled by an online automated control system, which would turn off all the lights at 10:00 p.m. In addition to the field light standards, the project includes 47 approximately 15-foot-tall pedestrian pathway light standards and 13 approximately 18-foot-tall parking lot light standards, which would also be controlled by an online automated control system.

IV.B-36: After facility closure at 10 p.m. most of the lights would be turned off, with parking lot, pathway and security lighting left on for a short period of time after 10 p.m. to allow for safe exit of site users. However, no lights would be left on overnight. Therefore, no spillover of artificial lighting would occur, and this impact would be less than significant.

Comments: There is some ambiguity in these statements and it seems not to be mandatory. How long after 10 p.m. will be the walkway and parking lot lighting be switched off? Experience at sport fields show that lights are often left on with no one on the field. This causes energy waste and unnecessary light pollution and should be avoided. A more strict regulation to switch of the lights as soon as people have left the field is recommended here.” (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-08]*)

“Planning Commission - Patrick Hannan from City Fields Foundation has been instrumental in changing how athletic fields are being build throughout the City. Though artificial turfs have been asset with regards to less immediate and short-term costs to DPR. Matter of fact, it will cost the people of SF to maintain these turf fields. For instance, the Mission Street and 16th fields are no longer safe to play on; the materials has torn beyond repair, the tires and other materials are forming dune like piles and DPR cannot pay for its maintenance. At Crocker Amazon, the fields are being used beyond their intended use. The DPR has immensely increased the fields usage starting @ 6:00 am for many sports and up to 10:00 pm. The department that issues permits does not care about keeping the environment safe and rather, are asking for high fees to play on said areas.

If the Beach Chalet fields are going to be built, then (a) have DRP and City Fields Foundation provide adequate long-term maintenance service as long as either party is in existence; “ (*Jeff Staben, letter, December 6, 2011 [I-Staben-01]*)

“DPR permittng service has to eliminate unaffiliated programs or programs that can be played off of turf fields, such as frisbee or touch football (i.e, Crocker Amazon has a grass football field which is not utilized on weekends or weekdays except during pee-wee football scrimmages);” (*Jeff Staben, letter, December 6, 2011 [I-Staben-02]*)

“And so I think it --and we all know that these fields with the lights will allow muck more playing time. They don’t need the maintenance that the natural fields require.” (*Walter Van Riel, public hearing comment [I-Van Riel-02]*)

Response PD-4

Comments Regarding Field Users under the Project

Several comments assert that the projected facility user numbers presented in the EIR are inaccurate. Comment I-AClark-01 states that the estimates associated with facility use are too uncertain and that more substantive research is needed to accurately estimate existing and proposed uses. Comments I-AClark-06, I-AClark-13, and I-AClark-14 state that the EIR lacks accounting and analyses of the increase of use of persons and vehicles and that more research is needed to analyze impacts of increased soccer playing and increased people use and vehicle use on the surrounding environment. Comment I-GoHoward-06 states that play hours should be comparably presented using the same time period and that data and methods used to calculate hours available for play should be presented in EIR as “extra” play time over that of existing fields. This comment also states that it is illogical to expect that project fields will always be available for play at times indicated and requests that weather related data be factored into estimates. Comment O-SPEAK3-06 requests that data be obtained showing program of usage at

other similar facilities. Comment I-AClark2-01 asserts that the most significant problem with the EIR is the people count and states that the “DEIR people report is fuzzy, incomplete and lacks data.” Comment I-AClark-12 asserts that discrepancies exist between information presented in the EIR and the Seeking Green report (SPUR, July 2011) concerning proposed play hours that need to be resolved.

In response to the comments above, estimates of the proposed use of the Beach Chalet Facility were made based on information provided by the SFRPD about projected future use schedules (weekdays and weekend days) for the athletic fields, using the existing reservations schedule information and observations of existing use, as well as projections of future use, based on existing use patterns at the project facility and other similar facilities, and proposed field capacity. The projections assume that the fields would be well used during the additional hours made possible by the project, thus providing a reasonably conservative estimate of future conditions. This approach is consistent and appropriate for CEQA review as it provides an analysis of the level of use that would be enabled by completion of the proposed project.

Comment I-GMiller3-10 requests information regarding the types of teams that will use the fields after dark. The proposed reservation system would be similar to the existing reservation system. As stated on page II-21 of the EIR, the types of groups that currently use the existing athletic fields by reservation (i.e., school teams, youth leagues and adult leagues) would continue to use the renovated facilities. Field reservations would continue to operate as under existing conditions. Thus, the types of teams that would use the fields after dark would be similar to those that currently use the project site, which includes both adults and children.

Comment I-Barish-01 asks for the source of anticipated increase in use of fields between 9 a.m. and 3 p.m. Monday through Friday. The fields are currently bordered by a chain-link fence and, typically, no reservations are made between 9 a.m. and 3 p.m., Monday through Friday, although as stated on the bottom of page II-11, the fields are available for reservation during this time. With project implementation, however, the chain-link fence would be removed and replaced with a 3.5-foot-tall black vinyl fence and 16-foot-tall fence behind goals. This would essentially eliminate a barrier to using the site at any time. While the project site would still operate primarily via a reservation system, it is likely that informal “walk-up” play would occur during the non-permitted, non-reservable, “open play” hours, similar to field use at other synthetic turf play fields in San Francisco. Some of that “open play” would occur between 9 a.m. and 3 p.m., Monday through Friday, as shown in Table II-4 on page II-23.

Comments O-RCA-04 and O-SPEAK3-06 state that the facility, including light towers, are for adults, not kids’, soccer, as children’s leagues end around 6 p.m. The comments further state that adult leagues will include non-residents. Comment I-GMiller3-10 states, that attracting young children to the park after dark might not be a good idea and inquires as to what types of teams that will be using the field after dark. See Response PD-3 above regarding site use by non-San Francisco residents. Also, as stated in the EIR on page II-21, the site would be available to both youth and adult leagues during all hours. While it is possible that more adult leagues may choose to use the project site after dark, the SFRPD would not preclude their use or reservation by youth

leagues. The concern conveyed by these comments is noted and will be forwarded to decision-makers. Also see the discussion regarding crime and safety issues in Response PD-2 on page X.D-31.

Comments Regarding Maintenance of Proposed Facility

Comments I-Anderson-16, I-Bar-David-02, I-Barish-35, I-Citron-16 I-Dennenberg-15, I-Edelson-17, I-GIHoward-08, I-Khan-16 request information on what level of maintenance will be required for synthetic turf fields, what kinds of activities would maintenance involve, and how many hours would be spent on each activity. The comments also ask how long will the synthetic turf last before it is replaced and how much water will need to be used in comparison to grass turf. The comments ask for the same information for natural grass and question whether more cleaning will be required because the site is near the beach. Comment I-Ray3-11 states that synthetic turf will require more maintenance because it will require sweeping, steam cleaning to remove bacteria, tear repairs, etc., and costs to the City could be substantial if someone gets infected and sues the City.

Comment I-Ray3-11 also states that the project will require additional cleaning of bathroom facilities and changing rooms. Comment I-AClark-08 asserts that the 1/3 maintenance work schedule has resulted in deterioration of field conditions that will not be alleviated by the project because the maintenance schedule would be maintained while the use the facility would increase (in terms of trash, debris, wear and tear). The commenter asserts that this will result in a significant cumulative impact of the environment and its protection and sustainability. Commenter recommends that proposed maintenance plan be revised to assign additional maintenance staff to the facility. Similarly, comment I-Koivisto-08 states that more staffing is needed at the site (as compared to other facilities) because of the site's unique location (and because it is subject to "animal feces, sand blasting, flooding and wind").

Comments I-Ogilvie-10, I-Ray-11, I-Ray2-01, and I-Ray3-11 voice concern that the amount of garbage will increase substantially once the project is implemented, requiring an increase in garbage pickup services. Comment I-AClark-03 states that there is lack of environmental and sustainable maintenance, protection, upkeep and preservation, both at the existing site and proposed as part of the project. The commenter states that limited maintenance staffing is unacceptable for environmental protection and preservation and has a highly significant impact. Comments I-Barish-22 and I-Barish-31 request additional information regarding detergents, cleansers, disinfectants, etc., that will be used to treat synthetic turf, ask which are listed under Proposition 65 and request information regarding frequency and amount of their use as well as amount of human exposure directly or through tracking on shoes, clothing, and wind transport. The comments ask what are risks of exposure to those playing, spectators and others and whether such risks vary by age or gender. Comment I-Ray3-11 states that the project will require increased maintenance of fixtures, structures, and pathways, barbeque area, play area, and will also need graffiti control.

In response to the comments above, maintenance of the renovated facility is discussed on page II-24 of the EIR. Here it is stated that staffing at the project site would not increase and that 1/3 full-

time equivalent employee maintenance staff would continue to maintain the facility (this is the level of staffing that SFRPD can financially accommodate at the site, both presently and after the project is implemented). Maintenance would consist of garbage pick-up and periodic sweeping and, as needed, spot washing of the synthetic turf (using only dish soap and water, no disinfectants or special detergents would be used per the manufacturer's recommendation). Although small amounts of solvents and adhesives could be required to make minor repairs, they would not be used in large quantities but only in spot applications at the specific repair location. SFRPD would establish a site-specific maintenance schedule, with activities and timing similar to that of other synthetic turf fields. For example, the South Sunset Playground maintenance schedule includes sweeping every two weeks, or as needed, and turf grooming every five to eight weeks. Repair of turf, removal of graffiti, and spot washing with soap and water is conducted as needed. If this maintenance level proves to be inadequate, SFRPD would reconsider maintenance needs as would typically occur for any SFRPD-managed facility. However, no significant environmental impact would occur.

Maintenance logistics would not have the potential to result in environmental impacts, nor are they relevant to project description. Based on this information, the site would involve regularly scheduled upkeep (similar to existing conditions) and occasional spot-cleaning and repairs of turf areas, with no abrasive or hazardous materials used other than small amounts for repairs. Thus, the project would not lead to exposure of humans to hazardous materials associated with site maintenance and upkeep. The synthetic turf is expected to last for a minimum of ten years (as stated on page II-14 of the EIR), at which time it would be returned to the manufacturer for reuse/recycling and replaced by new synthetic turf. Water would be used for spot cleaning, as needed, and is not expected to exceed the amount of water currently used at the site. In fact, it is estimated that the project will save in excess of approximately six million gallons of water per year since the synthetic turf fields will not require irrigation water. For discussion of costs associated with the proposed project, which include maintenance costs, please see discussion in Section X.B, General Comments.

Comment I-Solow2-05 asserts that the existing site cannot accommodate the amount of play that is demanded, without being closed part of the year. As discussed in the EIR, one of the reasons for proposing an synthetic turf on the project site is because it would not require field closures for extended periods of time to accommodate regrowth.

Comments I-Anderson-18, I-Dennenberg-17, I-Khan-18, I-GMiller3-07, I-Anderson-18, I-Bar-David-04, and I-Edelson-19 inquire as to how maintenance will be handled with more traffic and higher use of the area. Maintenance would be performed Monday through Friday during the day between 8 a.m. and 2 p.m. when the schools are in session. Based on historic use at this and other facilities, field use during these hours is minimal except during school vacations (Table II-4 on page II-23 presents a conservative estimate of potential field use at this time). Even during school vacations, SFRPD would ensure that adequate time is provided to perform maintenance by limiting play to a portion of the site. If maintenance staff requires field closures for a full day for grooming or other maintenance needs, this would be coordinated with permitting staff.

Comments I-BLewis-06 and I-Foree-Henson-03 question whether the turf company will be in business in 10 years and request an explanation of what will happen if the turf starts to break down and there's no money to replace it. As discussed in Response HAZ-2, the expected life span of the synthetic turf is anticipated to be a minimum of 10 years. According to SFRPD, if the turf breaks down, SFRPD would have the turf company replace it under warranty. By contract, warranties for turf purchased for SFRPD properties are backed by a third party warranty should the turf company go out of business before the warranty expires. As with all capital assets managed by SFRPD, life expectancy of all assets is identified and tracked in SFRPD's database system. When a particular infrastructure item requires replacement, the department plans accordingly and identifies the appropriate funding mechanism to accommodate such replacement. The proposed synthetic turf would not be viewed any differently than any other asset that the department manages.

Comment I-O'Leary-07 states that the synthetic material will be difficult to maintain as huge sheets would have to be removed in order to be replaced, which will be very labor intensive and expensive. In response to this comment, as noted above, the repairs to the turf would be undertaken on an as-needed basis and would be limited to the damaged areas. Replacement of large portions of the turf would not be required for most types of repairs.

Comment I-O'Leary-07 states that huge holes from repeated treading will pose a tripping hazard. As noted above, any holes in the turf would be repaired as needed, as is the case at other synthetic turf facilities in San Francisco. It is noted, based on the project sponsor and testimony from users of the existing facility presented at the Public Hearing on the DEIR on December 1, 2011, the existing site presents a tripping hazard due to the abundant gopher holes and a general state of disrepair. However, this is not an environmental impact of the project.

Comment I-Staben-01 states that synthetic turf on other sites, such as the site near Mission and 16th Streets, is in disrepair and the Crocker Amazon fields are being used beyond their capacity. The commenter adds that the same thing will happen at the project site and requests a commitment from the City for long-term maintenance. In response to this comment, it is noted that no evidence was submitted to support the assertion that proposed fields at the project site would be used beyond capacity in the future. It is also important to point out that one of the primary objectives of the proposed project is to increase athletic field use on the site, which would be expected to alleviate any overuse that may be happening at other sites. Also, the condition of other existing recreational facilities throughout the City is a non-CEQA issue that will be forwarded to the decision-makers. Lastly, regular maintenance of the project site, as described in the EIR and above, is part of the overall project and would be conducted as part of normal operations, foreseeable for the long term.

Comment I-GMiller3-01 states that the fields may be subject to vandalism which will be expensive to repair. Speculation that the site will not be used as intended is not a CEQA topic (see response ERP-3). However, as noted above, repairs would be made as necessary. For a general discussion of project costs, please see discussion in Section X.B, General Comments.

Comments Regarding Specific Proposed Physical Components of the Project

Comments I-Ogilvie-07, I-Ray-08, and I-Ray3-10 state that the fields do not need to be expanded and assert that expanding them would require removal of the windscreen hedge between the service roads and the fields (despite what the plans show). The comments also state that the concrete walkways around the synthetic turf would make them unattractive and that lengthening the fields will make it more difficult for youths to play on them. These comments are concerning a specific project component (the fields), provide personal opinions, and/or relate to non-CEQA issues. The proposed project would not include tree removal beyond that described in the EIR (see also Section X.L, Biological Resources). The information will be forwarded to the decision-makers; however, no further response is required per CEQA.

Comments I-Darrigrand & Claflin-04 question why the paths have to be paved. Comments I-Anderson-04, I-Citron-06, I-Dennenberg-04, I-Edelson-06, I-Hyde-05, I-Khan-05, O-CSFN-03 question why there are so many paths in a park that is supposed to be a naturalistic parkland. As stated on page II-17 of the EIR, adding paved pathways is one of the project objectives because the project sponsor wants to improve field access and circulation. The paths would be added to “provide players, spectators, and maintenance staff access to each of the fields, as well as provide connection with existing pedestrian circulation routes within the park and to the pathway at the Great Highway.” The western end of Golden Gate Park contains many miles of similar pathways for similar purposes, which does not markedly interfere with its overall naturalistic character. Moreover, as noted in the EIR and in the response to Comment PD-1, the project site, while within a larger naturalistic area, is currently, and would remain under the proposed project, in use as an athletic facility.

Comment I-Barish-02 questions what will account for the increase of the project site from 9.4 to 11.2 acres (other than the 0.4 acres increase in playing field). The project site would be expanded slightly around its perimeter to accommodate proposed amenities such as spectator seating, paved paths, a larger parking lot, and a plaza area.

Comments I-Barish-24 and I-Barish-26 ask what is the amount, by weight, of synthetic turf that will be used in the construction of the Beach Chalet Athletic Fields and request amount, by weight, of tire crumb infill that will be used in the construction of synthetic turf fields. This information is not yet available because a turf manufacturer and product have not yet been selected. However, this comment does not relate to physical environmental effects under the purview of CEQA analysis.

Comment I-Buffum-05 asks for the total coverage in square feet of synthetic fields and the new paved paths and asks that the EIR consider cumulative impacts of the field along with the footprint of the San Francisco Westside Recycled Water Project. As stated on page II-13 (in Table II-2), the proposed athletic fields would be 64,350 square feet in size. As stated on page IV.C-23 of the EIR, the circulation paths would add approximately 0.7 acres (30,492 square feet) of new impervious surface material to the project. The cumulative impacts of the project along with other past, present, and probably future projects are considered throughout Chapter IV, with a table of cumulative projects provided in Table IV-1, on pages IV-5-8. In terms of permeability of

the turf fields the Project Description on page II-14 of the EIR states that the fiber and infill of the synthetic turf would be supported by a backing made up of a combination of permeable woven and un-woven polypropylene fabrics that provide strength and vertical drainage and that the underlayment would consist of drainage tile or an aggregate rock base. As stated further on page IV.G-26 of the EIR (in the Hydrology and Water Quality section), the SFRPD would construct the playfields with an underlying liner and a drainage system equipped to capture all stormwater runoff and leachate from the fields, initially directing it to the combined sewer system via a new pipeline and connection. The SFRPD would conduct periodic water sampling from the underdrain system, in conjunction with SFPUC, to evaluate the quality of water drained from the synthetic turf. If sampling by the SFRPD indicates that water quality is acceptable, SFPUC could allow drainage from synthetic field to infiltrate into the groundwater basin. The EIR determined that impacts associated with water drainage through the fields to be less than significant.

Comment I-Learner-12 states that the amount of proposed seating does not match the plans and is not justified considering the proposed attendance of 288 people per reservation period. The commenter also asks for the current seating arrangements for regular games and tournaments. As stated on EIR page II-17 and illustrated on the plans on page II-12, the project would install spectator seating for approximately 250 visitors at the north and south ends of the facility, as well as seating for approximately 606 visitors on the east-west walkway between the two center fields. Although not specified in the plans, additional seating for approximately 150 spectators would be provided in the plaza area (the number of seats in the plaza area, which is quoted as being 190 on page II-17, has been reduced to 150 since the publication of the DEIR). In total, the project would provide up to 1,006 spectator seats, which is less than the number provided in Table II-2 on page II-13 due to the reduction in spectator plaza seating amount. This number of seats is proposed to accommodate tournaments, which would occur up to six times per year. These events would not be typical of field use; the EIR analysis is appropriately based on more typical patterns of use. With regard to current seating arrangements, spectators typically congregate behind the fence at the goal locations, on the grass between the fields and on the ends. Usually players are on one side and spectators on the other side. The existing facility does not have spectator seating.

In response to comment I-GIHoward-05 and I-GIHoward-07 regarding the adequacy of handicapped parking supply, the number of parking stalls is based on the number of parking stalls in the parking lot. Furthermore, not all disabled park visitors drive and not all disabled park visitors require an ADA parking space. It is also noted that these comments are in regard to specific components of the proposed project and do not address the adequacy of the EIR. As such they are noted and will be forwarded to the decision-makers; however, no further response is required. Also, see responses to comments I-GIHoward-03 and I-GIHoward-06 in Section 10.K, Transportation and Circulation.

In response to comments I-Ogilvie-05, I-Ray-06, I-Anderson-19, I-Bar-David-05, and I-Citron-18, which concern the proposed restroom improvements and the potential for vandalism, these comments are in regard to specific components of the proposed project and do not address the

adequacy of the EIR. As such they are noted and will be forwarded to the decision-makers; however, no further response is required per CEQA.

Comments O-PAR3-05, I-Solow2-06, I-Spoelstra-08, O-SPEAK3-06 are regarding the proposed lighting system and concerns that lights would be left on even when not in use. Comment A-SFPC-Antonini-04 states that there would be limits to the amount of light reduction that is possible and that ending light use at 9:00 p.m. should be considered. As stated on page II-15, all lighting would be controlled by an online automated control system, which would turn lights on at sunset and turn all the lights off upon field closure at 10:00 p.m. daily. Furthermore, the 47 approximately 15-foot-tall pedestrian pathway light standards and 13 approximately 18-foot-tall parking lot light standards would also be controlled by an online automated control system. The EIR analysis is based on the Project Description information provided by the applicant. Concerning the potential for ending light use at 9:00 p.m., or another time prior to 10 p.m. as proposed, please see response ALT-1.

Comment I-Kirshenbaum-02 states that field lighting is wasteful and extravagant under the current circumstances. This comment states a personal opinion on the project and not on the adequacy or completeness of the EIR. No further response is required. Also see response GC-1.

Comment I-Darrigrand & Claflin-04 ask how many trees will be lost. As stated on page II-21 of the EIR, the project would remove 16 trees and approximately 44 shrubs. The proposed project includes replacement of each tree removed at a one-to-one or greater ratio.

Comments Regarding Future Uses at the Site

Comments I-AClark-11, I-AClark-13, I-AClark-15, and I-Litehiser-05 state that children will be underserved by the facility and recommend that the playing schedule be adjusted to guarantee specific time slots to children. SFRPD only permits the fields to youth teams afterschool between 3:00pm and 6:30pm. That said, these comments are in regard to specific components of the proposed project and do not address the adequacy of the EIR. As such, they are noted and will be forwarded to the decision-makers; however, no further response is required per CEQA.

Comments A-SFPC-Antonini-12, A-SFPC-Sugaya-04, I-Schultz-11, O-PAR2-07, I-O'Leary-13, I-Jungreis2-14, and A-SFPC-Miguel-04 state that the EIR does not analyze potential for non-sporting events (such as Hardly Strictly Bluegrass and/or Outside Lands Festivals), to take place on the project site.¹ In response, the SFRPD would not formally prohibit non-sporting events but they would be extremely difficult to reserve, much more so than is currently the case. This is because SFRPD does not allow eating, smoking or staking on synthetic turf. No events have been held on other synthetic fields in the City that are not athletics-related and similarly, no non-athletic events are anticipated on the Beach Chalet site.

Comment I-MRussell-03 voices concern about the use of the park after closed hours. The park is currently closed from 10 p.m. to 6 a.m., except for through traffic and special events. The

¹ Currently these events do not take place on the project site; however, concerts and other non-sporting events have taken place at the fields in the past.

proposed operating hours of the Beach Chalet facility would extend until 10 p.m. Thus, the project would not be anticipated to increase the use of the park after it is closed.

Comment I-Litehiser-02, I-McDevitt-04, I-Richman-07, and I-Rivera-04 state that the choice to make these fields into a soccer only facility would limit its use for other sports, picnicking, kite flying and passive activities and that, if built, there should be designated times for other activities. Proposed uses on the site would be similar to uses that currently take place on the site, which is primarily soccer practices and games, though SFRPD would also permit lacrosse and ultimate frisbee as the fields could be used for most ground sports activities and general recreation. In addition, as described throughout the Project Description, amenities such as plaza areas, playground equipment, barbeque pits, and spectator seating, are designed for nonathletic activities at the site. Furthermore, grassy areas around the project site would continue to be available for other activities, including activities mentioned in the comments. The environmental analysis in Chapter IV is based on the intended uses at the project site. CEQA Guidelines Section 15145 does not require analysis of project components that are speculative. See Section X.K, Recreation.

Comment I-Staben-02 recommends that other activities, such as frisbee or touch football, should be limited so as not to overuse the fields. Proposed programming at the project site by one use or another is not an issue that raises potential physical environmental issues under CEQA. Moreover, the project site, including the fields, is not currently open for such uses. However, the comment will be forwarded to the decision-makers.

Commenter I-Learner-21 requests that various changes to the project be codified through operation/permitting guidelines, including: requirement for a night use permits, carrying capacity, handling of management of scheduling tournaments, use of amplified sound, coordination with larger events planned in the park and on Golden Gate National Recreation Area (GGNRA) lands along Ocean Beach/Great Highway, and recommends looking at Kezar Stadium scheduling and permitting guidelines for reference. This comment provides a personal recommendation on the proposed project, but does not address the adequacy or accuracy of the analysis presented in the EIR. The EIR states that amplified sound is not proposed under the project. No further response is required.

Comment I-GMiller3-04 questions what public process will be required to add an amplified sound system to the project site in the future. The SFRPD does not plan to add an amplified sound system to the project site in the future, as noted above. Any event that needs amplified sound would be required to bring in their own temporary system and the use of such system would be limited to brief announcements (for instances, for special games). SFRPD may also allow amplified sound for tournaments to make announcements similar to what has been done in the past.

Comments O-PAR3-03 and O-PAR3-05 recommend that fields close at 9 p.m. on Fridays and Saturdays and 8 p.m. on all other evenings and state that maximum decibel noise guidelines should be set and enforced for amplified sound. The recommendation regarding the facility's proposed operational hours is noted and will be forwarded to decision-makers. Regarding noise-

related issues, regulation of noise is stipulated in Article 29 of the Police Code (the Noise Ordinance), which states the City's policy is to prohibit unnecessary, excessive, and offensive noises from all sources subject to police power. The project site is subject to police power and excessive noise would be dealt with through noise complaints and similar mechanisms, as under existing conditions. As stated in paragraph above, the SFRPD does not plan to add an amplified sound system to the project site in the future.

Other Comments Regarding Proposed Facility

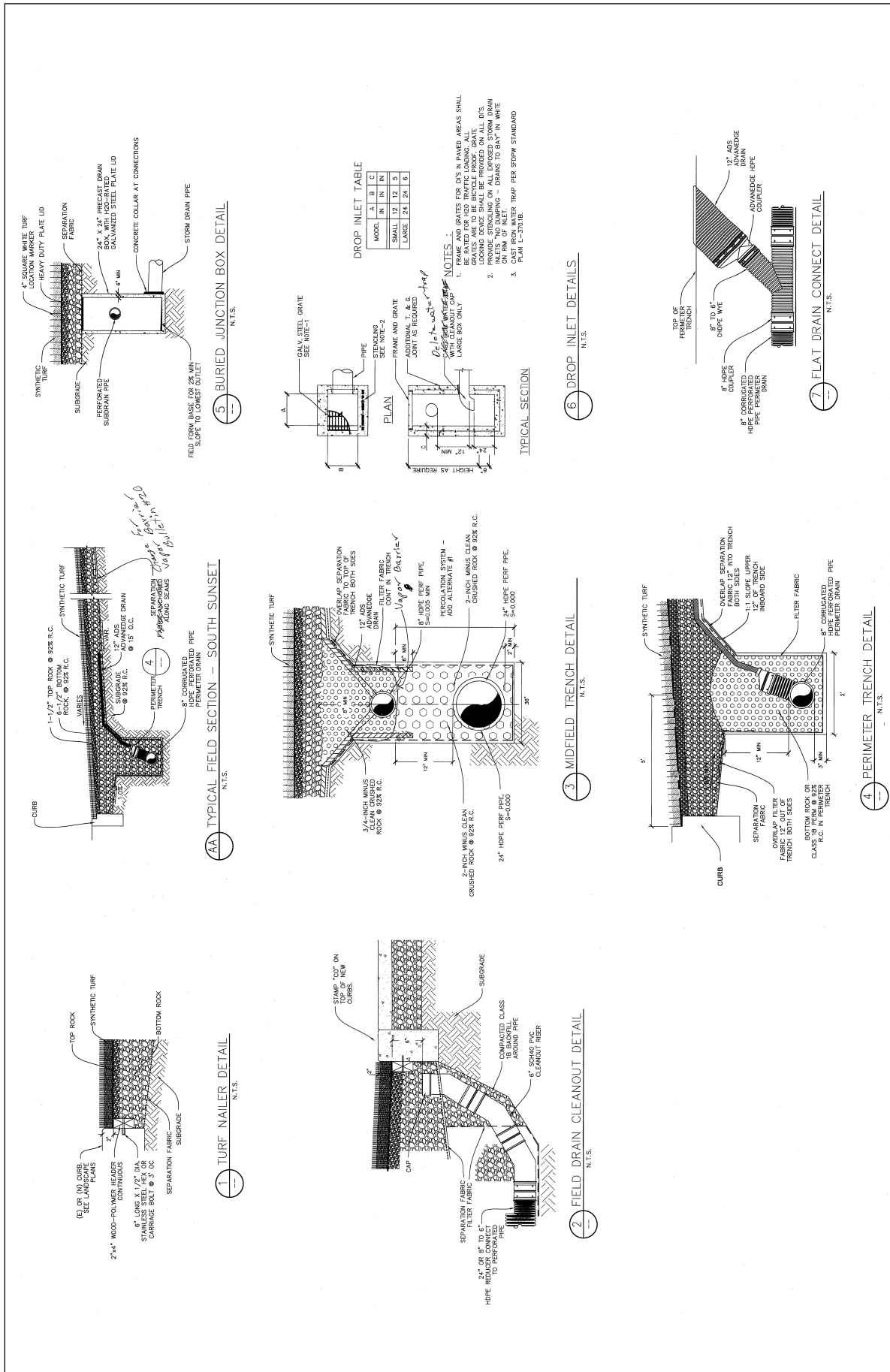
Comment I-Joaquin-Wood-01 states that the project is a professional stadium masquerading as a gift for children of San Francisco and will be expensive to maintain. With respect to comments related to funding or financial implications of the project, see Response GC-2. Comments as to the nature of the proposed project do not address the adequacy of the EIR, but express an opinion on the merits of the proposed project. As such, these comments are noted and will be forwarded to the decision-makers; however, no further response is required.

In response to I-GIHoward-08, which questions what will happen to materials removed from the field, as part of the proposed project, the organic layer of grass (green waste) would be removed and disposed of as the contractors' property. The top soil material would be moved to the southern edge of the field to address grade issues at that location. According to SFRPD staff, the SFRPD would try to utilize as much top soil on site as possible.

Comments I-Learner-15 requests an illustration of the proposed rainwater catchment basin. **Figure X.D-1**, on the following page, provides a diagram of the synthetic turf field construction details for the South Sunset Playground, which are similar to those proposed at Beach Chalet.

With regard to comments A-SFPUC-01 and A-SFPUC-02, as discussed under EIR Chapter IV. Hydrology and Water Quality, "Setting", dry weather flows to the Oceanside Water Pollution Control Plant (OWPCP) (typically May 1–October 15) are currently 14 million gallons per day (mgd), and the treatment plant has the capacity to treat up to 43 mgd to a secondary level. As stated on page IV.G-2, during wet weather conditions, the combined primary and secondary treatment capacity of the of the OWPCP is 65 mgd. Wet weather flows in excess of 65 mgd receive flow-through treatment equivalent to primary treatment in three large transport boxes, which have a combined storage capacity of 73.5 million gallons, including 2.2 million gallons of storage in the sewer lines. Wet weather flows between 65 mgd and 175 mgd are discharged to the ocean through the Southwest Ocean Outfall, and flows in excess of 175 mgd are discharged at the shoreline through one of seven combined sewer overflow structures located along the ocean coast.

As noted on page IV.G-27 of the EIR, the project would increase dry weather sewage volume over existing conditions by 1,100 gallons per day (0.0011 mgd). The volume of wet weather flows is variable as it relates to rainfall intensity, but as a worst case, the project would increase the volume of wet weather discharges to the combined sewer by an estimated 3.35 million gallons per year. The increased flows from the project represent a small portion of the existing dry weather flows to the OWPCP and are well within the capacity of the treatment plant. With wet weather conditions, when brought into compliance with the Stormwater Design Guidelines,



SOURCE: RHAAC

Case No. 2010.0016E: Beach Chatlet Athletic Fields Renovation Project
Figure X.D-1
 Artificial Turf Field Construction Details

project-related discharges would also be considered less than significant. Therefore, no significant impact would ensue.

Comment I-McGrew-04 states that the fields will be locked and only opened if paid for, as with the Polo Fields. As stated on page II-21, field reservations would continue to operate as under existing conditions but with greater use by more people for longer hours. Furthermore, the project site would allow for a certain amount of "open play" time when no reservations are allowed and unorganized, pick-up games are encouraged. Thus, access to the site would be increased rather than decreased as part of the proposed project.

Comment I-O'Leary-07 states that the synthetic material will migrate on the adjacent grassy areas, sandboxes, sidewalks, and nearby backyards. The synthetic turf would meet or exceed all parameters established by the *San Francisco Recreation and Park Department Synthetic Playfields Task Force Findings and Department Recommendations* and the turf specification developed in coordination with the Department of the Environment. Furthermore, it would be very similar to the synthetic turf already used on other fields, such as Crocker Amazon, which is also located at the edge of a large park. Although the turf has been known to migrate onto clothes and shoes at other facilities such as Crocker Amazon, this has not resulted in any reported problems. Also, please see discussion regarding human health risk evaluation in Section X.O, Hazards and Hazardous Materials and Air Quality.

Comments O-SPEAK2-07, O-SPEAK4-07, and O-SPEAK3-14 state that excavation and removal of soil will make the change from grass fields to synthetic turf an irreversible barrier to restoration in the future. Restoration of the project site in the future is speculative and is not proposed as part of the project or included as part of the environmental analysis. Furthermore, no policies or regulations require that future site restoration be analyzed in an EIR. However, these comments are noted and have been forwarded to decision-makers.

Comment A-SFPUC-3 states that SFPUC would require that stormwater from all disturbed surfaces comply with the Stormwater Design Guidelines. Text in the second paragraph on EIR p. II-15 is revised as follows:

Because the project includes greater than 5,000 square feet of ground disturbance, the project would need to comply with the CCSF Stormwater Design Guidelines described in Section IV.H, Hydrology and Water Quality, for the management of stormwater following construction. In accordance with these guidelines, the project must implement a stormwater management approach to prevent the stormwater flow rate and volume from exceeding existing conditions (except for fields). Accordingly Based on SFPUC guidance, stormwater runoff from the impervious portions of the parking lot and other impervious areas would be conveyed to the combined sewer system, or would be drained into the ground, and eventually to the groundwater basin below. Infiltration swales or other naturalized control measures would be implemented to reduce the peak runoff rate and runoff volume prior to discharge to the combined sewer system.

This revision does not change the conclusions presented in the EIR.

In response to comment I-Ray2-01, which states concern about safety after evening games, the project would attract more players and spectators to the site but the claim that they would increase violence in the area is unsubstantiated. The project site is already engaged in sports-related activities, with no indication that current users of the site vandalize the surrounding areas of the park or the nearby residential districts. The comment is related to non-CEQA issues and makes speculative claims. See also the last paragraph of response ERP-3 and response PD-2 concerning safety issues on page X.D-31.

Several comments discuss project operations. Comment I-Miniville-01 indicates that the project would continue a long-time existing use at the site, provide a multi-cultural social experience for the community, extend user hours to support working adults, provide a safe place for children, increase number of annual play days and hours, reduce operation costs for maintenance and turf replacement, provide physical activity space, provide a constructive outlet for youth throughout the city, and provide a quality facility, safe and economical fields. The comment also notes that the proposed lights would point down and restrict spillover. Comment I-Van Riel-02 states that fields with the lights will allow much more playing time and that synthetic turf fields would not require the level of maintenance that natural fields require. Comment I-GGerrity-01 states that synthetic turf would not require watering and would get a lot more use. With lights, players would be able to play after dark. Raymond Kimbell Fields, which has synthetic turf, is provided as an example of a facility that gets a lot of use due to some of the similar field improvements. The comment notes that this site is mainly used for sports and that changes should be made that work best for accommodating sports uses.

Comment I-Ray3-12 states that reduction of water usage (listed as one of the objectives) is a non-issue from an environmental standpoint. This comment provides an opinion about one of the project components and is noted. No response is required.

E. Plans and Policies

E.1 Overview of Comments on the Plans and Policies

The comments and corresponding responses in this section cover topics in Chapter III of the EIR. These include topics related to:

- PP-1, Plans and Policies, General
- PP-2, Consistency with Golden Gate Park Master Plan
- PP-3, Consistency with San Francisco General Plan
- PP-4, Consistency with Other Planning Documents

E.2 Plans and Policies, General [PP-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-SPEAK3-07

I-Jungreis2-34

I-Koivisto-12

“A Change of Use is proposed. What is the zoning district in which a sports facility may be located according to the Land Use tables in the Planning Code? When a use is changed from casual meadow playing fields to a full competition-ready facility with stadium lighting turned on 365 days a year, turf pavement over several feet of constructed underlayment, is that still the same category of use, or does that graduate up to another category of use? The argument should be substantiated that this facility would not amount to a change of use and presented in the EIR.”
(*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-07]*)

“The plan must include alternatives: there is insufficient analysis of City policy to encourage school playing-field facilities to be used during non-school hours (these facilities are located where the demand is, and using local school playing-fields develops community relationships).”
(*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-34]*)

“And while I could not afford to spend much time in this section of the DEIR, the idea (as stated in the Strategic Plan section) of synthetic turf replacing grass and dirt being somehow good for environmental sustainability, in addition to the lights and their concomitant CO2 output, was stunning. I had assumed, incorrectly I now see, that terms such as ‘environment’ and ‘sustainable’ would be well-defined in a draft environmental impact report. Since they are not, these words should also be defined in the glossary. It would be easier to have this discussion if

the discussion is clearly defined and transparent.” (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-12])

Response PP-1

Comment I-Koivisto-12 states that terms “environment” and “sustainable” should be defined and added to the EIR glossary since the commenter does not believe that synthetic turf replacing grass, sand, dirt, and lights would be environmentally sustainable. This comment provides a personal opinion regarding the consistency of the project with strategic objectives of the SFRPD Strategic Plan, discussed on pages III-9 and III-10, and it will be forwarded to decision-makers. However, in response to the request that these terms be defined, the EIR Glossary of Terms, pages ix through xiii, has been revised to include the following:

Environment. The complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival.

Sustainable. Of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged.

This revision does not change the analysis or conclusions presented in the EIR.

In response to comment I-Jungreis2-34, which states that there is insufficient analysis of City policy to encourage school playing field facilities to be used during non-school hours, the project is site-specific and focused on improvements at the Beach Chalet Athletic Fields Facility, a site that is specifically designated for recreation and one over which the SFRPD has jurisdictional authority. The overarching objective of the proposed project is to address specific deficiencies at the project site, not to consider other ways to meet the demand for playing facilities elsewhere (for example, through coordination between the SFRPD and the San Francisco Unified School District). This comment will be forwarded to decision-makers; however, any consideration of such citywide policies is outside of CEQA requirements. It is noted, however, that in 2009, SFRPD and the San Francisco Unified School District established a “joint use” field program by which School District synthetic turf fields are permitted to youth and adult sports leagues through SFRPD during weekend days when the schools aren’t using their field facilities.

There is no specific zoning designation regarding sports facilities. The project area, and Golden Gate Park as a whole is zoned as “Public” by the San Francisco Planning Department. This zoning designation would not change as a result of the proposed project.

E.3 Consistency with Golden Gate Park Master Plan [PP-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Miguel-02	I-Anderson-09	I-Crowley-05	I-Learner-08
A-SFHPC-01	I-Arack-03	I-D'Anne2-01	I-Learner-10
O-CPF-01	I-Barish-03	I-Dennenberg-08	I-BLewis-01
O-CPF-02	I-Bartley-12	I-Edelson-10	I-BLewis-10
O-CSFN-07	I-Brant-01	I-Fukuda-01	I-Lieb-01
O-CYSA2-01	I-Bridges-01	I-MGerrity-01	I-Lieb-04
O-GGAS2-01	I-Bridges-07	I-MGerrity2-01	I-Litehiser-01
O-GGAS2-15	I-Browd-01	I-JoGoldberg-01	I-Lounsbury-05
O-GGAS2-22	I-Bufferum-05	I-Hahn-01	I-Mabutt-01
O-GGAS2-23	I-Buhler-02	I-Hahn-08	I-Mosgofian-02
O-GGAS2-24	I-Campos-03	I-Hoffman-01	I-Moss-01
O-GGAS2-25	I-Campos2-01	I-Hoffman-03	I-O'Leary-06
O-GGPPA-01	I-Chappell-07	I-KHoward-08	I-Posthumus2-01
O-GGPPA-09	I-Chappell2-01	I-Jungreis2-23	I-Ray3-04
O-GGPPA-10	I-Chappell2-02	I-Kaspar-01	I-Schultz-13
O-RCA-01	I-Chappell2-04	I-Khan-09	I-Schultz-16
O-SCSFBC-04	I-Chappell3-01	I-Kohn2-04	I-Schwartz-01
O-SFAH-01	I-Cherny-01	I-Koivisto-48	I-Solow2-01
O-SFAH-03	I-Citron-02	I-Learner-01	I-Solow2-03
O-SFAH-05	I-Citron-10	I-Learner-02	I-Stern2-04
O-SPEAK2-04	I-Clayton-09	I-Learner-03	I-Warriner-01
O-SPEAK3-09	I-Clayton-10	I-Learner-04	
O-SPEAK4-04			

"I'll have other comments written later --in references to the adequacy of the or the coverage of the EIR, is the Golden Gate Park Master Plan because there were many, many references to it publicly today and there are many references to it in the EIR document in front of us.

I have dealt with the Master Plan since 1998 and before because I was on the citizen's committee that helped write it. And by the way, even the head of Planning's environmental department, Bill Wycko was a Planning Department resource for the plan.

That document is a bureaucratic document as are all things that come out of city, state or federal government. It says one thing in one section and it contradicts it 10 pages, 15, 20 pages later on and gives a third opinion someplace else. But if you take a look at the Master Plan, it gives short shrift to the west end of Golden Gate Park. Master plan is a little over 200 pages long. Two pages constitute the west end plan.

Soccer fields are mentioned as part of three sentences in that section. The west end diagram notes 'additional soccer fields,' refers you to the Richmond Sunset Treatment Plant diagram that says 'new soccer and multi-purposes field.' The accompanying text says, 'The recommended plan proposes expansion of the existing uses surrounding the site, one additional soccer multi-use sports field, a picnic area reforestation areas and a parking lot are proposed.' That's directly from the Golden Gate Park Master Plan.

But perhaps the most telling sentence in that entire two-page section is this: 'The goal of this area plan is to increase legitimate activities and transform this part of the Park.' Okay?' (*Ron Miguel, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Miguel-02]*)

"The HPC believes the proposed project is inconsistent with the Golden Gate Park Master Plan and conflicts with the City's General Plan policies." (*Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-01]*)

"The Beach Chalet Soccer fields are located at the western terminus of Golden Gate Park, which is listed in the National Register of Historic Places. Intended to remain a naturalist meadows and woodlands, when the current athletic fields were introduced, there was little impact. The improvements being proposed today are inconsistent with the Golden Gate Master Plan and would have a significant impact on the environment." (*California Preservation Foundation, letter, December 8, 2011 [O-CPF-01]*)

"The original Golden Gate Park Master Plan, adopted in 1998 after exhaustive environmental review, recommends that the original design of the park be followed in all decisions about new projects. It clearly called out proposed improvements to the western end, specifically to improve the landscaping, continue reforestation of the western windbreak, add a soccer field near the waste facility, and pursue restoration and rehabilitation for the windmills, Millwright's House and the Beach Chalet. It did not include the complete renovation of the soccer fields or introduction of artificial elements into the landscape. The DEIR states that the project is consistent with the Golden Gate Master Plan, stating: 'because the project would be implemented **entirely within the boundaries of the existing complex**, the proposed turf would be consistent with the character of the use as an athletic field complex, any trees or shrubs' removed would be replaced at a ratio of at least 1-to-1, and the project would not diminish or encroach upon the surrounding open space.' In fact, **the proposed project does expand** beyond the boundaries of the existing complex **by an additional 2 acres**, contradicting the aforementioned statement in the DEIR.

In looking at Table II-2 and Figure II-6 Proposed Site Plan, the existing grassy area used as athletic fields would be expanded by almost 20,000 square feet with permanent fields, not

including the seating which encroaches into the open space; the parking lot would be expanded by almost 10,000 square feet; and around 70 new lights, sidewalks, play structures, etc. would be added to the site. One of the Policies that the DEIR failed to review is Policy A for Naturalistic Parkland. The only portion in the Golden Gate Park Land Use Map depicted as Major Recreation are the original fields themselves, the surrounding area is considered Naturalistic Parkland.” (California Preservation Foundation, letter, December 8, 2011 [O-CPF-02])

“The development on the West end of Golden Gate Park is in violation of the Golden Gate Park Master Plan.” (Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-07])

“The Beach Chalet Athletic Field has been a traditional facility in San Francisco for ground sports.” (California Youth Soccer Association, letter, December 1, 2011 [O-CYSA2-01])

“Any discussion about development in Golden Gate Park, especially in the western end, but take place within the context of the Golden Gate Park Master Plan (1998). The Master Plan states:

The major design feature of Golden Gate Park and the framework within which all park activities occur is its pastoral and sylvan landscape. **The integrity of the pastoral and sylvan landscape must be maintained and remain unaltered.**

(Golden Gate Park Master Plan, at 3-9, Policy A-2 [emphasis added])

There is no doubt that the project will compromise the integrity of the pastoral and sylvan landscape of the western end of Golden Gate Park. The project as proposed will

1. quadruple usage at the site, with an associated increase in automobile traffic
2. install up to nine acres of synthetic turf material, which will remove one of San Francisco’s largest open, grassy meadows and will require disposal of approximately 400 tons of potentially hazardous materials in less than a decade;
3. install 60-foot stadium lights in a part of the park that was previously dark at night and add to light pollution at other dark areas, including Ocean Beach and Land’s End;
4. alter wildlife populations at the site, resulting from potential changes in migratory, feeding, and breeding behaviors’ and
5. potentially discharge heavy metals and other pollutants to ground water and storm water discharged from the site.” (Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-01])

“The ‘propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements.’ ... Perhaps one of greatest flaws in the DEIR is that it concludes that the proposed project, as planned, is consistent with the San Francisco General Plan and the Golden Gate Park Master Plan. The DEIR concludes:

The renovation of the Beach Chalet Athletic Fields facility with synthetic turf and lighting for extended use does not appear to conflict with any adopted plans and goals for the purposes of CEQA. As mentioned above, the proposed project would require a General Plan Referral, which would analyze the project’s consistency with the San Francisco General Plan.

(DEIR, at III-II) Given the objectives of the General Plan to ‘emphasize the naturalistic landscape qualities of the western end of the park’ and the Master Plan to ‘retain the integrity of the original design of the park’, which included keeping the western end more natural and wild, there is simply no way that a project of this size-which will turn the fields into a high-use, late-night athletic complex-can be considered to be consistent with these plans.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-15]*)

“The Golden Gate Park Master Plan emphasizes the intention of William Hammond Hall, the park’s original planner, for the park’s east end to be highly cultivated while the west end would retain a more wild and natural environment. According to the Master Plan:

The park land east of Strawberry Hill includes a variety of intensively cultivated areas and developed facilities while the park land to the west is a pastoral and woodland landscape with open meadows defined by stands of trees and enhanced by lakes ... It is expected that the Golden Gate Park Master Plan will retain the integrity of the original design

(Golden Gate Park Master Plan (1998), at 3-2).

Again, Policy A.1 of Objective II of the Master Plan states ‘[a]ll activities, features and facilities in Golden Gate Park should respect the unique design and character of the park.’ (Id. at 3-9) Policy A.2. states:

The major design feature of Golden Gate Park and the framework within which all park activities occur is its pastoral and sylvan landscape. **The integrity of the pastoral and sylvan landscape must be maintained and remain unaltered.**

(Id., emphasis added)

“The DEIR once again demonstrates its bias in the discussion of the Golden Gate Park Master Plan, where it states:

As discussed in the Park Master Plan, the western portion of Golden Gate Park contains most of the park’s larger meadows, lakes, and relatively natural areas, as well as facilities for activities and sports. The project site is designated as a ‘Major Recreational Area,’ according to the plan’s Land Use Map (Figure 3–1 of the Park Master Plan).⁵ As such, it was established to meet specific recreational needs, and is programmed specifically to help meet

recreational and sports needs (Objective 1, Policy C, Major Recreation Area). The plan requires that land uses and activities in Golden Gate Park contribute to the mission and purposes of the park, and that activities within a designated land use zone should be appropriate to the land use purpose (Objective 1, Land Use and Activities). The project site would be maintained for recreational uses, as proposed by the project, and thus would be consistent with Objective I and its designation as a Major Recreational Area.

(DEIR, at III -7). It is extremely notable that the DEIR quotes this portion of the Master Plan, as well as a statement regarding the condition of the athletic fields, but fails to provide direct quotes about the Master Plan's requirement that the history of the park and the sylvan aspect of the western end of the park be respected. (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-22]*)

"The DEIR is entirely flawed in its conclusion that

[t]he proposed project would be generally consistent with these policies because the project would be implemented entirely within the boundaries of the existing complex, the proposed turf would be consistent with the character of the use as an athletic field complex, any trees or shrubs removed would be replaced at a ratio of at least I-to - I, and the project would not diminish or encroach upon the surrounding open space

(DEIR, at III-8) First, it cannot reasonably be concluded that this project preserves or otherwise maintains the naturalistic character of the western end of the park. The statement is further flawed because it characterizes the project as only affecting the 'boundaries of the existing complex' and does not acknowledge that (1) light pollution, (2) noise, (3) traffic, (4) additional human activities, (5) trash, and (6) tracking of crumb rubber will occur outside the boundaries of the project, creating a penumbra of environmental and aesthetic impacts that are not truly assessed in the DEIR." (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-23]*)

"The DEIR also provides no evidence for the conclusion that

[i]n addition, lighting of the existing grass soccer fields to extend use hours was also not considered because, at that time, the fields were already at or beyond their use limits for proper maintenance.

(DFTR at III-9) At the time the Master Plan was drafted_ lights had been used for decades to permit nighttime play on grass fields. Clearly, this was an issue that could have been addressed in the Master Plan but was omitted, likely because it would have violated the Master Plan's directive to maintain the western end of the park in a more naturalistic setting. The DEIR's conclusion to the contrary is just another example of its bias and failure to base its conclusions on evidence or other verifiable facts." (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-24]*)

“Finally, the DEIR improperly defers an assessment of the conflicts with the Master Plan to be decided at a later date by another body, notably the San Francisco Recreation and Parks Department Commission, which is the project sponsor. The DEIR states that

[u]ltimately, consistency of the proposed project with the Park Master Plan will be determined by SFRPD Commission when the project is considered for approval.

(DEIR, at III-9). Part of the job of the DEIR is to provide an honest assessment of the consistency with the Master Plan, not to defer it to SFRPD Commission. Moreover, what results if the SFRPD determines that the project is inconsistent with the Master Plan? The DEIR should address this issue forthrightly now.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-25]*)

“...This project goes against the over-riding design of the Park as outlined in the Golden Gate Park Master Plan:

*‘The purpose of Golden Gate Park is to serve as an open space preserve in the midst of San Francisco. This historic park is a **cultivated pastoral and sylovan landscape**, defined by an abundant evergreen woodland. It is designed and managed to afford opportunities for all to experience beauty/ tranquility/ recreation and **relief from urban pressures.**’ (p. 3-2)*

‘The landscape of Golden Gate Park is its most prominent feature, and is what attracts people to the park. The park landscape is the sum of many components: terrain/ forests/ meadows/ horticultural displays, lakes, athletic fields/ and climate ... ’(pA-1)

*The western park was to be: ‘. . . **simply treated as a woodland or forest**, with all the hills and ridges more or less heavily timbered/ and the valleys covered with lower-growing shrubs or field grasses ... ’(p4.5)*

The DEIR states that the Recreation and Park Commission is the final arbiter as to whether or not the project fits into the concepts of the Golden Gate Park Master Plan.” (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-01]*)

“...Why does the DEIR state that installing lights would remain consistent with the Golden Gate Park Master Plan? What language in the Master Plan is this referring to? ...” (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-09]*)

“Alternative 4: Synthetic turf without lights - -The DEIR states that this is consistent with the Golden Gate Park Master Plan - what is the basis for this statement? Where does it say in the

GGPMP that this is acceptable? ..." (Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-10])

"Beach Chalet is located on the western end of the park which the Golden Gate Park Master Plan intended to be kept in a natural state. The eastern end of the park was intended to allow for various attractions i.e. museums, tea garden, botanical garden, etc. The proposed Beach Chalet soccer fields will be a violation of the Golden Gate Park Master Plan and should not be allowed. Converting the natural turf to artificial turf, increasing the parking lot, and installing ten light towers will destroy the natural sylvan setting of the western end of Golden Gate Park. It will replace more than seven acres of natural grass and topsoil with more than seven acres of artificial turf. In addition the project will install ten sixty foot light towers, bleachers, additional parking, cut down 55 trees. The lights will be on every night until 10 PM. We can understand the lights at ATT Park but not in a pastoral setting in the west end of Golden Gate Park." (Richmond Community Association, letter, December 12, 2011 [O-RCA-01])

"...The Water project, like the adjacent Beach Chalet project is not consistent with the Golden Gate Park Master Plan and the San Francisco General Plan." (Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-04])

"The DEIR, however, lacks a thorough analysis of the project's consistency with the Golden Gate Park Master Plan and fails to evaluate a reasonable range of potentially feasible alternatives." (San Francisco Architectural Heritage, letter, December 12, 2011 [O-SFAH-01])

"By proposing to introduce artificial turf and stadium lighting to the western portion of Golden Gate Park, the proposed project is inconsistent with several policies in the Golden Gate Park Master Plan that prioritize protection of the west end's 'pastoral and sylvan landscape.' The Golden Gate Park Master Plan indicates that the western end of the park was intended to maintain naturalistic landscape qualities:

- *The Purpose of Golden Gate Park is to serve as an open space preserve in the midst of San Francisco. This historic park is a cultivated pastoral and sylvan landscape, defined by an abundant evergreen woodland. It is designed and managed to afford opportunities for all to experience beauty, tranquility, recreation and relief from urban pressures (Page 3-2).*
- *William Hammond Hall envisioned the park in two different regions. The park land east of Strawberry Hill includes a variety of intensively cultivate areas and developed facilities while the park land to the west is pastoral and woodland landscape with open meadow defined by stands of trees and enhanced by lakes (Page 3-2).*

- *The integrity of the pastoral and sylvan landscape must be maintained and remain unaltered (Page 3-9).*
- *The western park was to be ... simply treated as a woodland or forest, with all the hills and ridges more or less heavily timbered, and the valleys covered with lower-growing shrubs or field grasses (Page 4-5).*
- *Over the years, facilities have been added to the western park, but the character of the landscape has remained as more wooded, less refined parkland. This distinction should be maintained, with different landscape treatments for the eastern and western portions (Page 4-5).” (San Francisco Architectural Heritage, letter, December 12, 2011 [O-SFAH-03])*

“The proposed project, however, does expand beyond the boundaries of the existing complex by two acres. Moreover, installing 60-foot field lights will have significant impacts on the surrounding open space, particularly at night. The Golden Gate Park Master Plan indicates that in areas not designated for nighttime use (including the project site), park lighting ‘would generally be limited to a minimal amount of street lighting for safety’ (III-9). Installing ten 60-foot field lights is clearly not in line with this policy and will undoubtedly alter the naturalistic character of the park’s west end.” *(San Francisco Architectural Heritage, letter, December 12, 2011 [O-SFAH-05])*

“Adding artificial turf and stadium lighting designed to attract nighttime use in an area of Golden Gate Park which is designated to remain as a natural area goes counter to the policies of Golden Gate Master Plan and the Western Shoreline Area Plan of the General Plan; the 60 foot high light standards of galvanized steel would create a negative visual impact to the pastoral park setting and would violate Policies 2.1 and 2.2 for Conservation of Natural Areas of the Urban Design Element.” *(Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-04])*

“Golden Gate Master Plan will be violated. Excavating and replacing the grass meadow by installing artificial turf and stadium lighting designed to attract nighttime use in an area of Golden Gate Park which is designated to remain as a natural area goes counter to the policies of Golden Gate Master Plan and the Western Shoreline Area Plan of the General Plan. The 60-foot high light standards of galvanized steel would create a negative visual impact to the pastoral park setting and would violate Policies 2.1 and 2.2 for Conservation of Natural Areas of the Urban Design Element.” *(Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-09])*

“Excavating and replacing the grass meadow by installing artificial turf and stadium lighting designed to attract nighttime use in an area of Golden Gate Park which is designated to remain as a natural area goes counter to the policies of Golden Gate Master Plan and the Western Shoreline

Area Plan of the General Plan; the 60 foot high light standards of galvanized steel would create a negative visual impact to the pastoral park setting and would violate Policies 2.1 and 2.2 for Conservation of Natural Areas of the Urban Design Element." (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-04]*)

"Explain why the DEIR ignores the Golden Gate Park Master Plan when it calls the western end of the Park the more wild and forested area." (*Raja Anderson, letter, December 12, 2011 [I-Anderson-09]*)

"Now it is natural, wild, a refuge for both humans and animals and birds. It conforms to the master plan of the park, which states that Western side of park was to be kept wild and natural This plan will turn this area into another parking lot instead of a park. Must we pave paradise again?" (*Patricia Arack, letter, December 12, 2011 [I-Arack-03]*)

"There is little doubt that the proposed project is inconsistent with these and many other requirements of the Golden Gate Park Master Plan. This project shows no regard for the intended use of the western portion of Golden Gate Park as described in the Master Plan. Artificial turf, sports lighting, stadium seating, and more concrete have no place in this part of Golden Gate Park. Describing artificial turf fields and 60 foot high sports lighting as being consistent with the sylvan and pastoral nature of the park is laughable. And the sports lights will unquestionably distract from the character of the park. These are just two of the many examples that have been presented that demonstrate that the project flies in the face of the Golden Gate Park Master Plan. The project's obvious conflict with the Master Plan must be considered in this environmental review, and should be adequate grounds for rejection of the project as currently conceived." (*Jean Barish, letter, December 12, 2011 [I-Barish-03]*)

"The affront to the Golden Gate Park Charter" (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-12]*)

"The Planning Commission has a difficult decision before it. There clearly is a shortage of usable soccer fields in the City. But that is not a reason to permanently alter the historic character of the Park, and ignore the clear intent of the Master Plan." (*Michael Brant, letter, December 2, 2011 [I-Brant-01]*)

“As a native Californian and a lover of Golden Gate Park, I implore you to uphold the original intent of majestic Golden Gate Park:

‘The project seems to belie the original intent of Golden Gate Park as a uniquely wild setting. The Master Plan for Golden Gate Park, drafted in 1995, emphasizes environmental stewardship and maintaining the park in a natural, multi-use way. Among its provisions are ‘major meadows and lawns should be adaptable to host a wide variety of activities, rather than designed for a specific use.’”

‘But the Recreation and Park Department (RPD) and sports advocates are pushing a plan to install seven acres of synthetic turf fields, complete with 60-foot, 150,000-watt lighting that will shine until 10 p.m. year-round.’” (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-01]*)

“The SF Recreation and Parks Dept. is proposing to replace 9 acres of open, naturally-growing grass in Golden Gate Park with synthetic turf and to install several 60-foot tall lights that will illuminate the western end of Golden Gate Park for the first time. This project will remove important wildlife habitat, increase disturbances to neighbors and wildlife, and violate the Golden Gate Park Master Plan.” (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-07]*)

“Therefore the preservation of, and respect for the heritage of the Park are of great importance to me. This project would violate numerous provisions in the Park’s Master Plan which calls for the western end to remain undeveloped and wild. The stadium lighting on 60ft towers would have a profound impact on the ambiance of the dark, windy, fog shrouded edge of our Park and the beach beyond.” (*Gary Browd, letter, December 7, 2011 [I-Browd-01]*)

“What is total coverage in square footage of the artificial fields and the new paved paths? How does this comply with the Golden Gate Master Plan for the West end of the park? Please consider the cumulative impact of the proposed fields along with the footprint of the Wastewater Treatment Plant.” (*Nancy Buffum, letter, December 12, 2011 [I-Buffum-05]*)

“Upon review of the EIR, however, Heritage believes that the report fails to adequately acknowledge conflicts with the Golden Gate Master Plan and fails to evaluate a reasonable range to potentially feasible alternatives to the proposed project.

By proposing to introduce artificial turf and stadium lighting into the Park, the proposed project is clearly inconsistent with the Golden Gate Master Plan policies that prioritize protection of the west end’s ‘pastoral and sylvan landscape.’” (*Mike Buhler, public hearing comment [I-Buhler-02]*)

“Artificial turf and stadium sports lighting are a major infringement to the character of Golden Gate Park. And the water treatment plant is also a major assault Golden Gate Park. Please take note of what the Golden Gate Master Plan states:

(p 4-5) ‘It’s important to maintain the rural character in the western park.’

(p 6-1) ‘The demands for recreation need to be balanced with the objectives of preserving the original intent and purpose of the park as a sylvan and pastoral’ retreat.’ ..

(p 9-5) ‘Lighting is for safety purposes and is not intended to increase night use.’ ... “ (Roland Campos, letter, December 11, 2011 [I-Campos-03])

“I think it’s the environment defined in the Golden Gate Park Master Plan.

I’d like to point out some passages from the Golden Gate Park Master Plan on Section 4, Page 5, says, ‘It is particularly important to maintain the rural character in the western park.’ I don’t think that stadium lights and plastic turf would be considered a rural character.

Also, Section 6, Page 1, it says, ‘The demand for recreation needs to be balanced with the objectives, preserving the original intent and purpose of the Park as a sylvan and pastoral retreat. I don’t think plastic turf and stadium lights qualifies as respecting that.

Also Section 9, Page 5, says regarding lighting, ‘Lighting is for safety purposes and is not intended to increase night use.’ I don’t think the individuals that conceived the project, as proposed at this point, took into account those elements. So I urge you to extend the comment period and to oppose the project in its current state of design. Thank you.” (Roland Campos, public hearing comment [I-Campos2-01])

“Since the adoption of the ROSE, the Golden Gate Park Master Plan was developed over a period of several years with the benefit of thousands of hours of hours of public input, and subsequently adopted.

‘Golden Gate Park has been a part of San Francisco for over 120 years. Over that time, the city and the lives of its citizens have changed dramatically, *yet the purpose and use of Golden Gate Park has remained remarkably unchanged.* Today, as one hundred years ago, people are coming to Golden Gate Park to picnic, walk, bicycle, to fed the ducks, to see the bison, and ‘*as a relief and counterpoise to the urban life.*’ This is an enduring tribute to the vision and design that created the park. The park is as vital today as it was a hundred years ago, perhaps more so. Golden Gate Park is both a 19th century ‘pleasure ground’ and a modern urban park.’ (GGPMP, page 1-6.)

'The Master Plan for Golden Gate Park is intended to provide a framework and guidelines to ensure responsible and enlightened stewardship of the park. The goal is to manage the current and future park and recreation demands while preserving the historic significance of the park. As such, the plan is a preservationist plan, and proposed changes respect the historic context of the park.' (GGPMP, page 1-6.)

'Golden Gate Park Mission Statement The Purpose of Golden Gate Park is to serve as an open space preserve in the midst of San Francisco. This historic park is a cultivated pastoral and sylvan landscape, defined by an abundant evergreen woodland. It is designed and managed to afford opportunities for all to experience beauty, tranquility, recreation and relief from urban pressures.' (GGPMP, page 3-2)

The purpose of the Objectives and Policies is to preserve Golden Gate Park's contribution to the diversity of cultural, natural and recreational resources available to park visitors from San Francisco, the Bay region, and elsewhere. *Golden Gate Park should be recognized as an important American Cultural Resource.'* (GGPMP, Page 3-2).

'William Hammond Hall envisioned the park in two different regions. The park land east of Strawberry Hill includes a variety of intensively cultivated areas and developed facilities while the park land to the west is pastoral and woodland landscape with open meadow defined by stands of trees and enhanced by lakes.' (GGPMP, page 3-2.)

'The western park was to be: 'simply treated as a woodland or forest, with all the hills and ridges more or less heavily timbered, and the valleys covered with lower-growing shrubs or field grasses.' (GGPMP, page 4-5.)

'Over the years, facilities have been added to the western park, but the character of the landscape has remained as more wooded, less refined parkland. This distinction should be maintained, with different landscape treatments for the eastern and western portions.' (GGPMP, page 4-5.)" (Jim Chappell, letter, December 10, 2011 [I-Chappell-07])

"Regarding the Beach Chalet EIR, I have some concerns, and that is that, as a planner, we have one document that we can look at and that is the Master Plan. And the Master Plan of Golden Gate Park is the result of thousands of hours, probably tens of thousands of hours of thousands of people over many years, city employees, city commissioners and the public.

And the Draft EIR dismisses the Master Plan, saying, 'Consistency of the proposed project for the Park Master Plan will be determined by the San Francisco Park and Rec Department Commission when the needs to be seriously thought about by this Planning Commission here today.' " (Jim Chappell, public hearing comment [I-Chappell2-01])

"Just a couple of quotes from the Master Plan. 'The Master Plan for Golden Gate Park is intended to provide a framework and guidelines to ensure a responsible and enlightened stewardship of

the Park. The goal is to manage the current and future park recreation demands while preserving the historic significance of the Park. As such the plan is a preservationist plan and proposed changes should respect the historic context of the Park.’ “ (Jim Chappell, public hearing comment [I-Chappell2-02])

“So I sincerely believe that there is a compromise here, that Golden Gate Park continue to be as it was initially planned and as the Master Plan calls for and that a different soccer field configuration on that land is possible. Thank you.” (Jim Chappell, public hearing comment [I-Chappell2-04])

“I have carefully reviewed the Draft Environment Impact Report on the Beach Chalet Athletic Fields and find it inadequate to address the impacts of this project. ‘An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information that enables them to make a decision that intelligently takes account of the environmental consequences.’ (DEIR, page 1-5). The document dismisses the Golden Gate Park Master Plan with the statement ‘... consistency of the proposed project with the Park Master Plan will be determined by SFRPD Commission when the project is considered for approval.’ (page III-9).

The Golden Gate Park Master Plan was developed over a period of several years with the benefit of thousands of hours of public input. As a planner, I am concerned that the Master Plan should be so discounted in this DEIR.

Referencing the Golden Gate Park Master Plan (GGPMPP):

‘Golden Gate Park has been a part of San Francisco for over 120 years. Over that time, the city and the lives of its citizens have changed dramatically, yet the purpose and use of Golden Gate Park has remained remarkably unchanged. Today, as one hundred years ago, people are coming to Golden Gate Park to picnic, walk, bicycle, to feed the ducks, to see the bison, and ‘as a relief and counterpoise to the urban life.’ This is an enduring tribute to the vision and design that created the park. The park is as vital today as it was a hundred years ago, perhaps more so. Golden Gate Park is both a 19th century ‘pleasure ground’ and a modern urban park.’ (GGPMP, page I-I).

‘The Master Plan for Golden Gate Park is intended to provide a framework and guidelines to ensure responsible and enlightened stewardship of the park. The goal is to manage the current and future park and recreation demands while preserving the historic significance of the park. As such, the plan is a preservationist plan, and proposed changes respect the historic context of the park.’ (GGPMP, page 1-6).

‘Golden Gate Park Mission Statement

The Purpose of Golden Gate Park is to serve as an open space preserve in the midst of San Francisco. This historic park is a cultivated pastoral and sylvan landscape, defined by an

abundant evergreen woodland. It is designed and managed to afford opportunities for all to experience beauty, tranquility, recreation and relief from urban pressures.’ (GGPMP, page 3-2)

‘Objectives and Policies Statement of Purpose

The purpose of the Objectives and Policies is to preserve Golden Gate Park’s contribution to the diversity of cultural, natural and recreational resources available to park visitors from San Francisco, the Bay region, and elsewhere. Golden Gate Park should be recognized as an important American Cultural Resource.’ (GGPMP, Page 3-2).

‘William Hammond Hall envisioned the park in two different regions. The park land east of Strawberry Hill includes a variety of intensively cultivate areas and developed facilities while the park land to the west is pastoral and woodland landscape with open meadow defined by stands of trees and enhanced by lakes.’ (GGPMP, page 3-2).

‘The western park was to be: ‘simply treated as a woodland or forest, with all the hills and ridges more or less heavily timbered, and the valleys covered with lower-growing shrubs or field grasses. ‘ (GGPMP, page 4-5).

‘Over the years, facilities have been added to the western park, but the character of the landscape has remained as more wooded, less refined parkland. This distinction should be maintained, with different landscape treatments for the eastern and western portions.’ (GGPMP, page 4-5).

The DEIR ignores this body of evidence contained in the Golden Gate Park Master Plan. Any public body utilizing this document to make decisions regarding the subject project will lack this information and thus the DEIR is inadequate. These aforementioned conflicts with the Master Plan constitute significant precedent-setting impacts on this important historic and cultural resource.” (*Jim Chappell, letter, November 21, 2011 [I-Chappell3-01]*)

“I find the proposed soccer fields, with artificial turf and powerful lighting, to be out of keeping with the Golden Gate Park Master Plan, which emphasizes the importance of maintaining the natural and sylvan landscape of the park. It is also a significant change in the very nature of the park. In general, the development of the park has located such features as the museums, the Music Concourse, the Conservatory, the Sharon Building and Children’s Playground, and the Kezar Stadium and Pavilion in the eastern half of the park. The western half of the park has, with few exceptions, remained more natural, pastoral, and sylvan. This proposal is therefore a substantial departure from the historical development of the park as well as from the park’s own master plan.” (*Robert Cherny, letter, November 30, 2011 [I-Cherny-01]*)

“As a resident of the Sunset district and a frequent visitor to the park, I am aghast at the idea of a sports complex disturbing the tranquility of the western edge. The traffic, the litter, the noise and

lights are all completely out of sync with the serene character of the surroundings. As an urban dweller I find it unconscionable that we might diminish the beauty of so unique and precious a natural resource.” (Ben Citron, letter, December 11, 2011 [I-Citron-02])

“Explain why the DEIR ignores the Golden Gate Park Master Plan when it calls the western end of the Park the more wild and forested area.” (Ben Citron, letter, December 11, 2011 [I-Citron-10])

“One stated objective remains to be addressed: ‘Improve safety and increase night-time use of Golden Gate Park by installing new lighting and bringing more recreational facility users to the area’. Contained within this are many unsubstantiated assumptions. Here are some of these assumptions and counter-arguments that demonstrate that **this objective is essentially an attempt by the sponsor to unreasonably restrict the range of alternatives under consideration.**

- Assumption: More recreational facility users in the park at night will increase safety. Counter-argument: Simple logic indicates that an area with no night-time use has no crime or safety issues. SFPD statistics show that the areas with most crime and injuries at night are those where most people congregate at night.
- Assumption: Night lighting will increase safety. Counter-argument: While we generally feel safer in well-lit areas at night, there are many studies that show that the link between lighting and safety is far more complex. Clearly night-lighting increases night-use, which increases the potential for crime and injury. Also, bright sports lighting has the effect of obscuring the surrounding dark shadows and facilitating crime in those areas.
- Assumption: Increasing night-time use of the west end of Golden Gate Park is consistent with the Golden Gate Park Master Plan. Counter-argument: The master plan states that *Lighting is for safety purposes and is not intended to increase night use.* (GGPMP: 9-5). The Beach Chalet fields are not included in either the night-use areas or potential night-use areas. There is no night use planned at any athletic facility west of Crossover Drive.

Therefore, it seems that any alternative that meets the objective as written must necessarily violate both CEQA and the Golden Gate Park Master Plan. Despite this, the Compromise Alternative does provide an opportunity to improve the safety of both sites (through better design) and night-time use of the off-site location.” (Rupert Clayton, letter, December 10, 2011 [I-Clayton-09])

“Parking Analysis Fails to Cite or Analyze Legal Limits in Golden Gate Park

The project proposes to expand the existing 50-car parking lot to add a further 20 parking spaces. However, the provision of parking in Golden Gate Park is legally limited by Appendix 41 to the

San Francisco Code. This is the codified version of Proposition J, approved by the city's voters in 1998 as amended by Proposition G, passed in 2005. The relevant section states:

*Upon completion of construction of the Underground Parking Facility, the Authority shall cause one surface parking space within the Park to be permanently eliminated for each space within the Underground Parking Facility. As part of this process, all of the surface spaces in the Concourse, consisting of approximately 200 spaces, shall be eliminated. Priority for elimination of the remaining spaces shall be given to areas of heavy traffic congestion and environmental sensitivity. However, the Authority shall weigh in its decision to eliminate surface spaces the extent to which removal of such remaining spaces could adversely impact, by increasing traffic congestion, neighborhood and neighborhood commercial districts and attempt to avoid such impacts. Surface spaces that are unused because of present or future permanent road closures shall not be counted as spaces that have been permanently eliminated under this paragraph. **No net gain in parking spaces existing as of the effective date of this ordinance, other than those provided for in the Golden Gate Park Master Plan, shall be permitted.***

The Golden Gate Park Master Plan contains no provision for expanding parking at the Beach Chalet athletic fields, therefore Appendix 41 does not permit any increase in parking spaces at this site. The EIR must make this restriction clear." (*Rupert Clayton, letter, December 10, 2011 [I-Clayton-10]*)

"Finally this project violates the Golden Gate Park Master Plan repeatedly and blatantly. Here's just one of many examples I could give. This is directly from the GGPMP: (page 9-5) '**Lighting is for safety purposes and is not intended to increase night use.**'

I could list many other examples of it blatantly violating the GGPMP yet the dEIR says little about this." (*William Crowley, letter, December 10, 2011 [I-Crowley-05]*)

"I am opposed to the draft EIR for the Beach Chalet Athletic Fields. Much of the previous testimony before your committee has outlined some of the inadequacies of this EIR.

My concern is for the long-term effect on the ecology of the proposed site for this untested design for a soccer field. This soccer field is proposed for a very sensitive area along the beachfront. What effect by taking away an area that could be used for restoring what the designers of Golden Gate Park envisioned, a sylvan escape from the stress of city living." (*Denise D'Anne, Letter, December 7, 2011 [I-D'Anne2-01]*)

"Explain why the DEIR ignores the Golden Gate Park Master Plan when it calls the western end of the Park the more wild and forested area." (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-08]*)

“Explain why the DEIR ignores the Golden Gate Park Master Plan when it calls the western end of the Park the more wild and forested area.” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-10]*)

“After a quick look on some of the chapters, it seems obvious that the project values the increased hours of soccer play above protecting the parkland. In the chapter on cultural resources, the DEIR states that the project’s impact on cultural resources would be quote, ‘significant and unavoidable,’ unquote.

On the original intent of the Golden Gate Park, isn’t that a violation of the Golden Gate Park Master Plan?” (*Hiroshi Fukuda, public hearing comment [I-Fukuda-01]*)

“I recognize there is lots emotion around Golden Gate Park, but the bottom line is this space is already dedicated to athletic fields. Over 75 years ago someone decided that one of the many things the park should provide is space for team sports, and they devoted about 1% of the parks acreage to this purpose. It is not one of the many grassy meadows, it is not set aside as part of the serene landscaping of the western edge of the park -this small piece of the park was set aside specifically for field sports and that purpose is its historic value.” (*Michael Gerrity, Letter, December 1, 2011 [I-MGerrity-01]*)

“I recognize there’s a lot of emotion around Golden Gate Park, but the bottom line is that this space is already dedicated to athletic fields. over 75 years ago, someone decided that one of the many things the Park should provide is a space for teen sports and they devoted about 1 percent of the Park’s acreage to this purpose. It is not one of the grassy meadows. It has not been set aside as part of the serene landscaping of the western edge of the Park.

This small piece of the Park was set aside specifically for teen sports and that purpose is its historic value.” (*Michael Gerrity, public hearing comment [I-MGerrity2-01]*)

“The findings in the DEIR in the Beach Chalet renovations are inconsistent with the Master Plan of the Park. Many have pointed out that the western two thirds are to be preserved as wooded and natural spaces in the midst of our dense urban environment.” (*Johnathan Goldberg, public comment [I-JoGoldberg-01]*)

"I have been a resident of San Francisco since 1989. I strongly oppose the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights because it is inconsistent with The Golden Gate Park Master Plan." (*Thomas Hahn, letter, December 9, 2011 [I-Hahn-01]*)

"This project is OUT OF CHARACTER WITH THE PLAN FOR THE WEST SIDE OF GOLDEN GATE PARK which designates this area as wild and forested." (*Thomas Hahn, letter, December 9, 2011 [I-Hahn-08]*)

"...long time advocate for Golden Gate Park and I participated in the Master Plan process. The west end of Golden Gate Park was designed to be the most wild and forested part of Golden Gate Park. Three objectives of the Master Plan were to continue forestation throughout the Park, implement a shrub restoration program and improve wildlife habitat values around the Park and to designate areas with high wildlife values as special management areas." (*Martha Hoffman, public hearing comment [I-Hoffman-01]*)

"This project is the opposite of the Master Plan goal of improving wildlife habitat. It would be totally destructive for their well-being and it would have a very negative impact on the well-being of Golden Gate Park. I really think this Draft EIR is unacceptable." (*Martha Hoffman, public hearing comment [I-Hoffman-03]*)

"Relationship of the reforestation program to the project is missing: The DEIR does not explain the current reforestation program for the western end of Golden Gate Park and how the loss of trees and replanting of new trees will fit into that plan.

All replacement trees planted as mitigation must be in addition to trees already planned for as part of any reforestation efforts. The project should not substitute mitigation plans for reforestation efforts that are needed to maintain the forest and western windbreak of the Park." (*Katherine Howard, letter, December 11, 2011 [I-KHoward-08]*)

"The plan requires a large development including a huge amount of artificial materials and artificial lighting to create a busy athletic complex in the western end of Golden Gate Park: the Golden Gate Park Master Plan expressly requires the western end of the park to be kept 'pastoral' and 'sylvan' and there is insufficient analysis of the proposal's complete conflict with the Master Plan.

The plan requires a large development including a huge amount of artificial materials and artificial lighting to create a busy athletic complex in the western end of Golden Gate Park: the Golden Gate Park Master Plan expressly requires the western end of the park to be kept 'pastoral' and 'sylvan' and there is insufficient analysis of the conflict with Master Plan due to the proposal's introduction of a huge amount of artificial materials." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-23]*)

"The planned changes are not in keeping with original intents of this spacious & special local garden, which serves the City, surrounding communities, & visitors from near & far." (*Trish Kaspar, letter, November 22, 2011 [I-Kaspar-01]*)

"Explain why the DEIR ignores the Golden Gate Park Master Plan when it calls the western end of the Park the more wild and forested area." (*Tehmina Khan, email, December 10, 2011 [I-Khan-09]*)

"He has completely ignored the mandate of the Golden Gate Park Master Plan and the San Francisco General Plan to maintain the sylvan and naturalistic qualities of the western end of Golden Gate Park." (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-04]*)

"The Master Plan objectives listed on p.11 fail to include non-team recreation. While these areas have been used for team recreation since the 50's they have also been used for non-team recreation and by wildlife. Much of this area was taken away from public use without public input or comment by the erection of the chain-link fence, but it is still a public area and as much as possible still used for multiple purposes. Leaving the nonteam uses out of the analysis skews the picture of the affects of this proposed project." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-48]*)

"II-5: Project Sponsor's Objectives: Remain Consistent with Golden Gate Park Master Plan (GGPMP). As noted elsewhere in the DEIR, installation of field lights at the Beach Chalet Soccer Field is not consistent with the GGPMP. It might be noted that the project sponsor's objectives are somewhat contradictory." (*Deborah Learner, letter, November 29, 2011 [I-Learner-01]*)

"II-24 Project approvals: This section only mentions that the Recreation and Park Commission would be required to give project approval. It would be more complete to mention that a Determination of Consistency with GGP Master Plan would be required. In addition a GGP master plan amendment may also be required because currently, the installation of athletic field

lighting at the Beach Chalet Soccer Field is not consistent with the GGPMP.” (Deborah Learner, letter, November 29, 2011 [I-Learner-02])

“III -9 Lighting: The paragraph at the top of the page makes an assumption that night lighting wasn’t considered for the Beach Chalet Soccer Fields because ‘the fields were already at or beyond their use limits for proper maintenance’. However, in considering possibilities at the time of the Master Plan’s preparation, night lighting was not suggested for the Beach Chalet Soccer fields as it was also considered inappropriate to the park environment and out of character for the west end of GGP. The GGPMP, 3-21 also states that night lighting should not detract from the character of the Park, a statement that should also be included in this review of GGPMP policies.” (Deborah Learner, letter, November 29, 2011 [I-Learner-03])

“IV-B-15: The Golden Gate Park Master Plan (GGPMP) does not identify the Beach Chalet Soccer Fields as a night use area. Only the restaurant is identified as such. Please correct this fact in your narrative and include the map from page 9-5 from GGPMP to show what was in fact approved in the GGPMP. Furthermore, field lighting at the Beach Chalet Soccer Field was not even included in the list of ‘potential’ night use areas. It is also clear that the GGPMP West End Special Area Plan (DEIR Figure on IV.E-12) does not recommend soccer field night use.” (Deborah Learner, letter, November 29, 2011 [I-Learner-04])

“IV-C-24: In the paragraph beginning ‘As described above’, the fact that the Beach Chalet is identified as a ‘Night Use Area’ is confusing and out of place relative to a discussion on recreational field lighting. If left in, this phrase should be further clarified to mention that the night lighting designation only refers to the immediate restaurant area, (again GGPMP page 9-5 is relevant). The paragraph correctly notes at the end that the Beach Chalet Athletic Fields have had no historical precedent with regard to electrical illumination. The remainder of this section makes it clear that the impact of the field lights would be significant.” (Deborah Learner, letter, November 29, 2011 [I-Learner-08])

“IV -5: ... Richmond Sunset Treatment Plant Site (RS) Currently the GGPMP Special Area Plan for the Richmond Sunset Treatment Plan Site (GGPMP, 13-10) proposes construction of an additional soccer field at the site, in addition to a screened log storage area .. The Master Plan also notes that if a reclaimed water treatment facility is constructed at the RS site, the Recreation and Park Department has required that the facility be completely underground with a recreational use on top. The EIR should address the following issues: Will the recommendation that an additional soccer field proposed in the GGPMP at the RS plant site be abandoned with this

expanded use at the Beach Chalet Field? Will the GGPMP be amended to reflect this alteration?" (Deborah Learner, letter, November 29, 2011 [I-Learner-10])

"I oppose the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights. It is inconsistent with The Golden Gate Park Master Plan." (Beth Lewis, letter, December 4, 2011 [I-BLewis-01])

"...this project is OUT OF CHARACTER WITH THE PLAN FOR THE WEST SIDE OF GOLDEN GATE PARK which designates this area as wild and forested." (Beth Lewis, letter, December 4, 2011 [I-BLewis-10])

"I strongly oppose the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights. It is inconsistent with The Golden Gate Park Master Plan. ..." (Reddy Lieb, letter, December 5, 2011 [I-Lieb-01])

"...this project is out of touch with the natural environment and the area is designated as wild and forested." (Reddy Lieb, letter, December 5, 2011 [I-Lieb-04])

"This space should be kept natural, with real grass or ground covering. The area should maintain its wildness and openness. As was originally set forth in the master plan for Golden Gate Park. It is well loved for its natural setting." (Linda Stark Litehiser, email/letter, December 1, 2011 [I-Litehiser-01])

"The Architects of Golden Gate Park intended its use to be as much for Recreation as for Parks. It's name it says it all: San Francisco Rec and Parks. Even then they recognized which such a compact city on a small parcel of land that it would be important for its citizens to have a place for recreation. So they took the 'Outside Lands' comprised of mostly sand dunes and gnarly trees and made our Park." (Jill Lounsbury, email, December 6, 2011 [I-Lounsbury-05])

"I am writing today in opposition to the planned artificial turf soccer complex at the Beach Chalet soccer fields. The pastoral western end of Golden Gate Park is not an appropriate location for seven acres of artificial turf or 60 foot high stadium night lighting. I find the current EIR to be

deeply flawed and the proposed project to be a direct violation of the Golden Gate Park Master Plan. I support the alternative proposal put forth by the public at the December 1st Planning Commission hearing. You have received extensive testimony, both oral and written, documenting the significant adverse impacts to the people and wildlife that live and visit the area if this project is approved." (*Anmarie Mabbut, email, December 12, 2011 [I-Mabbut-01]*)

"I believe the DEIR is written to ultimately support the project, despite the Golden Gate Master Plan which stipulates the natural character of the GGP, especially the portion west of 19th Avenue. I believe the DEIR marginalizes the historic and natural (I understand this is a politically incorrect word these days) character of Golden Gate Park." (*Denis Mosgofian, letter, December 11, 2011 [I-Mosgofian-02]*)

"The proposed project is within the Coastal Zone. It is required to comply with provisions of the City's certified Local Coastal Program (LCP), which includes the provisions of the City's Golden Gate Park master plan for the western end of the park.

Among the objectives and policies of the LCP are requirements that

'the visual and physical connection between Golden Gate Park and the beach be strengthened and emphasize the naturalistic landscape qualities of the west end of the park for visitor use.' Golden Gate Park, Objective 3, Policy I

The proposed soccer fields, in which grass would be replaced by artificial turf that is lit by 60-foot stadium lights, would egregiously violate this requirement on all counts.

In Comments on the Notice of Preparation submitted March 3, 2011 by California Coastal Commission staff, Program Analyst Renee T. Ananda noted that the LCP is the legal standard of review for the Coastal Development Permit (CDP), which the City is responsible for processing. She pointed out the above-mentioned objective and policy. She recommended that the DEIR analyze project impacts on coastal resources and its conformity with the policies of the LCP, including 'potential impacts of artificial lighting on biotic resources and the public's coastal recreational experience in the surrounding area and along Ocean Beach.'

The DEIR contains no such an analysis, nor does it address conformity with the LCP. Although the City, not the California Coastal Commission, has held responsibility for approving CDPs since the LCP was certified, the City is required to act in keeping with the California Coastal Act and the LCP." (*Rasa Gustaitus (Moss), letter, December 12, 2011 [I-Moss-01]*)

“A huge complex of any kind, and particularly in conjunction with another proposed project (water treatment plant) not only takes away from other low-impact opportunities such as trails, natural gardens, and passive recreation The effect is to reduce the western end of Golden Gate Park to a high-impact urbanized setting so over-scaled that one’s eye cannot see around it or over it and leads the mind to believe that it is just another paved part of any place anywhere in any city - not the wondrous Golden Gate Park. This is completely contrary of the spirit and intent of the Master Plan. What a shame!” (*Andrea & Rick O’Leary, email, December 11, 2011 [I-O’Leary-06]*)

“After noting the Golden Gate park master indicated that this section would remain pastoral and sylvan, I was shocked to see the proposal of Rec and Park to install a sports complex with artificial turf and stadium lights. I thought the Rec and Park would be protecting the Park for us not forcing us to fight for what we thought was already agreed upon.” (*Yope Posthumus, public hearing comment [I-Posthumus2-01]*)

“RPD and City Fields believe the answer to the field resting and drainage issue is to build a sports complex which is in violation of the city charter, in violation of the Master Plan of Golden Gate Park, in violation of the expressed wishes of all non-soccer playing residents that have spoken during public meetings, and in violation of our environmental policies that require us to use the most environmentally sound principles in all purchases and projects.” (*Jamie Ray, letter, no date [I-Ray3-04]*)

“Not only does the increased traffic into the Park require further in-depth study, it is directly in conflict with the Master Plan for Golden Gate Park which states: Among the goals of the policies are the following: minimize the impact of motor vehicles on the park experience. (Golden Gate Park Master Plan, page 5-2).

The Master Plan of Golden Gate Park further states in Policy M -Traffic Generators (page 3-15):

Major traffic generators, within Golden Gate Park or adjacent to the park, preparing development or improvement plans or staging major activities shall be required to prepare a transportation analysis or environmental evaluation detailing possible transportation impacts to Golden Gate Park. Where appropriate, such development plans, improvement programs, or activities should provide a transportation management system that will prevent additional motor vehicle congestion, user conflicts, and all-day parking by non-recreational users within Golden Gate Park and encourage alternative modes of transportation. [Emphasis added.]” (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-13]*)

“This is also contrary to the Master Plan of Golden Gate Park which states in Policy C, Wildlife and Habitat at page 3-10 and 11 that:

Golden Gate Park provides important habitat for wildlife within San Francisco. Habitat values should be preserved and enhanced throughout the park. Designate and manage areas or zones within the park that are identified as having high natural resource values.

1. Manage, protect, and enhance the park’s landscape for wildlife habitat and other natural values. Managing the landscape for these values should include preserving and enhancing food sources, nesting sites, and roosting sites thinning and providing openings in the forest canopy, and maintaining understory vegetation
3. Preserve selected dead and aging trees for habitat value....
5. Designate areas within the park that have special resources or habitat values as natural resource areas. Natural resource areas should be managed to preserve and enhance the natural resource values. Control park uses in and near natural resource areas to preserve natural values.” *(Cheryl Schultz, letter, December 11, 2011 [I-Schultz-16])*

“The proposals to install lights and artificial grass at the Beach Chalet Soccer fields violates your master plan.” *(Richard Schwartz, email, November 30, 2011 [I-Schwartz-01])*

“As noted by one of the Planning Commissioners at this evening’s meeting, the Beach Chalet Soccer Fields have been present at the western end of Golden Gate Park for about 75 years. Further, the Golden Gate Park Master Plan specifically describes the Beach Chalet fields as ‘Soccer Fields’ and includes provisions for improving and expanding those fields to provide additional recreational opportunities for the residents of San Francisco.” *(Andrew Solow, email, December 1, 2011 [I-Solow2-01])*

“As you are all aware, Golden Gate Park is man-made, not natural. If we really want to make Golden Gate Park a ‘natural area’, we should turn off all irrigation, let all of the trees and shrubs die, and let sand dunes reclaim the entire park.” *(Andrew Solow, email, December 1, 2011 [I-Solow2-03])*

“This is the only alternative that is compatible with the Golden Gate Master Plan that says that the western edge of the Park should remain sylvan and pastoral. Synthetic turf and artificial lighting belong outside of Golden Gate Park. Thank you.” *(Kathleen Stern, public hearing comment [I-Stern2-04])*

“I write today to express my deep opposition to the proposed renovation plan to the Beach Chalet Soccer Fields. I believe that this renovation project is abusive and disrespectful to the Park Master Plan and also to the legions of residents who find recreation, solace and sanctuary in the wild western end of Golden Gate Park. I for one have been enjoying the wildlife and wild spaces of that area for some thirty years.” (*Joyce Warriner, email, December 8, 2011 [I-Warriner-01]*)

Response PP-2

Many comments above assert that the project or certain outcomes of the project, such as increase in traffic around the site or the introduction of night lighting or installation of synthetic turf, would conflict with policies or intents of the Park Master Plan. Some comments state that the EIR’s conclusion is biased and unsupported by evidence or other verifiable facts and that an amendment may be needed to bring the project into compliance with the Park Master Plan. The comments also state that the EIR improperly defers an assessment of such conflicts to a later date, to be decided by another body.

Discussion of the project’s consistency with the Park Master Plan policies is provided on pages III-7 through III-9 of the EIR. It is noted on EIR page III-7 that the project site is designated as a “Major Recreational Area,” according to the Park Master Plan’s Land Use Map (Figure 3-1 of the Park Master Plan). As such, it was established to meet specific recreational and sports needs, and is programmed specifically to help meet those needs (Objective 1, Policy C, Major Recreation Area). The Plan requires that land uses and activities in Golden Gate Park contribute to the mission and purposes of the park, and that activities within a designated land use zone should be appropriate to the land use purpose (Objective 1, Land Use and Activities). The project site would be maintained for recreational uses, as proposed by the project, and thus would be consistent with Objective 1 and its designation as a Major Recreational Area. Additional text is provided on pages III-7 through III-9 of the EIR discussing the proposed project’s consistency with various other Park Master Plan policies. In general, while it is true that the west end of the park is intended to be preserved as more pastoral and sylvan than the eastern portion of the park (EIR recognizes this in the Project Description and throughout Chapter IV, Environmental Setting and Impacts), the analysis included throughout the EIR considers the project in light of this designation and therefore concludes that the project does not conflict with the Golden Gate Park Master Plan. The EIR provides information on the project’s physical impacts, but the conclusion of the project’s appropriateness is a policy matter for decision makers to consider during the project approval phase.

Some comments, including I-Campos-01, I-Cowley-05, I-Learner-03, O-RCA-01, O-SPEAK2-04, O-SPEAK4-04, I-Bridges-07, I-Buhler-02, O-GGAS2-23, and I-Stern2-04, reference specific components of the proposed project, such as the synthetic turf and lighting, as well as potential effects of the project (“light pollution, noise, traffic, additional human activities, trash, and tracking of crumb rubber”) as being inconsistent with the Park Master Plan. Several commenters assert that these components and effects make the project inconsistent with the Park Master Plan.

As the EIR states on page III-8 through III-9, because the use of synthetic turf was not contemplated at the time of the Park Master Plan's development, there are no recommendations or policies that specifically address synthetic turf. In addition, lighting of the existing grass soccer fields to extend use hours was also not considered. The plan addresses lighting in the park by designating nighttime use areas in the park, and lighting in other areas would generally be limited to a minimal amount of street lighting for safety. The lack of specific policies regarding night lighting and synthetic turf does not automatically render the project inconsistent with the Park Master Plan. In fact, the Master Plan does discuss upgrading the facility and adding a field for the purpose of more playability, which the proposed project would accomplish through different methods. Ultimately, consistency of the proposed project with the Park Master Plan (pursuant to CEQA Guidelines Section 15125(d)) will be determined by the SFRPD Commission when the project is considered for approval. However, to the degree that the proposed project has the potential to conflict with plan or policies adopted specifically for the purposes of avoiding or mitigating environmental effects, such potential conflicts have been concluded in the Initial Study to result in less than significant impacts.

Furthermore, as stated on the EIR page III-1, while there is no requirement for a detailed analysis of consistency between the proposed project and the applicable land use plans, the CEQA Guidelines direct that a general discussion of inconsistencies between applicable general plans and regional plans be included. However, no actual conclusions need to be drawn (other than for those plans and policies adopted for the purpose of avoiding or mitigating environmental effects). Since the EIR contains a general discussion of the project's consistency with applicable plans and policies in Chapter III, Plans and Policies, it meets CEQA requirements.

It is important to point out (as stated on EIR page III-1) that land use plans typically contain numerous policies emphasizing differing legislative goals, and an interpretation of consistency requires a balancing of all relevant policies. The board or commission that enacted the plan or policy determines the meaning of such policies and how individual projects satisfy those policies at the time it considers the approval of the project. Whether a project is consistent with particular plans will be determined at the time of project approval by the agency charged with making that consistency determination. In the case of this project, the San Francisco Recreation and Parks Commission would determine consistency with the Park Master Plan, which is not part of the General Plan, as well as approve the project's conceptual plan. As stated under Response PP-3, the San Francisco Planning Commission will evaluate the proposed project in accordance with provisions of the San Francisco General Plan, which includes the Recreation and Open Space Element and the Priority Policies, as well as the Western Shoreline Plan, which is an area plan within the General Plan that encompasses the City and County of San Francisco's (CCSF) Local Coastal Plan. The Planning Commission would also consider the project's application for a Local Coastal Permit. In each case, the approving agency will consider any potential conflicts between the project and adopted plans or policies in the context of all applicable objectives and policies and determine consistency based on a balancing of relevant policies as part of the decision-making process.

As stated on page III-3 of the EIR, a conflict between a proposed project and a General Plan policy does not, in itself, indicate a significant effect on the environment within the context of CEQA, with the exception being those conflicts that result in physical changes that could adversely impact the environment. The decision-makers will evaluate the proposed project's consistency with General Plan policies during the project approval phase. To the extent that the project is found to be inconsistent with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project *adopted for the purpose of avoiding or mitigating an environmental effect*, and where such inconsistencies result in physical effects, these have been considered in the EIR under the appropriate topic areas. As noted above, the Initial Study for the proposed project concluded that the proposed project would not conflict with other applicable plans, policies, and regulations such that an adverse physical change would result. Approval of the proposed project would require a SFRPD staff analysis of project consistency with the Park Master Plan that would be a part of project approval and independent of the environmental review process.

Comment A-SFPC-Miguel-02 notes that the Park Master Plan contains the text, "the recommended plan proposes expansion of the existing use surrounding the site, one additional, soccer multi-use sports field, a picnic area reforestation areas and a parking lot are proposed," and that the Plan states the goal of the area plan is to "increase legitimate activities and transform this part of the Park." Comments I-McGerrity-01 and I-Solow2-01 state, similarly, that Park Master Plan specifically describes the Beach Chalet fields as "Soccer Fields" and includes provisions for improving and expanding those fields to provide additional recreational opportunities for residents. Comment I-Solow2-03 further states that to make Golden Gate Park a "natural area", [the SFRPD] would have to turn off all irrigation, let all trees and shrubs die, and let sand dunes reclaim the entire park. These comments provide restatements of information contained in the EIR and personal opinions, but do not address the adequacy or accuracy of the analysis presented in the EIR. As such, these comments are noted; however, no further response is required per CEQA.

A number of comments state the EIR either mischaracterizes the west end of the park or fails to properly describe the project as being inconsistent with its character. As discussed in the Project Description, the project site is a recognized structured recreational facility in the west end of the park, surrounded by largely pastoral and sylvan parkland. It is inaccurate to refer to the site or the surrounding areas as truly natural or wild, since the entire park is man-made. However, the surrounding area's naturalistic character is conveyed throughout the EIR, including in the Project Description, and Chapter IV in Sections IV.A (Land Use), IV.B (Aesthetics), IV.C (Cultural Resources), and IV.F (Biological Resources). A description of the west end of the Golden Gate Park is included on page II-9 of the EIR. In response to these comments, EIR page II-9, paragraph 2 has been revised:

The project site is located at the western end of the park, which is less intensely developed than the eastern end of the park and conveys a more pastoral and sylvan character than parklands further east. ~~yet~~ This end of the park also contains several active recreational areas, including the Polo Fields, the Beach Chalet Athletic Fields, the golf course, the archery field,

the Bercut Equitation Field, and the 45th Avenue playground. The recreational features in the western end of the park are generally located in the lowland meadows, while the hills are typically woodland areas. The western end of the park contains eight lakes, with open grassy areas at the golf course, Speedway Meadow, Elk Glen Meadow, Lindley Meadow, Polo Fields, Bison Paddock, Disc Golf Course, and the archery field. See Section IV.E, Recreation, for further discussion of Golden Gate Park recreational resources.

This revision does not change the analysis or conclusions presented in the EIR.

Comments I-Bridges-01 and I-Lounsbury-05 state that the project would restrict uses at the site, constituting conflicts with the Park Master Plan. The Park Master Plan, on page 6-1, characterizes the site as an athletic facility. The project would not change these uses but intensify them to meet the high demand for play time. Thus, the claim that such conflict would exist is unsupported. No further response is required.

Comment I-Bartley-12, which opines that the project is an affront to the Golden Gate Park Charter, is noted. No further response is required.

In response to comment I-Buffum-05 asking whether square footage of the synthetic fields is in compliance with the Park Master Plan for the west end of the park, the Park Master Plan does not impose square footage requirements for improvements at this site although the Master Plan does include an additional playing field at this location. The same comment also states that the EIR needs to consider cumulative impact of the proposed fields along with the footprint of the San Francisco Westside Recycled Water Project. Cumulative impacts of the proposed project are considered in each section of Chapter IV of the EIR, and the proposed Westside Recycled Water Project is considered in the cumulative analyses.

In response to comment I-Fukuda-01, a significant and unavoidable impact does not necessarily render the project as being inconsistent with the Park Master Plan. The consistency analysis of the proposed project with the Park Master Plan will be conducted prior to project approval, separate from the environmental review process. The conclusion of the analysis will be included in the staff report provided to the Recreation and Parks Commission prior to the hearing where a decision on Park Master Plan consistency and whether or not to approve the project will be made. In response to comments I-Learner-04 and I-Learner-08, which states that the Park Master Plan does not identify the Beach Chalet Soccer Fields as a night use area, EIR page IV.B-15, paragraph 3 has been revised:

The park lighting section of the Park Master Plan's Utilities and Infrastructure element describes the existing lighting system in the park as antiquated and in need of replacement.⁵ According to the Master Plan, different areas of the park will be lighted to different levels based on amount of use and safety considerations. The Beach Chalet Athletic Fields are not listed in the Master Plan as a "night use" area. The closest "night use" area to the project site is the Beach Chalet Restaurant, immediately west of the project site.

⁵ SFRPD, *Golden Gate Park Master Plan*; p. 9-5.

This revision does not change the analysis or conclusions presented in the EIR.

Regarding comment I-Learner-10, which concerns the Park Master Plan's recommendation to add a soccer field at the Richmond Sunset treatment plant site, this project would meet the demands for additional play time by improving field conditions and enabling nighttime play, rather than by increasing the number of playing fields. Thus, the fifth soccer field contemplated by the Master Plan would not be added. If the area designated for the fifth field is not used by the San Francisco Westside Recycled Water Project, it would remain in its current state or would be returned to landscaped park use. The Master Plan, when updated next, would capture any changes or modifications required as a result of the proposed project or other SFRPD actions. In response to comments O-CPF-02 and O-SFAH-05, regarding the expansion of the site boundary, this expansion is described in Chapter III, Project Description, and is indicated on Table II-2, page II-13. According to Table II-2, the size of project site would be increased from 9.4 acres to 11.2 acres. This increase would be modest and would not, in itself, make the project inconsistent with the Park Master Plan. However, EIR page III-8 has been revised as follows:

Other Park Master Plan policies that would apply to the proposed project include Objective II, Policy A, Item 1, which requires that all activities, features, and facilities in Golden Gate Park respect the unique design and character of the park, and Objective II, Policy A, Item 2, which states that the "major design feature of Golden Gate Park and the framework within which all park activities occur is its pastoral and sylvan landscape."⁷ The proposed project would be generally consistent with these policies because ~~the project it~~ would be implemented entirely within the boundaries at the location of the existing complex (as indicated in the Project Description, the project site would be expanded from 9.4 to 11.2 acres), the proposed turf would be consistent with the character of the use as an athletic field complex, any trees or shrubs removed would be replaced at a ratio of at least 1-to-1, and the project would not diminish or encroach upon the surrounding open space. The project would also be consistent with Policy F, Sustainable Landscape Principles, which requires efficient use of water resources; minimization of chemical fertilizers, pesticides, and herbicides; and selection of low-maintenance and ecologically appropriate construction materials. This would result from the fact that proposed synthetic turf would require less water to maintain than the existing grass turf, and would not require chemical fertilizers, pesticides, or herbicides to maintain. Furthermore, as stated in Chapter II, Project Description, of this EIR, the synthetic turf would be returned to a turf manufacturer for reuse/recycling at the end of its lifespan.

This revision does not change the analysis or conclusions presented in the EIR. Furthermore, as stated on page III-3 of the EIR, a conflict between a proposed project and an applicable policy does not, in itself, indicate a significant effect on the environment within the context of CEQA. The decision-makers will evaluate the proposed project's consistency with applicable policies during the project approval phase.

⁷ SFRPD, *Golden Gate Park Master Plan*; p. 3-9.

Comment I-Koivisto-48 indicates that the Master Plan Objectives listed on page [IV.E-]11 fail to include non-team recreation. Objective 1, Policy C indicates that the major recreation areas within Golden Gate Park have been established to meet specific recreational needs. The lands within major recreation areas is programmed or designed for specific types of recreation or sport. The policy does not specifically indicate that major recreation areas are programmed or designed for either team or non-team recreation, as both are appropriate at major recreation areas.

In response to comment I-Clayton-10, which states that the Park Master Plan contains no provision for expanding parking at the Beach Chalet Athletic Fields, based on Policy K, Parking, included on page 3-15 of the Golden Gate Park Master Plan, all-day commuter parking within the park is discouraged. Beach Chalet Athletic Facility users would not park at the site for the duration of a whole day or commute elsewhere, by and large. Furthermore, the Park Master Plan states under Item 2 of this section that parking regulations should consider impacts to pedestrian and bicyclist safety, and to park destinations. In the case of the proposed project, the destination is an appropriate place to provide parking amenities, since most soccer players either drive or carpool to the site. Furthermore, parking amenities already exist on the project site, so the project would expand rather than introduce a new element to the site that does not already exist there.

In response to comment I-KHoward-08 regarding request for additional information regarding the reforestation program at the western end of Golden Gate Park, EIR page III-3, paragraph 5 has been revised:

Further, trees removed as part of the project would be replaced in the vicinity of the removed trees. Thus, the proposed project would be consistent with the policy regarding maintenance and expansion of the urban forest and reforestation (see discussion of the reforestation program below) of the western end of the park. Finally, the proposed improvements at the Beach Chalet Athletic Facility would maintain and expand the existing recreational uses in the western end of Golden Gate Park.

The Golden Gate Park Reforestation Program is discussed on page 4-13 of the Golden Gate Park Master Plan, where it is stated:

Reforestation efforts have prevented serious forest decline since 1980. From 1980 to 1993, 12,000 new trees were planted. Planting continues today at a rate of approximately 1,000 trees per year. The reforestation program, however, has not entirely reversed the trend of forest decline. Most of the effort thus far has targeted the western part of the park where the windbreak is in need of immediate replanting. Reforestation has been more limited in other areas of the park. The primary constraint on reforestation has been the lack of personnel to implement it. Potential sites have been restricted also by a desire to avoid the visual disturbance caused by reforestation in areas of more intense use by park visitors. The number of young trees in areas where reforestation has occurred has greatly increased and most of these trees are in good to excellent condition — a reversal of conditions observed in 1979. The reforestation program is operating at a 50-year replacement cycle, instead of the originally intended 25- to 30-year cycle outlined in the 1980 FMP. The

inventory data confirm that reforestation should continue to be concentrated in the west end of the park, but that it is also needed in the other forest areas.

This revision does not change the analysis or conclusions presented in the EIR.

E.4 Consistency with San Francisco General Plan [PP-3]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Moore-04	O-GGAS2-18	O-SPEAK4-04	I-Koivisto-11
A-SFHPC-01	O-GGAS2-19	I-Chappell-03	I-Jungreis2-13
O-CYSA2-03	O-GGAS2-20	I-Chappell-06	I-Schultz-10
O-GGAS2-15	O-GGAS2-21	I-Kohn2-12	I-Schultz-15
O-GGAS2-16	O-SPEAK2-04		

“...but one of the things which is of concern, it was briefly touched on in passing by some of the people who were presenting is indeed the disconnect with us as a city having properly updated our Recreation and Parks element, which is indeed an integral part of the policy document referred to as the general plan. And that is hanging out. And one of the most important things in that particular element is for me the further commercialization of our open spaces, and not just of Golden Gate Park but everywhere else in the city.

And while I think it is a collective policy discussion we would all have the think about in order to make our city fiscally viable, to do a wholesale commercialization without having reflected on that in the larger context of the city for me is an ill-timed ...

I’m saying that because as planning commissioners, as planners, as architects, as citizens, I think we need to be able to reference projects with comprehensive plans and with comprehensive policy discussions. And I do not believe that we have completed the policy discussion of where we want to go with our recreation and park open space as a city from here on into the future.”
(Kathrin Moore, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Moore-04])

“The HPC believes the proposed project is inconsistent with the Golden Gate Park Master Plan and conflicts with the City’s General Plan policies.” *(Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-01])*

“The proposal is in tune with the Recreation and Open Space component of the San Francisco General Plan to improve the western end of Golden Gate Park for public recreation.” (*California Youth Soccer Association, letter, December 1, 2011 [O-CYSA2-03]*)

“The ‘propriety of virtually any local decision affecting land use and development depends upon consistency with the applicable general plan and its elements.’³ (*Citizens of Goleta Valley v. Board of Supervisors of County of Santa Barbara* (1990) 52 Ca1.3d 553, 570.) Perhaps one of greatest flaws in the DEIR is that it concludes that the proposed project, as planned, is consistent with the San Francisco General Plan and the Golden Gate Park Master Plan. The DEIR concludes:

The renovation of the Beach Chalet Athletic Fields facility with synthetic turf and lighting for extended use does not appear to conflict with any adopted plans and goals for the purposes of CEQA. As mentioned above, the proposed project would require a General Plan Referral, which would analyze the project’s consistency with the San Francisco General Plan.

(DEIR, at III-II) Given the objectives of the General Plan to ‘emphasize the naturalistic landscape qualities of the western end of the park’ and the Master Plan to ‘retain the integrity of the original design of the park’, which included keeping the western end more natural and wild, there is simply no way that a project of this size-which will turn the fields into a high-use, late-night athletic complex-can be considered to be consistent with these plans.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-15]*)

“While the DEIR selectively quotes from the General Plan where it may be read to support the project, the DEIR avoids direct quotes to the General Plan that may call the wisdom of the Project into doubt. For example, the DEIR does not quote Objective 3 of the, Master Plan which states:

OBJECTIVE 3

ENHANCE THE RECREATIONAL CONNECTION BETWEEN GOLDEN GATE PARK AND THE BEACH FRONTAGE.

POLICY 3.1

Strengthen the visual and physical connection between the park and beach. Emphasize the naturalistic landscape qualities of the western end of the park for visitor use. When possible eliminate the Richmond-Sunset sewer treatment facilities.

POLICY 3.2

Continue to implement a long-term reforestation program at the western portion of the park.

...The proposed plan to remove trees and replace grass with artificial turf at the Beach Chalet clearly violates Objective 3 by removing or deemphasizing the naturalistic qualities of the western end of the park. “ (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-16]*)

“The DEIR also emphasizes what the Project would accomplish for increased access, security, and visitor usage. (Id.) However, the DEIR fails to acknowledge in this section that other alternatives would also provide these benefits without contradicting the General Plan and Master Plan.” (Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-18])

“Overall, the DEIR states that the potential conflicts with the General Plan will be ‘decided by decision makers’ apparently at a later date. Golden Gate Audubon disagrees with this assessment and asserts that the DEIR must fully describe all conflicts with existing plans. It is not appropriate to put off this analysis for another day. Moreover, given the bias with which the DEIR is written, it is clearly intended to skew the ‘decision-makers’ that may make those decisions to conclude that there are no conflicts or that they are negligible.” (Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-19])

“The DEIR acknowledges and states:

The Recreation and Open Space Element policies include development, preservation, and maintenance of open spaces; preservation of sunlight in public open spaces; elimination of nonrecreational uses in parks and reduction of automobile traffic in and around public open spaces; maintenance and expansion of the urban forest; and improvement of the western end of Golden Gate Park for public recreation.

(DEIR, at III-3). On its face, this text demonstrates that very significant conflict with the ROSE policies, particularly those policies that prioritize the preservation of open space, elimination of nonrecreational uses in parks, and reduction in automobile traffic.” (Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-20])

“If projections are correct, the new soccer fields will approximately quadruple usage of the soccer fields and will result in a considerable increase in auto use of the area. The proposed project not only does not build ‘on a tradition of alternatives to the automobile’ as stated in the General Plan, it increases the need for and dependence on automobiles. As we build bike routes all around the City we are encouraging the public to use that form of transportation, but this plan only states bike racks will be in the parking lot. It fails to indicate how many or how bike transportation will be accommodated in the area of the Soccer Fields:” (Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-21])

“Adding artificial turf and stadium lighting designed to attract nighttime use in an area of Golden Gate Park which is designated to remain as a natural area goes counter to the policies of Golden Gate Master Plan and the Western Shoreline Area Plan of the General Plan; the 60 foot high light standards of galvanized steel would create a negative visual impact to the pastoral park setting and would violate Policies 2.1 and 2.2 for Conservation of Natural Areas of the Urban Design Element.”
(*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-04]*)

“Excavating and replacing the grass meadow by installing artificial turf and stadium lighting designed to attract nighttime use in an area of Golden Gate Park which is designated to remain as a natural area goes counter to the policies of Golden Gate Master Plan and the Western Shoreline Area Plan of the General Plan; the 60 foot high light standards of galvanized steel would create a negative visual impact to the pastoral park setting and would violate Policies 2.1 and 2.2 for Conservation of Natural Areas of the Urban Design Element.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-04]*)

“The now world-famous Urban Design Plan (UDP) for the Comprehensive Plan of San Francisco (May 1971, Department of City Planning) states the following Policies for Conservation (page 66):

‘Natural Areas Policy 1

Preserve in their natural state the few remaining areas that have not been developed by man. Natural areas in the city that remain in their original state are irreplaceable and must not be further diminished. Significant development should not take place in these areas, and facilities necessary to aid in human enjoyment of them should not disturb their visual feeling or natural ecology. Accordingly, parking lots and service buildings should be confined to areas that are already developed, and access pathways should be designed to have a minimal effect upon the natural environment. Where possible, the interior of these natural areas should be out of sight of the developed city.’

‘Lands in public ownership, primarily those of the City and Federal governments, constitute the bulk of these natural areas. Coordinated programs for conservation of both land features and ecology should be carried out, with high priority given to such management functions. Where natural areas are in private ownership, either special incentives or public acquisition should be used to assure a similar degree of preservation.’

‘Natural Areas Policy 2

Limit improvements in other open spaces having an established sense of nature to those that are necessary, and *unlikely to detract from the primary values of the open space. The recreation and open space values of parks and other open and landscaped areas developed by man ought not to be reduced by*

unrelated or unnecessary construction. These resources are not expected to be increased substantially in future time, whereas the public need/or them will surely grow.'

'Facilities placed in these areas should be of a public nature and should add to rather than decrease their recreation and open space values. Facilities that can be accommodated outside of established parks and open spaces should be placed at other appropriate locations. Where new facilities are necessary in these parks and open spaces, they should be sited in areas that are already partially developed in preference to areas with a greater sense of nature.'

'Through traffic, parking lots and major buildings should be kept out of established parks and open spaces where they would be detrimental to recreation and open space values. Parking garages and other facilities should not be placed beneath the surface in these areas unless the surface will retain its original contours and natural appearance. Realignment of existing trafficways in these areas should avoid destruction of natural features and should respect the natural topography with a minimum of cutting and filling. The net effect of any changes in parks and open spaces should be to enhance their visual qualities and beneficial public use.'

The chapter on Conservation, Human Needs includes areas that 'have a special character worthy of preservation. These areas have an unusually fortunate relationship of building scale, landscaping, topography and other attributes that makes them indispensable to San Francisco's image.' (UDP, page 49) *Golden Gate Park is included in the figure as having this 'generally pleasing' quality of visual form and character."*

The chapter on Neighborhood Environment, item 18, states: *'If auto traffic and parking in parks are discouraged, recreational use can be increased.'* (UDP, page 121.) And yet the Transportation Section of the DEIR states that, 'it is estimated that players, officials, or spectators do not typically use public transit to travel to and from the project site. Similarly, although some players, official or spectators may occasionally travel by bicycle or walk if they live nearby, these are not typical methods of travel. Therefore, it was assumed for this analysis that all person trips generated by the project would be automobile trips.' (DEIR, page IV .D-7, 8.)

The UDP Chapter on Policies for Neighborhood Environment, Opportunity for Recreation, Policy 9 states: *'Maximize the use of recreation areas for recreation purposes. Parks provide their greatest service to the community when they bring a sense of nature to city residents. Recreation facilities suited to each park and its neighborhood should be installed and maintained, while facilities not primarily intended for recreation or not requiring a park location should be placed outside the park system.'*

'...Automobile traffic in parks should be minimized, and where possible, means of transportation other than automobiles should be provided in large parks. Automobile parking should occur at the ends of parks, preferably outside the park boundaries. Parking lots and other visually distracting uses should be screened from the areas devoted to recreation.' (UDP, page 129.)

The proposed project violates all of the above precepts: it takes a landscaped area and replaces with it with a paved surface, it limits the use of the area to a narrow group of a specific subset of

athletically-inclined users instead of retaining the multi-use nature as intended for Golden Gate Park's open spaces, it destroys the unique landscape character of the area, it introduces more automobile traffic and parking both to the park environs and inside the park, it does not screen the parking from the open space area, it degrades the sense of nature in a major park, and it could be placed on any vacant land or indeed on rooftops or on top of major garages, in the city.

And yet the DEIR totally ignores the above Conservation Policies of the Urban Design Element of the Master Plan." (*Jim Chappell, letter, December 10, 2011 [I-Chappell-03]*)

"The DEIR also ignores the adopted Recreation and Open Space Element of the General Plan (1986, City Planning Department). While a new ROSE is well underway, the adopted ROSE, underway at the same time as the Golden Gate Master Plan (Policy 2.10, page 30 et seq.), states:

'To address these problems, work on the Master Plan has begun. The overall goal of the Golden Gate Park Master Plan should seek to *retain the integrity of the park's original design* while having sufficient flexibility to accommodate society's evolving needs. In 1979, the Recreation and Park Commission, adopted 'Master Plan Objectives and Policies for Golden Gate Park,' to guide any necessary changes, act as a blueprint to guide maintenance of the park's rich landscape, and steward Golden Gate Park through the next century. The objectives are to:

1. Acknowledge Golden Gate Park's contribution to the diversity of cultural and recreational activities available to residents of San Francisco and the Bay region; recognize the park's importance as an American cultural resource.
2. *Provide for the protection and renewal of the park landscape.*
3. *Preserve the open .space of Golden Gate Park.*
4. Create and maintain a park-wide system of recreation roadways, pathways and trails. *Minimize vehicular traffic.*
5. Foster appropriate use of park recreation resources.'

'Consideration should be given to establishment of a separate public advisory committee, supported by a professional staff consisting of planners, landscape architects, recreation specialists, and horticulturists to prepare the plan. This advisory committee should report to the Recreation and Park Commission. The objectives and policies serve as the basis for five master plan elements which should carry out the adopted policies, and address specific issues and park features. The five elements are:

- Forest Management
- Circulation-Transportation Management
- Land Use
- Landmarks and Structures
- Landscape Design

'The first two elements, Forest Management and Circulation, have been adopted by the Recreation and Park Commission and are being implemented. The City should provide the necessary resources to complete the remaining master plan elements. The five elements are described below:

'Forest Management: The Forest Management Element addresses the problems of the park's forest and vegetation. It includes an extensive tree inventory, *reforestation program*, and management and design guidelines.'

'Circulation - Transportation Management: The Transportation Management Plan focuses on all forms of access to and circulation throughout the park. This element is designed to create and maintain a park-wide system of recreational roadways, pathways and trails while *minimizing vehicular traffic*. Key elements include the restriction of through-traffic to designated roadways and reduction of the number and impact of such roadways. *The plan encourages use of public transit*, development of a safe and inviting pedestrian system, and accommodation of bicycle and equestrian trail systems.'

'Land Use: The land use element should update the existing inventory of land uses, facilities, structures, and recognized landmarks and identify appropriate areas for required land uses throughout the park. *All activities, features and facilities should be subordinate to the present design and character of the park* The plan should preserve the park's valuable open space and not permit construction of new recreation or cultural buildings within Golden Gate Park unless incidental to enjoyment of the Park's open space. No additional roadways should be allowed to encroach on the park. *Emphasis should be given to activities which do not diminish open space. The primary function of the park is to serve the recreation needs of all San Francisco residents. Neighborhood serving facilities should be located in the adjacent neighborhoods themselves.*'

'Landmarks and Structures: The landmarks and structures element should evaluate historic values, and physical and structural conditions, and current and required maintenance levels of the park's landmarks and structures. An inventory of existing structures and recognized landmarks should be updated. The plan should encourage restoration and reconstruction of landmarks and require *that any modification or replacement of existing buildings be compatible with the landscape character and historic features of the park* Restoration requirements should be identified and programmed as part of the capital improvement budget, or other funding sources. While advocating the provision of park amenities and visitor services, the plan should *prohibit any construction which would detract visually or physically from the character of the park.*'

'Landscape Design and Features: *The landscape design element of the master plan should provide for the protection and renewal of the park's unique landscape areas. The size and form of the park's major pastoral landscape elements, its meadows and wooded areas should be retained and renewed. Similarly, the overall evergreen landscape character of the park should be maintained as the dominant design element. This element should closely coordinate with the forest management element.* Existing formal gardens and colorful horticultural displays should be retained, in areas designated in early park plans; however, new colorful horticultural displays should not be introduced into predominantly evergreen areas. Landscape design standards should be employed to guide restoration and

maintenance of meadow areas, lake and water course edges, park entrances and pedestrian pathways, intensive recreation use areas, and roadways and other paved areas.’

Again, since the ROSE is not discussed in the DEIR, it is not possible for decision-makers to evaluate the proposed actions against these strictures.” (*Jim Chappell, letter, December 10, 2011 [I-Chappell-06]*)

“The General Plan of the City and County of San Francisco, Environmental Protection Policy 1.4 states: ‘Assure that all new development meets strict environmental quality standards and recognizes human needs: 1) In reviewing all proposed development for probable environmental impact, careful attention should be paid to upholding high environmental quality standards. Granted that growth provides new economic and social opportunities, uncontrolled growth can also seriously aggravate environmental deterioration. Development projects, therefore, should not disrupt natural or ecological balance, degrade the visual character of natural areas, or otherwise conflict with the objectives and policies of the General Plan.’ There is insufficient analysis in these specific regards.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-13]*)

“The DEIR concludes that ‘the proposed project would not obviously or substantially conflict with any policies, not be inconsistent with the spirit and intention of, the General Plan.’ (DEIR, page III-4.)

Yet, barely three paragraphs of above this quoted statement, the EIR drafter notes that this same plan calls for ‘emphasizing the naturalistic landscape qualities existing in the western portion of the park.’ (Ibid.)

Surely, the virtual sports arena proposed, with 1,000 spectator seats, 60 lights and a sea of AstroTurf, cannot be described as a ‘naturalistic landscape.’ How can the EIR drafter possibly have arrived at such a ‘no conflict’ conclusion?

Yet, the drafter of the EIR contends further, in Impact BI-3, that potential conflicts with applicable local policies (page IV. F-33-34) are less than significant with the sole proviso that the trees to be cut down will be covered by an existing replacement program. Nowhere does the DEIR discuss the clear conflict with the Western Shoreline Area Plan (which has been adopted as part of the San Francisco General Plan), even though that plan calls for ‘emphasizing the naturalistic landscape qualities existing at the western portion of the park.’ (Page III -4 of DEIR.)” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-12]*)

“In the same way, under Accountable Planning Initiative, the Beach Chalet plan conflicts with the goal of protecting the neighborhood character of the area as testified to by numerous local residents and many meetings, and encourages the use of automobiles ...” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-11]*)

“The General Plan of the City and County of San Francisco, Environmental Protection Policy 1.1 states: ‘Assure that all new development meets strict environmental quality standards and recognizes human needs: 1) In reviewing all proposed development for probable environmental impact, careful attention should be paid to upholding high environmental quality standards. granted that growth provides new economic and social opportunities, uncontrolled growth can also seriously aggravate environmental deterioration. Development projects, therefore, should not disrupt natural or ecological balance, degrade the visual character of natural areas, or otherwise conflict with the objectives and policies of the General Plan.’

The DEIR does not address this Environmental Protection Policy of the General Plan of the City and County of San Francisco.” (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-10]*)

“It is also inconsistent with Objective 8 of the Master Plan of San Francisco.

Objective 8 of the Master Plan Flora and Fauna. Ensure the Protection of Plant and Animal Life states:

A totally manufactured environment without plants and animals would be sterile. That bit of nature, which still remains in San Francisco, is a precious asset. The ecological balance of wildlife and plant communities should be protected against further encroachments.

POLICY 8.1

Cooperate with and otherwise support the California Department of Fish and Game and its animal protection programs.

The California Department of Fish and Game has overall authority to protect animals in San Francisco. The Municipal Code reinforces this control in protecting animals in public areas. The City should foster greater public awareness of these laws.

POLICY 8.2

Protect the habitats of known plant and animal species that require a relatively natural environment.

Golden Gate Park, a product of years of planning and design, provides to a certain extent the natural environment needed by wildlife and plant communities. The natural areas of Golden Gate Park should remain as they are, and any move to convert them into areas of more active recreation should be discouraged.

Other parks and undeveloped areas in San Francisco remain relatively undisturbed and provide a variety of environments for flora and fauna: beaches, sand dunes, wooded areas, open fields, grassy hills, and lakes. All these areas should be protected. The Presidio, not subject to local jurisdiction, should, nevertheless, be urged to protect animal and plant habitats within its boundaries.

POLICY 8.3

Protect rare and endangered species

A number of native plant and animal species are designated as rare or endangered. Interested individuals, and groups, together with knowledgeable public agencies, such as the Recreation and Park Department and the California Academy of Sciences." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-15]*)

Response PP-3

Several comments (A-SFHPC-01, I-GGAS2-15, O-SPEAK4-04, I-Jungreis2-13, I-Schultz-10, O-GGAS2-18, O-GGAS2-20, and A-SFPC-Moore-04) assert that the project is inconsistent with or would conflict with various objectives and policies of the City's General Plan, including those contained within the Environmental Protection Element, the Recreation and Open Space Element, the Western Shoreline Area Plan, and the Urban Design Element.

The EIR discusses General Plan objectives and policies relevant to the project, including those contained in the Recreation and Open Space Element, the Western Shoreline Area Plan, the Urban Design Element, and the Accountable Planning Initiative on pages III-2 through III-5 and provides an overview of the project's overall consistency with those plans and policies. The EIR concludes on page III-4 that the proposed project would not obviously or substantially conflict with any of the policies contained within these documents, nor be inconsistent with the spirit and intent of, the General Plan.

EIR page III-4 has been revised to include new paragraphs 2 and 3:

The Environmental Protection Element of the General Plan addresses the impact of urbanization on the natural environment. As stated in the Environmental Protection Element, in highly urban San Francisco, environmental protection is not primarily a process of shielding untouched areas from the initial encroachment of a man-made environment but achieving a more sensitive balance, repairing damage already done, restoring some natural amenity to the city, and bringing about productive harmony between people and their environment. The environmental protection element, therefore, gives natural environmental amenities and values appropriate consideration in urban development along with economic and social considerations.

The policies and objectives contained in this element are generally broad but those that could apply to the proposed project include those seeking for a proper balance among conservation, utilization, and development of San Francisco's natural resources (Objective 1), those seeking maintenance and improvement of the quality of the bay, ocean, and shoreline areas (Objective 3), and which seek assurance that the land resources in San Francisco are used in ways that both respect and preserve the natural values of the land and serve the best

interests of all the city's citizens, and others (Objective 7). The proposed project would make improvements to an existing site already used for recreation, and would do so in a way that minimizes impacts on any natural resources. It would be consistent with some of the policies of the Environmental Protection Element and may be perceived as inconsistent with others. Whether a project is consistent with particular plans will be determined at the time of project approval by the agency charged with making that consistency determination (in the case of the General Plan, the San Francisco Planning Commission).

This revision does not change the analysis or conclusions presented in the EIR.

In general, any conflict between the project and General Plan policies that relate to physical environmental issues are discussed in Sections IV.A through IV.H of the EIR. As stated above, the compatibility of the project with General Plan policies that do not relate to physical environmental issues will be considered by decision-makers as part of the decision whether to approve or disapprove the proposed project. In the case of this project, the San Francisco Planning Commission will evaluate the proposed project in accordance with provisions of the San Francisco General Plan, including Priority Policies and the Western Shoreline Plan, an area plan within the General Plan that encompasses the City and County of San Francisco's (CCSF) Local Coastal Plan. The Planning Commission would also consider the project's application for a Local Coastal Permit.

As discussed in the Initial Study (Appendix A of the EIR) on page 10, in 2007, the Planning Department reviewed the renovation of athletic playfield complexes at six locations across the city, which included conversion of the fields from grass to synthetic turf, the installation of field lighting, fencing, irrigation, and other landscape and building improvements. The proposed project at Beach Chalet was included in this review. On May 17, 2007, the Planning Department determined that the project is in conformity with the General Plan. Since the proposed project is undergoing further environmental review, a revised General Plan Referral¹ is required.

Some of the specific comments regarding the alleged inconsistencies between General Plan policies and the project are addressed below. However, as stated above, a conflict between a proposed project and a General Plan policy does not, in itself, indicate a significant effect on the environment within the context of CEQA. Any physical environmental impacts that could result from such conflicts are analyzed in the relevant impact sections of the EIR. As stated above, potential conflicts with the General Plan are considered by the decisions-makers independently of the environmental review process. Thus, in addition to considering inconsistencies that affect the physical environment, the decision-makers will also consider other potential inconsistencies with the General Plan, independently of the environmental review process, as part of the decision to approve or disapprove the proposed project. Any potential conflict not identified in this environmental document would be considered in that context and would not alter the proposed project's physical environmental effects analyzed in this EIR.

¹ San Francisco Charter Section 4.105 and Sections 2A.52 and 2A.53 of the San Francisco Administrative Code establish the requirement for General Plan Referrals for certain types of projects. A General Plan Referral is required to evaluate whether a project would be consistent with the City's General Plan Objectives and Policies.

In response to comment O-SPEAK2-04, which states that the proposed project counters the policies of the Western Shoreline Area Plan of the General Plan, those policies are discussed on page III-4 of the EIR. As stated, the proposed project would be generally consistent with the policy that encourages visual and physical connection between the park and the beach as it would improve the public access between Beach Chalet Athletic Fields and the beach, as well as improve security and encourage visitors. It would also maintain the site's function as a recreational resource and the replacement of trees at a ratio of at least 1 to 1 would make the project consistent with policies that concern reforestation. The EIR also states that the project would not emphasize the naturalistic landscape qualities at the western portion of the park, as the project site is located within areas designated for active recreation.

In response to comment O-GGAS2-21, which states that the EIR fails to indicate how many or how bike transportation will be accommodated in the area of the soccer fields, on page II-17, the EIR indicates that the project would include bicycle racks able to accommodate up to 81 bicycles. On page II-5, the EIR states that access by foot or bicycle is available through existing trails surrounding the site.

Comments I-Chappell-03 and O-SPEAK2-04 states that the EIR ignores Conservation Policies of the Urban Design Element. Specific policies called out by the commenters are Policy 2.1, preserve in their natural state the few remaining areas that have not been developed by man and Policy 2.2, limit improvements in other open spaces having an established sense of nature to those that are necessary, and unlikely to detract from the primary values of the open space. It is noted that the project site is a structured recreational facility and that the project would be limited to the site and would not preclude preservation of the surrounding natural areas. While the EIR does not provide an extensive analysis of the Urban Design Element Policies, it does provide a summary of those policies that would be applicable to the proposed project on EIR page III-3. As stated:

The Urban Design Element policies include protection of major views of San Francisco; conservation of resources that provide a sense of nature, continuity with the past, and freedom from overcrowding; preservation of areas that have not been developed by man; limitation of improvements in open spaces having an established sense of nature to only those that are necessary; promotion of high-quality design for buildings to be constructed at prominent locations; promotion of building forms that respect and improve the integrity of open spaces and other public areas; and installation and maintenance of landscaping in public and private areas.

The EIR does recognize that, although the project site is not within the viewshed of or physically connected to Ocean Beach, the lighting proposed as part of the project could be visible from portions of Ocean Beach, particularly at night. As discussed in EIR Section IV.B, Aesthetics, these impacts would be less than significant.

Under the Conservation section of the Urban Design Element, it is stated that certain irreplaceable resources must not be lost or diminished; that natural areas must be kept

undeveloped for the enjoyment of future generations; that past development, as represented both by distinctive buildings and by areas of established character, must be preserved; and that street space must be retained as valuable public open space in the tight-knit fabric of the city. The decision-makers (the Planning Commission and, in the event of an appeal, the Board of Supervisors) will consider consistency with applicable plans and policies when evaluating the proposed project based on the entire record.

In response to comment I-Chappell-06, which states that the EIR ignores policies within the Recreation and Open Space Element (ROSE), ROSE policies are discussed on page III-3 on the EIR and include development, preservation, and maintenance of open spaces; preservation of sunlight in public open spaces; elimination of nonrecreational uses in parks and reduction of automobile traffic in and around public open spaces; maintenance and expansion of the urban forest; and improvement of the western end of Golden Gate Park for public recreation.

In response to comment O-GGAS2-16, which states that the EIR avoids direct quotes to the General Plan that may call the wisdom of the proposed project into doubt, the EIR is not required to quote any applicable plans or policies but to provide an overview of project's consistency or inconsistency with applicable plans and policies. The decision-makers (the San Francisco Planning Commission and the San Francisco Recreation and Parks Department Commission) will consider consistency with applicable plans and policies when evaluating the proposed project based on the entire record.

Comment I-Schultz-15 states that EIR page IV.F-23 is inconsistent with Objective 8 of the Environmental Protection Element of the General Plan, which states: "A totally manufactured environment without plants and animals would be sterile. That bit of nature, which still remains in San Francisco, is a precious asset. The ecological balance of wildlife and plant communities should be protected against further encroachments." To the extent that any inconsistencies with applicable plans or policies result in physical environmental impacts, these have been considered in appropriate topics throughout EIR Chapter IV. The project's impacts on wildlife and plant communities are addressed in Section IV.F, Biological Resources, with all impacts to biological resources found to be either less than significant or less than significant with implementation of mitigation measures.

E.5 Consistency with Other Planning Documents [PP-4]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-NPS-02	I-Chappell-04	I-Elias-04	I-Ray4-04
O-SCSFBC-39	I-Chappell-08	I-Koivisto-10	I-Romano-07
O-SCSFBC2-02	I-Chappell-09	I-Ray3-14	I-Schultz-08

“Page III-10: Revise ‘Golden Gate National Recreation Area Policies 2006’ to read ‘National Park Service Management Policies (2006).’ “ (*Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-02]*)

“Parking and lack of Compliance with Proposition J

The proposed project would add 20 parking spaces in order to accommodate expected increased use of the site. However, the addition of 20 parking spaces is not permitted by Proposition J, passed by voters in 1998 (amended by voters Proposition G in 2005), as codified by Appendix 41 to the San Francisco Code. Proposition J/Appendix 41 restricts the total amount of street parking in Golden Gate Park.

Because the project’s 20 spaces cannot be added without going back to the voters, further assessment of the impact of traffic in the area is required.

Proposition II Appendix 41 states:

Upon completion of construction of the Underground Parking Facility, the Authority shall cause one surface parking space within the Park to be **permanently eliminated** for each space within the Underground Parking Facility. As part of this process, all of the surface spaces in the Concourse, consisting of approximately 200 spaces, shall be eliminated. Priority for elimination of the remaining spaces shall be given to areas of heavy traffic congestion and environmental sensitivity. However, the Authority shall weigh in its decision to eliminate surface spaces the extent to which removal of such remaining spaces could adversely impact, by increasing traffic congestion, neighborhood and neighborhood commercial districts and attempt to avoid such impacts. Surface spaces that are unused because of present or future permanent road closures shall not be counted as spaces that have been permanently eliminated under this paragraph. **No net gain in parking spaces existing as of the effective date of this ordinance, other than those provided for in the Golden Gate Park Master Plan, shall be permitted.**

Proposition J was a compromise between different community elements that supported a new underground parking facility in Golden Gate Park, and those that opposed it. The intent of Proposition I was to insure that in trade for the creation of 800 new spaces underground, parking would not be added to Golden Gate Park, either at the time of construction or later. This is indicated by the phrase ‘permanently eliminated’ in the code. The code clearly states that this applies ‘as of the effective date’ and does not list an expiration date for the code.

Therefore, the project cannot add 20 new parking spaces, and the impacts to the increased use of the project need to be re-evaluated.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-39]*)

“Another issue we are researching is that portions of the project proposal appear to violate city code, specifically 1998’s Proposition J. There is also a question of the applicability of the California Attorney General’s Proposition 65 suit against providers of synthetic turf and resulting settlement! which the DEIR does not appear to address.” (*Sierra Club San Francisco Bay Chapter, letter, no date [O-SCSFBC2-02]*)

“The DEIR also contradicts the comments received from the California Coastal Commission (CCC) in their letter of March 3, 2011 to the Planning Department. In that letter, the CCC states that the Local Coastal Program (LCP) policy ‘requires the visual and physical connection between Golden Gate Park and the beach be strengthened and *emphasize the naturalistic landscape qualities of the west end of the park for visitor use ...*’ However, the DEIR states that ‘*the project would not emphasize the naturalistic landscape qualities at the western portion of the park, as the project site is located within areas designated for active recreation.*’ (DEIR, p III-4.) This statement ignores the fact that *the entire concept of the western end of Golden Gate Park is that active recreation is contained within the naturalistic landscape qualities of the park; nowhere is it stated that the naturalistic qualities of the parkland can be destroyed for recreation uses.*” (*Jim Chappell, letter, December 10, 2011 [I-Chappell-04]*)

“The Ocean Beach Master Plan is nearing completion. Material from this plan has been available but is not included in the DEIR. The Master Plan has resulted from a year-long process involving SPUR, various public agencies, and members of the public. The goals arrived at include restoring and establishing conditions that support thriving biological communities, and preserving and celebrating the beach’s raw and open beauty. *The discussions for this project centered around welcoming a broader public while preserving the wild beauty of the beach. The DEIR did not consider these discussions or the impact that a semi-professional sports complex could have on Ocean Beach and the various activities that people go to the beach for - not only surfing and beach combing but also viewing the ocean and the sunset, start gazing and night time fire rings, which are intended to be enjoyed in the dark. The DEIR also does not consider the impact on the parking situation at Ocean Beach or the cumulative impact of the changes proposed for the Great Highway on the park users at the Beach Chalet fields.*” (*Jim Chappell, letter, December 10, 2011 [I-Chappell-08]*)

“The DEIR ignores the body of evidence contained in the Urban Design Plan, Western Shoreline Area Plan / Local Coastal Program the Recreation and Open Space Element, the Ocean Beach Master Plan, and the Golden Gate Park Master Plan. Any public body utilizing this document to make decisions regarding the subject project will lack this information and thus the DEIR is inadequate. These aforementioned conflicts with these plans constitute significant precedent-setting impacts on this important historic and cultural resource.

I hope the Planning Commission, the Planning Department and the Recreation and Park Department will direct that these important planning considerations be analyzed. I believe when

so done, this project will be shown to constitute an unavoidable significant impact on Golden Gate Park.” (*Jim Chappell, letter, December 10, 2011 [I-Chappell-09]*)

“Furthermore the EIR does not take into account the Natural Area Resources Plan of San Francisco’s Rec and Park department which is under environmental review at this time. This plan proposes to deforest over 33% of San Francisco’s wooded park areas, and replace these prime bird habitats with the small native plants and slow- growing trees common to San Francisco’s original sand dunes. If this proposal passes, the amount of large tree habitat suitable for raptors will be radically slashed in San Francisco. In that event the habitat at the present day soccer fields will be absolutely crucial for maintaining the threatened raptor populations in San Francisco.” (*Evan Elias, Letter, December 11, 2011 [I- Elias-04]*)

“Pursuant to the issue of state and federal interest in this area is the section headed Western Shoreline Area Plan. Policy goals of reforestation and a naturalistic landscape are listed, as is improving the western end of the park for public recreation. At this point, a definition of recreation, and perhaps of public, would be very useful. The lighting and the synthetic turf covering, as well as the removal/destruction of numerous trees/shrubs, are in clear conflict with the need for naturalistic landscape and reforestation in this area.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-10]*)

“Neither the lighting or artificial turf are keeping with our Green City Initiative, the Precautionary Principle or our IPM policies. Water use is a minor issue in comparison.” (*Jamie Ray, letter, no date [I-Ray3-14]*)

“Our Green City Initiative and signing onto the precautionary principle which requires us to take the least environmentally damaging approach and to choose the one less invasive to the environment. It requires that we consider the biological effects on wildlife from the actions we take, and the policies we create.” (*Jamie Ray, letter, December 12, 2011 [I-Ray4-04]*)

“The RPD proposed renovation of the Athletic Fields may be in conflict with the Ocean Beach Master Plan if access to parking at Ocean Beach is reduced. This needs to be evaluated more fully in the EIR.” (*David Romano, email, December 9, 2011 [I-Romano-07]*)

“This is in complete contradiction to CCSF Ordinance 53-07 - Use of Recycled Materials as there is currently nothing that can be recycled from 400 tons of synthetic turf materials and it would need to use up precious landfill. San Francisco is known for being a green leader and many city leaders around the Country have looked to us for some of the innovative laws that we have passed -- such as the ban on plastic bags in the City. This has resulted in a 50% drop in plastic bag litter on the streets since the ban took effect. How can we go so far backwards? The DEIR must address this issue.” (Cheryl Schultz, letter, December 11, 2011 [I-Schultz-08])

Response PP-4

In response to comment I-Chappell-04 and I-Chappell-09, which state that the DEIR contradicts the comments from the California Coastal Commission with regard to the Local Coastal Program policy that “requires the visual and physical connection between Golden Gate Park and the beach be strengthened and *emphasize the naturalistic landscape qualities of the west end of the park for visitor use*,” the project’s consistency with the policies such as those included in the Local Coastal Program, would be analyzed as part of the project approval process. CEQA does not require that any conclusions regarding consistency be reached within the EIR, only that they be discussed as they pertain to physical environmental impacts.

In response to comments I-Chappell-08 and I-Romano-07, which state that the EIR does not include material from the Ocean Beach Master Plan, the Ocean Beach Long-Range Planning Process is discussed on page III-11, where it is stated that any physical changes that could occur in the general project vicinity as a result of the Master Plan implementation would be subject to appropriate permits and environmental review. At the time of the EIR publication, the Ocean Beach Master Plan was not available to the public. As of publication of the Comments and Responses document, a Draft version of this report is available, although it has not yet been approved. It is noted that the Ocean Beach Master Plan appears to address areas west of the Great Highway. The Ocean Beach Master Plan is included as a cumulative project for the analysis of cumulative impacts (see EIR Table VI-1).

Comment I-Schultz-08 states that the proposed project is in contradiction to CCSF Ordinance 53-07, which states that recycled content materials should be used in public works and improvements to the maximum extent feasible. The project appears to be in compliance with this ordinance because it would utilize SBR infill, which is recovered from scrap tires and from the tire re-treading process. Furthermore, as stated on page II-14 of the EIR, the turf would be returned to a turf manufacturer for reuse/recycling at the end of its lifespan.

In response to comments I-Ray3-14 and I-Elias-04, which state that the project would be inconsistent with Green City Initiative, the Precautionary Principle, Integrated Pest Management policies, or the draft Significant Natural Area Resources Plan, these programs are described below for informational purposes only. To the degree that inconsistency with these policies would result in physical impacts to the environment, these impacts have already been considered

under the appropriate topic areas in Chapter IV. The EIR need not provide an exhaustive analysis of all of the City's plans and policies, just those that are most relevant to the proposed project, which has been done in the EIR. Note that it is unclear what is meant by the "Green City Initiative" as there is no San Francisco program or policy with this title. Also see response ESI-2, which clarifies that the Significant Natural Resources Area Plan, currently in draft, has been included to the cumulative impact analysis.

San Francisco's Integrated Pest Management Ordinance. The Integrated Pest Management Ordinance established the City's Integrated Pest Managed program for City properties in 1996. It requires an integrated approach to all pest control operations; establishes posting, recordkeeping, and accountability requirements; and phased out use of the most hazardous pesticides. The ordinance regulates pesticide use within the City's operations.²

San Francisco Department of the Environment, Precautionary Principle. The City has adopted a Precautionary Principle Ordinance that doesn't merely ask if a potentially harmful product is safe but also asks if it is necessary in the first place. The precautionary approach seeks to *minimize harm* by using the best available science to identify safer, cost-effective alternatives and encourages avoiding using potentially harmful products if safer alternatives are available.³

Significant Natural Resource Areas Management Plan. Fragments of unique plant and animal habitats within San Francisco and Pacifica, known as Significant Natural Resource Areas,⁴ have been preserved within parks that are managed by the San Francisco Recreation and Parks Department (SFRPD). The management areas (MAs) have been designated by differing levels of sensitivity, species presence, and habitat complexity within the 31 Natural Areas. (There are no designated management areas near the project. The closest designated management areas are on the other side of Crossover Drive, and near the Cliff House).

Comments O-SCSFBC2-03 and O-SCSFBC-39 state that the proposed addition of 20 parking spaces is not permitted by Proposition J. Proposition J is the Golden Gate Park Revitalization Act of 1998, whose principal purposes are to: (1) create a pedestrian oasis in the Music Concourse area of Golden Gate Park, situated between the de Young Museum and the Academy of Sciences (the "Concourse") and (2) take steps to reduce the impact of automobiles in the Park while still providing long-term assurance of safe, reliable and convenient access for visitors to the Park, including its cultural institutions. The Music Concourse area of the Golden Gate Park is not located in the project vicinity but in the eastern portion of the Park. Furthermore, any new parking created on the project site would be offset by parking spaces removed as part of other projects, including the John F. Kennedy Drive bikeway project nearby. Therefore, while a more detailed consistency with Proposition J and various other applicable City policies would be made during the project approval phase, the project does not appear to conflict with this specific policy.

² San Francisco's Integrated Pest Management Ordinance, <http://www.sfenvironment.org/downloads/library/ipmordinance.pdf>, access on January 24, 2012.

³ San Francisco Department of the Environment, Precautionary Principle, http://www.sfenvironment.org/our_policies/overview.html?ssi=14, access on January 24, 2012.

⁴ Significant Natural Resource Area Management Plan EIR, http://sfmea.sfplanning.org/2005.1912E_DEIR.pdf, accessed January 24, 2012.

Lastly, as stated above, to the extent that the project could result in physical effects, these have been considered in the EIR under the appropriate topic areas.

In response to comment A-NPS-02, which states that ‘Golden Gate National Recreation Area Policies 2006’ on EIR page III-10 should be revised to read ‘National Park Service Management Policies (2006), language on page III-10 has been revised as follows:

Other Plans and Policies

~~Golden Gate National Recreation Area~~ National Park Service Management Policies 2006

The National Park Service (NPS) is a bureau of the U.S. Department of the Interior that was created following the signing of the “Organic Act” by President Woodrow Wilson in 1916. The NPS manages the 394 areas called “units” of the National Park System. The NPS also helps administer dozens of affiliated sites, the National Register of Historic Places, National Heritage Areas, National Wild and Scenic Rivers, National Historic Landmarks, and National Trails. The “Organic Act” states that the fundamental purpose of the NPS “is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

This revision does not change the conclusions presented in the EIR.

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F. Environmental Setting and Impacts

F.1 Overview of Comments on the Environmental Setting and Impacts

The comments and corresponding responses in this section cover topics in Chapter IV of the EIR. These include topics related to:

- ESI-1, Environmental Setting and Impacts
- ESI-2, Cumulative Impacts

Portions of some of the comments addressed in this section also relate to other resource to other resources topics, those portions of the comments are responded to in those sections, including discussion of cumulative impacts in applicable resource sections.

F.2 Environmental Setting and Impacts [ESI-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-PAR3-09

O-SFCC-02

I-AClark-02

I-Edelson2-01

“Other issues and impacts that should be considered and which need additional time to review. Conflicts with existing plans and policies, including the Golden Gate Park Master Plan; Impacts on Transportation and Circulation; Impacts on Recreation; Impacts on Biological Resources, including Vegetation, Wildlife, and Special- Status Species; Impacts on Existing Hydrology and Water Quality, and; Impacts related to Hazards, Hazardous Materials.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-09]*)

“Changing these fields to artificial turf is no different than the installation of other updated facilities in the Park; children’s playgrounds, curbs and sidewalks, new lighting, pending reconstruction of the stables, etc.” (*San Francisco Chamber of Commerce, letter, December 1, 2011 [O-SFCC-02]*)

“It is common knowledge that people use at a site or an area have direct cumulative effects on environments. Cumulative effects lead to significant long-term, often irreversible environmental damage and degradation. Because of people use, areas and sites have been limited-even closed-to the public to protect and preserve environmental areas.

Think of it this way. You have a home in Tahoe or Bolinas on eleven acres and 1.2 million people come to visit you each year for ten years. What would be the cumulate environmental impact on your property and home?

Comprehensive and thorough research and analyses on people use and the effects on the environment is critically essential to the validity and reliability of the entire Beach Chalet DEIR and project." (*Ann Clark, letter, December 12, 2011 [I-AClark-02]*)

"I agree that the DEIR should be rejected and good enough is not good enough. Good enough is not the standard that we want to hold this to. This is a long-term project. Once it goes in, whatever it goes in is going to be in for a long time and we have to address the long-term impacts of this." (*Ellen Edelson, public hearing comment [I-Edelson2-01]*)

Response ESI-1

Comment O-PAR3-09 indicates the specific resource topics that should be addressed in the EIR: conflicts with existing plans and policies, including the Golden Gate Park Master Plan; impacts on transportation and circulation; impacts on recreation; impacts on biological resources, including vegetation, wildlife, and special-status species; impacts on existing hydrology and water quality; and impacts related to hazards and hazardous materials. Each of the resource topics raised in this comment is included in EIR Chapter IV, Environmental Setting and Impacts. Comments indicate that long-term and overall project impacts should be considered (I-AClark-02 and I-Edelson2-01). EIR Chapter IV, Environmental Setting and Impacts, considers overall project impacts and long-term impacts, as each section addresses impacts during project operations. For example, the Transportation and Circulation impact analysis considers traffic conditions during project operations, including the contribution of project traffic to 2035 traffic projections. The Hazards and Hazardous Materials and Air Quality section addresses disposal of synthetic turf.

Comment O-SFCC-02 indicates that the proposed actions are similar to other facility improvements that have been implemented in Golden Gate Park. This comment is noted. The proposed project effects are fully described and analyzed in this EIR. Information regarding the impacts of similar projects (or project elements) was considered as appropriate and is included in the EIR.

F.3 Cumulative Impacts [ESI-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Antonini-13	O-SCSFBC-05	I-Darrigrand & Claflin-05	I-Khan-08
A-SFPC-Borden-04	O-SCSFBC-06		I-Mabutt-04
A-SFPC-Sugaya-02	O-SPEAK2-02	I-Dennenberg-07	I-MMiller-04
O-CSFN-05	O-SPEAK3-01	I-Edelson-09	I-Moss-04
O-PAR2-01	I-Anderson-07	I-Elias-04	I-Moss2-01
O-PAR3-06	I-Buffum-05	I-Horton-04	I-Pattillo-03
O-PAR4-01	I-Chappell-05	I-Hyde-07	I-Pattillo2-04
O-PAR5-01	I-Chappell-08	I-Joaquin-Wood-04	I-Wooding-02
O-RCA-05	I-Citron-09	I-Jungreis2-01	I-Wuerfel-03
O-SCSFBC-03			

“...another person brought up the question --a couple people brought up the waste treatment plant that’s proposed apparently by SFPUC. This is a separate project. I mean, I don’t think it’s right to try to analyze them together because that might not happen. And it will be evaluated on its own merits and so I think it should be considered. Yes, it is a possibility that that could happen but we’re going to have that make that decision independently and one project is not dependant upon the other.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-13]*)

“I think that the issues that were brought up today, wastewater treatment center, ..., I think are all important ones that we need to look at.” (*Gwyneth Borden, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Borden-04]*)

“...I think that the cumulative effect does include the treatment plant site and that’s been mentioned before. Granted it’s a separate project but the EIR needs to take into consideration the potential for development that’s already been voiced, I believe, and should be analyzed in this particular document.” (*Hisashi Sugaya, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Sugaya-02]*)

“The DEIR does not consider the cumulative impact of the water treatment plant as required by State CEQA laws that foreseeable impacts be considered.” (*Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-05]*)

“While both projects identified ... would be located next to each other in the western end of Golden Gate Park, the Planning Department and its commission are conducting sequential environmental reviews of each project separately. The California Environmental Quality Act (CEQA) requires that the ‘cumulative effects’ of all environmental impacts on a common area be assessed.

As indicated in its communications of March 4th, November 22nd and December 15th of this year, PAR believes that, in order to assess the 'cumulative effects' of both projects, the environmental impacts from each project cannot be assessed and applied sequentially. As a result, PAR suggests the DEIRs for both projects be considered concurrently.

A possible alternative would be for the Planning Commission to proceed with a sequential certification of each EIR separately and then request that the Recreation and Parks Commission consider and apply both concurrently. Because the San Francisco Public Utilities Commission is the proponent of the water treatment plant, that may not be possible for the Recreation and Parks Commission to do." (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-01]*)

"BCAF EIR Public Comment Period should be continued to the release of the Westside Water Treatment V Plant DEIR and the Groundwater Project. We are concerned that this EIR has been issued separately from the DEIR for the Westside Water Treatment Plant. We understand that the BCAF DEIR does not judge this cumulative impact to be important; however, we do not see how the cumulative impacts of these projects can be evaluated by the public without the complete information that would be provided by having all DEIR's available at the same time." (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-06]*)

"The purpose of this letter is to urge that certification of the draft Environmental Impact Report for the Beach Chalet Soccer Fields Project be delayed until the draft EIR for the San Francisco Public Utilities Commission's Water Treatment Plant has been published and until the DEIRs for both projects in the western end of Golden Gate Park can be considered together.

Even if the proposed soccer fields are initially found to have potential environmental effects on the park that are 'individually limited', those effects may be 'cumulatively considerable' when viewed in connection with those from the proposed water treatment plant. The publication date of the DEIR for the water treatment plant is unknown. ..." (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR4-01]*)

"We hope you will consider it in conjunction with the EIR, the final one, for the water treatment plant that is designed to go in between the soccer fields and Murphy's Windmill.

The reason for doing that is twofold. Number one, we think that the scope of this particular Draft EIR is far too narrow. It doesn't even consider the cumulative effect of this other proposal for that particular portion of the Park. Not only on the Park but also in the immediate neighborhood.

So we'd like to reiterate that request that you schedule the consideration of both EIRs together and we will by that time, believe me, have proposals from Recreation and Park Department and

we'll be there to either support or oppose either over both projects. I don't know which it's going to be right now." (*Raymond Holland, Planning Association for the Richmond, public hearing comment (O-PAR5-01)*)

"There are plans to build a water purifying and pumping station in Golden Gate Park. This is part of a major plan to supply ground water to supplement San Francisco's water supply. Installing artificial turf will have a major negative impact because it will produce chemical run off into the aquifer which has not been fully investigated. The DEIR did not consider the cumulative impact of both the soccer field renovation and the water treatment plant. This is a major flaw, and the State CEQA laws require the consideration of impacts of foreseeable projects." (*Richmond Community Association, letter, December 12, 2011 [O-RCA-05]*)

"The DEIR incorrectly states that there are no cumulative impacts. The proposed Beach Chalet field protect is directly adjacent to another proposed large-scale project within Golden Gate Park, the San Francisco Westside Recycled Water Project (Case No. 200B.0091E). The Water project will take up several acres, will construct a large structure, add large pipelines, and install up fencing. Both projects are by the City and County of San Francisco." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-03]*)

"The Beach Chalet DEIR fails to consider the cumulative impact of both projects in this on the park and the surrounding natural resources that make up a single large area. These include the Golden Gate Natural Recreation Area, the Balboa Natural Area, and Sutro Heights Park, and the Pacific Ocean.

Table IV-1 in the DEIR lists the Water project as a cumulative factor, and even states that there are 'long-term impacts on Hydrology and Water Quality through 2018.' But the DEIR doesn't state what those are or offer mitigations." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-05]*)

"The DEIR omits several facts about the Water project. For instance, the DEIR omits from consideration the fact that the Water project will remove 120 trees, according to the map produced by the San Francisco Public Utilities Commission (the project sponsor) in its 2010 Tree Report. (See Exhibit 8.)" (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-06]*)

“Secondly, the proposed Soccer Fields project should be reviewed together with the proposed Recycled Water Treatment Plant which is also to be located at the western end of Golden Gate Park. The cumulative impacts of both proposed projects need to be evaluated together. Until a DEIR for the Treatment Plant is published this DEIR for the Beach Chalet Soccer Fields should not be approved.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-02]*)

“Cumulative Impacts: Recycled Water Treatment Plant. The proposed Soccer Fields project should be reviewed together with the Recycled Water Treatment Plant which is also proposed for location at the western end of Golden Gate Park. The cumulative impacts of both proposed projects need to be evaluated together. There is more than enough information available to allow analysis of the proposed Treatment Plant vis-a-vis the Beach Chalet Soccer Fields.

Cumulative Impacts: Proposed Ocean Beach Plan. No mention or study is found in the document of the proposed Ocean Beach Plan although SPUR has brought together eight City agencies, as well as the National Park Service, and the planning is well underway. The objectives and future needs of Ocean Beach planning effort are available in advanced draft form.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-01]*)

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design and experience of the park for visitors, if these two projects are built?” (*Raja Anderson, letter, December 12, 2011 [I-Anderson-07]*)

“...Please consider the cumulative impact of the proposed fields along with the footprint of the Wastewater Treatment Plant.” (*Nancy Buffum, letter, December 12, 2011 [I-Buffum-05]*)

“...The DEIR also ignores the fact that the Murphy windmill is now completely and beautifully renovated and that, combined with the soon-to-be renovated Millwrights’ Cottage Concession (which will contain a restaurant serving 3 meals a day and a kitchen garden, see attached RFQ), will happily increase visitors to the area. *Increasing visitors is good to a certain extent, but once we increase the total number beyond a certain number, we have an urban environment with minimal landscaping, not parkland with a few screened amenities.* Once that restaurant is up and running, and in conjunction with the clean-out of the corporation yard for either the proposed Westside Water Treatment Plant or for new meadows, as outlined in the Golden Gate Park Master Plan, this area should be amply busy while providing the parkland experience for visitors.” (*Jim Chappell, letter, December 10, 2011 [I-Chappell-05]*)

“The Ocean Beach Master Plan is nearing completion. Material from this plan has been available but is not included in the DEIR. The Master Plan has resulted from a year-long process involving SPUR, various public agencies, and members of the public. The goals arrived at include restoring and establishing conditions that support thriving biological communities, and preserving and celebrating the beach’s raw and open beauty. *The discussions for this project centered around welcoming a broader public while preserving the wild beauty of the beach. The DEIR did not consider these discussions or the impact that a semi-professional sports complex could have on Ocean Beach and the various activities that people go to the beach for - not only surfing and beach combing but also viewing the ocean and the sunset, start gazing and night time fire rings, which are intended to be enjoyed in the dark. The DEIR also does not consider the impact on the parking situation at Ocean Beach or the cumulative impact of the changes proposed for the Great Highway on the park users at the Beach Chalet fields.*” (Jim Chappell, letter, December 10, 2011 [I-Chappell-08])

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design and experience of the park for visitors, if these two projects are built?” (Ben Citron, letter, December 11, 2011 [I-Citron-09])

“Even more concerning, is the total impact of the soccer stadium plus the water treatment plant. Why are these not clearly and publicly linked in all public information re: the loss of 50% of the width of the park? It is not just that the soccer plan ignores the uses many of us want to preserve. These two projects will not be lovely--they do not need to be imposed on our park.” (Jacqueline Darrigrand and William Clafin, Letter, December 9, 2011 [I-Darrigrand & Clafin-05])

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design and experience of the park for visitors, if these two projects are built?” (Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-07])

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design and experience of the park for visitors, if these two projects are built?” (Ellen Edelson, Letter, November 28, 2011 [I-Edelson-09])

“Furthermore the EIR does not take into account the Natural Area Resources Plan of San Francisco’s Rec and Park department which is under environmental review at this time. This plan proposes to deforest over 33% of San Francisco’s wooded park areas, and replace these prime bird habitats with the small native plants and slow- growing trees common to San Francisco’s original sand dunes. If this proposal passes, the amount of large tree habitat suitable for raptors will be radically slashed in San Francisco. In that event the habitat at the present day soccer fields will be absolutely crucial for maintaining the threatened raptor populations in San Francisco.” (*Evan Elias, Letter, December 11, 2011 [I- Elias-04]*)

“Another point I would like to make is that environmental impacts of the proposed Soccer Fields project should be reviewed together with those of the proposed Recycled Water Treatment Plant which is also to be located at the western end of Golden Gate Park. The cumulative impacts of both proposed projects need to be evaluated together. Until a DEIR for the Treatment Plant is published, this DEIR for the Beach Chalet Soccer Fields should not be approved.” (*Inge Horton letter, December 1, 2011 [I-Horton-04]*)

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design” (*Katherine Hyde, email, December 11, 2011 [I-Hyde-07]*)

“...the aggregate impact of both the water treatment plant and the soccer stadium should have been considered together and has not been.” (*Joan Joaquin-Wood, email, December 12, 2011 [I-Joaquin-Wood-04]*)

“This project should be considered at the same time you are considering a draft EIR for the San Francisco Public Utilities Commission’s Tertiary Water Treatment Plant (with an enclosed Water Supplementation Pump) Project because of their interconnectedness in terms of cumulative environmental impact, cumulative construction impact, and anticipated aquifer impact (referenced below).” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-01]*)

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design and experience of the park for visitors, if these two projects are built?” (*Tehmina Khan, email, December 10, 2011 [I-Khan-08]*)

“Two huge construction projects are currently planned for the western end of Golden Gate Park, the artificial turf soccer complex at Beach Chalet and the Recycled Water Treatment Facility. Please support moving these projects to locations outside of Golden Gate Park. If you have any doubts, take a look at the plans for the 1915 Panama Pacific International Exposition in Golden Gate Park on pg. 36 of *The Making of Golden Gate Park, The Growing Years: 1906-1950* by Raymond H. Clary. The aerial image is a powerful and sobering reminder of how important your decisions are in protecting not only Golden Gate Park but all of San Francisco’s public park space.” (*Anmarie Mabbut, email, December 12, 2011 [I-Mabbut-04]*)

“The cumulative impacts are insufficiently studied, in my view. The environmental impacts of the proposed soccer fields project should be reviewed together with the impacts of the proposed recycled water treatment facility. Do you realize that that’s supposed to happen right in that same western part of the city next to the Murphy Windmill? It’s not studied in the EIR. Nor is this huge effort that’s being done with the oversight of SPUR with multi agencies to study Ocean Beach and the Ocean Beach area.” (*Mary Anne Miller, public hearing comment [I-MMiller-04]*)

“...failure to consider cumulative impacts on the park of this and recent, as well as potential new proposals.” (*Rasa Gustaitus (Moss), letter, December 12, 2011 [I-Moss-04]*)

“The Draft EIR has several serious flaws. It reaches firm conclusions unsubstantiated by evidence, enumerates particulars without pointing to questions and inconsistencies that arise and fails to consider cumulative polls.” (*Rasa Moss, public hearing comment [I-Moss2-01]*)

“Your department needs to consider the cumulative impacts of past, current and proposed changes within the entirety of Golden Gate Park. For example, there is little attention given to the proposed Westside Water Treatment Plant. This project will have a major impact on the overall uses and experience of the western end of the park, and, combined with the soccer fields, will turn this end of the park into more of a suburban corporate park than a place to escape the urban environment. Considering cumulative impacts will necessitate expanding every section of the DEIR and making changes to the exhibits.” (*Chris Pattillo, letter, December 8, 2011 [I-Pattillo-03]*)

“Another concern is that the analysis of the cumulative impacts presented in the DEIR focuses on only a small portion of park. It is essential that the entire park be included in this analysis. Your commission needs to consider the cumulative impacts of past, current and proposed changes within Golden Gate Park.” (*Chris Pattillo, letter, November 15, 2011 [I-Pattillo2-04]*)

“We’re adding a wastewater treatment sewage plant right beside the soccer fields and you have to think what this is going to mean to the entire project.” (*George Wooding, public hearing comment [I-Wooding-02]*)

“The cumulative environmental impacts of both the soccer and the water treatment projects together on the western end of the park were inadequately studied with comments about the potential for harm noted only during construction. Long-term impacts are noted for hydrology and water quality, without any mention of the long-term biological effects. These two projects together create a potential devastation of this wild area, both occurring in the same geographic area and possibly at around the same time. The aggregate physical impacts are not described and therefore cannot be mitigated.” (*Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-03]*)

Response ESI-2

The EIR public review generated many comments regarding cumulative projects and the cumulative impact analysis. The following projects were raised as cumulative projects that should be addressed in the EIR, all of which were included in the EIR cumulative impact analysis: San Francisco Westside Recycled Water Project, Ocean Beach Master Plan, and various Golden Gate Park Projects. See EIR Table IV-1 and the cumulative impact discussions within each resource topic. See also the response to comment ERP-1. On February 28, 2012, the San Francisco Public Utilities Commission announced that a new recycled water treatment plant location outside Golden Gate Park was being pursued. However, as a worst-case scenario and because the recycled water project Notice of Preparation is still on file with the Planning Department as being sited in Golden Gate Park, this EIR continues to consider the recycled water treatment plant in Golden Gate Park as a potential cumulative project.

Cumulative effects to visual character and quality are considered in the EIR in Section IV.B, Aesthetics. As described in the EIR, the project site is currently developed with soccer fields, a parking area, and a restroom building. Although the proposed project would change the appearance of the site, and the amount of use of the site is expected to increase, the project would not result in a significant land use impact because the existing use of the project site would remain the same. The project would be consistent with the character of the area in terms of its proposed use and physical compatibility, and would not substantially alter other public use of the park. Therefore, the project would not have a substantial impact upon the existing land use character of the project’s vicinity. The proposed project area and the potential recycled water project site to the south are separated by trees and shrubs, and are not within the same viewshed. With the exception of trees around the perimeter of the site, the potential San Francisco Westside Recycled Water project area is regularly disturbed and consists of bare ground, refuse piles, composting vegetative matter, soil piles, and existing structures. The project, in combination with

these other projects, would not make a considerable contribution to cumulative land use or visual character impacts.

The general, non-specific comments that the EIR is inadequate because it fails to analyze cumulative impacts, long-term cumulative biological resources impacts, or cumulative hydrology impacts are noted; these comments are not sufficiently specific to permit a detailed response. As indicated, the EIR includes a cumulative projects table, and includes cumulative impact discussions within each resource topic. Impact C-BI (EIR pages IV.F-34-36) addresses cumulative habitat and tree removal effects, which would be considered long-term biological resources impacts. Impact C-HY (EIR pages IV.G-28-29) addresses cumulative hydrology impacts, particularly regarding the water quality of stormwater runoff and potential groundwater effects.

Comment I-Elias-04 indicates that the Significant Natural Resource Areas Management Plan should be included as a cumulative project. In response to this comment, EIR page IV-8 has been revised to include the Significant Natural Resource Areas Management Plan (see the addition to Table IV-1, Cumulative Projects and Impacts in or Near the Beach Chalet Athletic Fields Renovation Project, below). In addition EIR page IV.F-5, paragraph 5 has been revised as follows:

Several of the cumulative projects discussed are likely to require the removal of trees within Golden Gate Park. In particular, the San Francisco Westside Recycled Water Project in western Golden Gate Park, including a proposed recycled water project on the parcel immediately south of the athletic fields, would require the removal of a number of Monterey pine and Monterey cypress trees. In addition, the Recreation and Parks Department's proposed Significant Natural Resource Areas Management Plan would result in invasive species removal activities east of Crossover Drive, in the eastern portion of Golden Gate Park. However, trees would be replaced as part of the cumulative projects or as mitigation. In addition, the Golden Gate Park Forest Management Plan has plans for long-term care and replacement of trees within the park. Many of the trees in Golden Gate Park are nearing or at maturity and are in a state of decline. These trees would need to be replaced and the Golden Gate Park Forest Management Plan addresses this. In addition, the Golden Gate Park Master Plan states that individual large trees should be replaced in-kind with similar species. The proposed project, as well as other projects within Golden Gate Park, would need to be consistent with both the Forest Management Plan and the Master Plan.

Because the improvements proposed under the Significant Natural Resource Areas Management Plan would occur one mile or further from the project site, no cumulative effects would be anticipated.

These revisions do not change the analysis or conclusions presented in the EIR.

**TABLE IV-1
CUMULATIVE PROJECTS AND IMPACTS IN OR NEAR THE BEACH CHALET ATHLETIC FIELDS RENOVATION PROJECT (from north to south, west to east)**

Lead Agency	Project Name	Project Description	Potential Cumulative Impact Topics	Approximate Distance to Project Site	Potentially Affected Project Components/ Areas of Overlap ^a	Estimated CEQA/ Construction Schedule
San Francisco Planning Department	Significant Natural Resource Areas Management Plan	<p>Fragments of unique plant and animal habitats within San Francisco and Pacifica, known as Significant Natural Resource Areas, have been preserved within parks that are managed by the San Francisco Recreation and Park Department (SFRPD).</p> <p>The management areas (MAs) have been designated by differing levels of sensitivity, species presence, and habitat complexity within the 31 Natural Areas. Three levels of MAs have been defined as MA-1, MA-2 and MA-3. Lake Merced is designated as an MA-1 natural area. Management actions within areas designated MA-1 may include:</p> <ul style="list-style-type: none"> • <u>The most focused restoration work, possibly to the degree of manipulating individual plants and vegetation series;</u> • <u>Reintroduction of sensitive species;</u> • <u>Tree removal in conformance with forestry statements;</u> • <u>Implementation of erosion-control measures as problems arise, including the closure of informal and social trails; and</u> • <u>Prohibition of planting nonnative species.</u> 	<p>Construction-related impacts on sensitive species and sensitive habitats; aesthetics; recreation; and public services, primarily related to invasive species removal.</p>	<p>Project located north (Balboa Street and Great Highway) and east (east of Crossover Drive) of the proposed project.</p>	<p>Golden Gate Park</p>	<p><u>Status of environmental review: Draft EIR published in August 2011</u></p> <p><u>Implementation schedule: 2012 or later</u></p>

G. Land Use

G.1 Overview of Comments on Land Use

The comments and corresponding responses in this section cover topics in Chapter IV, Section IV.A, of the EIR. All of the topics related to LU-1, Land Use and Land Use Character.

To the extent that comments responded to in this section also discuss other topics, such as consistency with plans and policies, land use, or project description, these comments are also addressed in those respective sections of the Responses to Comments document.

G.2 Land Use and Land Use Character [LU-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-NPS-03	I-AClark-13	I-Koivisto-45	I-Posthumus2-04I-
A-SFPC-Moore-02	I-Cope-01	I-Koivisto-46	Ray-01
A-SFHPC-07	I-Daley-01	I-Kushner2-02	I-Ray-13
O-GGAS-01	I-Daley2-01	I-NLang-02	I-Ray3-08
O-GGAS-03	I-D'Anne-01	I-Learner-11	I-Richards-09
O-SCSFBC-02	I-D'Anne3-01	I-Leifheit-02	I-Richman-06
O-SFOE/GGPPA-03	I-Denefeld2-05	I-Letofsky-01	I-Rivera-02
O-SPEAK3-07	I-Edelson2-06	I-Louey-01	I-Rivera-06
I-Arack-02	I-Elsner-01	I-Mabutt-01	I-Rivera-08
I-Arack2-01	I-Englander2-01	I-McCowin-05	I-Romano-05
I-Barish-04	I-Englander2-05	I-McDevitt-06	I-Romano2-05
I-Begley-01	I-Faulkner-01	I-McGrew3-01	I-MRussell-01
I-Bowman-01	I-Garside-01	I-GMiller-01	I-Sargent-02
I-Brown-01	I-JoGoldberg-02	I-Mosgofian2-02	I-Stern-02
I-Brown-04	I-Hill-01	I-Mosgofian2-04	I-Stern2-02
I-Brown-05	I-GoHoward-07	I-Moss2-02	I-Warriner-01
I-Buffum-01	I-GoHoward-10	I-Myers-03	I-Warriner-02
I-Chappell2-03	I-Hyde-02	I-Ogilvie-01	I-Woodruff-Long2-02
I-Cherny-01	I-Joyce-01	I-Ogilvie-12	I-Woodruff-Long2-04
I-Citron-02	I-Jungreis2-36	I-O'Rorke-02	I-Wuerfel2-01
I-AClark-04	I-Kirshenbaum-01	I-Pattillo-02	I-Wuerffel3-01
I-AClark-09	I-Koivisto-11		

"Page IV A-3: 1st sentence. According to Figure IV.A-1, it appears the Great Highway is approximately 250' away from the project site." (*Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-03]*)

“And while I believe that the Golden Gate Park is potentially resilient and will remain resilient to accommodate change, I do not believe that the proposal as it is stands is really very much in keeping with the spirit of the Park.

And I compare that to another major transformation which occurred in San Francisco in the last 20 years and that is the adaptation to the Presidio from a military base into what is now public and one of the most amazing and beautiful designed appropriate uses of open spaces and recreation along the San Francisco waterfront. In Golden Gate Park and what’s proposed and what’s been pushed very singularly in this EIR, I think we are doing something which is not at all in keeping with the basic spirit of what that park requires us to conserve.

And that does not mean that I do not support the physical and sports and recreational activities like they are, but I would rather like to see them transformed into an ecologically forward-looking project rather than into what I believe is sideways-or backwards-looking project.” (*Kathrin Moore, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Moore-02]*)

“The HPC believes the mitigation measures should clearly state that the park should be designed to be as naturalistic as possible and to match the semi-wild feeling that currently exists in this part of the park.” (*Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-07]*)

“The proposed project represents a significant and permanent change in the character of the western end of Golden Gate Park. As such, care should be taken to ensure that all parties-not just the project proponents-have ample time to present personal and technical comments.” (*Golden Gate Audubon Society, letter, November 21, 2011 [O-GGAS-01]*)

“...fully explore the issues involving the massive amount of artificial turf, extremely tall, bright lights, and artificial-turf fields and extremely tall, bright lights, and the large crowds that will be created by the project. The project is the ecological equivalent of a massive parking lot in the western end of a part of Golden Gate Park that has long been a refuge for wildlife and people who appreciate nature.” (*Golden Gate Audubon Society, letter, November 21, 2011 [O-GGAS-03]*)

“The Sierra Club supports the use of park meadows for sports-related activities. However, the proposed project is a major change of use for the area: the conversion of a multi-use meadow to a dedicated athletic facility that would deny public access for other recreational uses, and which would completely replace than nine acres of habit synthetic turf. It would brightly light an area that is current dark and naturalistic.

It must be emphasized that the project site is not isolated in an urban, neighborhood park, but is part of a large open space area of naturalistic parkland that includes the western end of Golden Gate Park, federal lands, and other protected city land. The site adjacent to, or in the immediate vicinity of, a number of sensitive natural resources, including the Golden Gate Natural Recreation Area, the Balboa Natural Area, and Sutro Heights Park. It is also within 500 feet of the Pacific Ocean.

Given the size of the project, the dramatic conversion of land in the middle of natural resources, the dramatic change of use, and the introduction of acres of known Proposition 65 substances into this environment, substantive and careful analysis is required by CEQA. ..." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-02]*)

"Lastly, I'm going to ask everyone to sit back, close your eyes and visualize for a moment Golden Gate Park. What do you see? A series of paths that wind through groves of trees, through meadows along peaceful lakes, people on family picnics playing informal games, strolling through forests that have taken years to grow, perhaps a child gazing in wonder at a hawk as it soars above him. And at night after the people have all gone home, nature throws her cloak of darkness over the parkland. The birds nestle in their perches, the night creatures come out, and a deep sense of tranquility settles on the Park. What a marvelous treasure we have right here in our city. This is what we want to protect. Please help us to save Golden Gate Park. Thank you." (*San Francisco Ocean Edge/Golden Gate Park Preservation Alliance, public comment [O-SFOE/GGPPA-03]*)

"A Change of Use is proposed. What is the zoning district in which a sports facility may be located according to the Land Use tables in the Planning Code? When a use is changed from casual meadow playing fields to a full competition-ready facility with stadium lighting turned on 365 days a year, turf pavement over several feet of constructed underlayment, is that still the same category of use, or does that graduate up to another category of use? The argument should be substantiated that this facility would not amount to a change of use and presented in the EIR." (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-07]*)

"The EIR report erroneously states that this project will not have significant environmental ... impact on the surrounding area. that is totally untrue. It will change the character of the outer Western Edge of GG Park forever, and not in a beneficial way." (*Patricia Arack, letter, December 12, 2011 [I-Arack-02]*)

"I beg to differ with that assessment of what this project will do to a really wonderful wild, sandblasted, windy, cold, natural environment that is a refuge for so many people, not just soccer players.

The character of the landscape will be forever changed. This is not Coney Island, this is not Southern California beaches, this is our Golden Gate Park, which was designed to be natural and wild and a home for the animals." (*Patricia Arack, public hearing comment [I-Arack2-01]*)

"According to the DEIR, the proposed project would not result in a substantial change in the character of the vicinity, and impacts to land use were less than significant. Since the proposed project will significantly increase the number of people traveling to/from and using this area of the park, since night lighting 365 days a year will alter the appearance of this area of the park, since the historic resource of this area of the park will be significantly altered, and since the project will significantly alter the appearance of the park, please explain why the DEIR concludes that impacts to land use are less than significant." (*Jean Barish, letter, December 12, 2011 [I-Barish-04]*)

"When I first heard about the proposal to tear up the meadow and the soccer fields and replace it with a modern facility, I didn't really know what to think. But since it was Golden Gate Park I asked myself one question. What would McLaren do? So I did some research and found out.

I've got this great book here. This is 'San Francisco's Golden Gate Park.' And it turns out that when John McLaren was in a situation where powerful interests in the city wanted to go into the western half of the Park and put in modern facilities for the good of the community, John McLaren said no. He fought them and he won and that is why the 1915 Pan Pacific International Exposition was built down at the Marina and not in Golden Gate Park.

There are other examples too from this book, Page 119, great story. McLaren was --right now they were starting to have a railroad line that was going to be built through the Park. McLaren wants to block this but, you know, he doesn't have an environmental impact report that he can go to and say, you know, 'Train pollution bad, trees good.'

So he tried to figure out how to block this. And right then the city engineer and the railroad people were saying, 'Trains are good for the Park. The people need them. Besides, there aren't that many trees and plants along the route anyway.'

So a couple days later McLaren storms into City Hall and says, 'If this proceeds and plants and shrubs will have to be dug up along that route.' Because he's Scottish. So the supervisors decided to go out and see who was right. So he brings them all down there, they get out and they see a field of floral beauty.

Supervisors say, 'Okay, McLaren, you win. Rail line canceled.' The supervisors leave. McLaren turns to his 300 workers and says, 'All right, you can go home, lads. They had worked all night to plant those roses and chrysanthemums just to block the rail line.

So what would McLaren do today about a proposal to tear up seven acres of meadow and natural grass and replace them with Astro turf, concrete and electric lights? He would block it. That's what McLaren would do." (*Steve Begley, public hearing comment [I-Begley-01]*)

"I oppose the proposed expansion and modernization of the Beach Chalet Athletic Field.

The Beach Chalet fields need to be fixed up, maintained, and gopher hole prevention implemented. However, completely changing the character of the western end of Golden Gate Park because of poor maintenance does not make sense. In addition, I am concerned about the impact of the lights on the Ocean Edge." (*Arnita Bowman, letter, December 12, 2011 [I-Bowman-01]*)

"I want to express my concern and dismay at the proposed soccer field. This project will ... removing yet more natural space." (*Jessica Brown, letter, November 30, 2011 [I-Brown-01]*)

"I also feel that the millions of dollars this will require could be better spent fixing the area up for more environmental usage. I'm actually a little flabbergasted SF can give up its Championship Football Team but plans to build a million dollar soccer field!" (*Jessica Brown, letter, November 30, 2011 [I-Brown-04]*)

"I love this city, I enjoy biking, hiking and enjoying stargazing at the beach or enjoying nights at the Beach Chalet and Cliff House. These experiences will all be ruined for us if this project is allowed to move forward." (*Jessica Brown, letter, November 30, 2011 [I-Brown-05]*)

"I have grave concerns about the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights. I feel that the Planning Commission and the DEIR are minimizing negative environmental impacts-- ... to the true purpose of the West end of the park to San Francisco residents." (*Nancy Buffum, letter, December 12, 2011 [I-Buffum-01]*)

" 'William Hammond Hall envisioned the Park had two different regions. The park plan east of Strawberry Hill includes a variety of intensively cultivated areas and developed facilities while the parkland to the west is pastoral and woodland landscape with open meadow defined by stands of trees and enhanced by lakes.'"

Over the years, facilities have been added to the western park --the soccer fields in question --but the character of the landscape has remained as more wooded, less refined parkland. This distinction should be maintained with different landscape treatments for the eastern and western portions of the Park." (*Jim Chappell, public hearing comment [I-Chappell2-03]*)

"I find the proposed soccer fields, with artificial turf and powerful lighting, to be out of keeping with the Golden Gate Park Master Plan, which emphasizes the importance of maintaining the natural and sylvan landscape of the park. It is also a significant change in the very nature of the park. In general, the development of the park has located such features as the museums, the Music Concourse, the Conservatory, the Sharon Building and Children's Playground, and the Kezar Stadium and Pavilion in the eastern half of the park. The western half of the park has, with few exceptions, remained more natural, pastoral, and sylvan. This proposal is therefore a substantial departure from the historical development of the park as well as from the park's own master plan." (*Robert Cherny, letter, November 30, 2011 [I-Cherny-01]*)

"As a resident of the Sunset district and a frequent visitor to the park, I am aghast at the idea of a sports complex disturbing the tranquility of the western edge. The traffic, the litter, the noise and lights are all completely out of sync with the serene character of the surroundings. ... As an urban dweller I find it unconscionable that we might diminish the beauty of so unique and precious a natural resource." (*Ben Citron, letter, December 11, 2011 [I-Citron-02]*)

"The Beach Chalet project is not a 'stand alone, isolated' piece of real estate. The Beach Chalet environment is continuously and contiguously linked from the ocean to the beach, the highway and the surrounding park and neighborhood areas. The environment-with its unique micro-climate-is organically, inorganically and microscopically interconnected, interrelated, interactive and inter-correlated. People use and environmental change or damage in one area impacts all the areas.

There is a lack of coordinated, comprehensive research that addresses the environment and significant environmental impacts of the Beach Chalet project's people use on nearby areas such as the ocean, beach, neighborhoods, businesses and park areas and the proposed Ocean Beach Master Plan and San Francisco Public Utilities Commission's water projects." (*Ann Clark, letter, December 12, 2011 [I-AClark-04]*)

"When you walk from Ocean Beach to the Beach Chalet project, you do not walk through a totally empty land-air space. The Beach Chalet project is not a 'stand alone', 'isolated' piece of real estate.

Nature doesn't abide by people's rules about zoning or spaces. The proposed environmental impact of 1.2 million people annually does not begin or end at the entrance to the Beach Chalet project. (As the old saying goes. 'You can't fool mother nature.')

The Beach Chalet environment is continuously and contiguously linked from the ocean to the beach, the highway and the surrounding park, neighborhoods and businesses areas. The Golden Gate Park and Ocean Beach western edge environment is organically, inorganically and microscopically interconnected, interrelated, interactive and inter-correlated. People use and environmental change or damage in one area impacts all the areas.

The unique micro-climate-salt air, off shore/on shore winds, storms, dense cold drippy fog, sand flows, rain, cloud covers and hot, warm and cold days-is not solely limited to the Beach Chalet's eleven acres.

The inter-connected Ocean Beach and Golden Gate Park western end area is full of people and vehicles with peak people and vehicle use on Saturdays and Sundays.

The question is this. Does the Beach Chalet project's 1.2 million people and 304,280 thousand vehicles annually have significant cumulative environmental impact on nearby ocean, beach, neighborhoods, businesses and park areas. The answer is yes." (*Ann Clark, letter, December 12, 2011 [I-AClark-09]*)

"The DEIR proposal does not analyze fully or penetrate deeply into the environmental effects of increasing people use. The DEIR is dismissive of environmental impacts on the areas adjacent to the Beach Chalet project. The DEIR does not improve or increase soccer playing time for children under eight years old and children under ten years old during the school year. The DEIR is not comprehensive and thorough.

The DEIR proposal raises serious, significant questions and problems about the lack of sufficient soccer playing time during the school year for children under eight years old (U 5, 6, 8) and under ten years old (U 10) and environmental impact of people use ...use on the Beach Chalet project. Golden Gate Park and surrounding areas." (*Ann Clark, letter, December 12, 2011 [I-AClark-13]*)

"I sincerely believe that the value of Golden Gate Park will be greatly lessened with construction of the synthetic turf fields and installation of the field lights.

The Beach Chalet renovation project has beneficial aspects such as reducing the fencing around the field, renovating existing bathrooms as well as construction of a small playground, picnic tables and barbecue pits. And although I see these aspects of the project as being potentially

useful, I cannot support the entirety of this project and the plans for the synthetic turf fields and the proposed field lighting.” (*Jeffrey Cope, public hearing comment [I-Cope-01]*)

“I oppose the enlargement of this natural grass playing field at the Golden Gate Beach Chalet because we need open space more than development at the western edge of Golden Gate Park. This wild location where the land meets the sea is more important for the discovery aspect of nature at its best for the children and the rest of us including the creatures who inhabit one of the most vibrant land and sea sites in the world.” (*Thomas Daley, letter, November 22, 2011 [I-Daley-01]*)

“Thanks for your time with all of us at the Thursday last meeting at city hall regarding the upkeep of the Beach Chalet grass playing field here in Golden Gate Park. We know you and the Parks Commission will make the right decision to maintain the playing field as a non intrusive part of our park,(like the decision with the most beautiful Rossi Park on Arguello Blvd).” (*Thomas Daley, letter, December 5, 2011 [I-Daley2-01]*)

“I strongly oppose any and all obstacles to keeping Golden Gate Park as pristine as possible for the benefit of all visitors. There is no EIR that can account of the destruction of any portion of Golden Gate Park.

I am urging a common sense approach. A park anywhere in the world is meant to mimic nature as much as possible. Artificial turf, a parking lot and night-lights are a contradiction of the purpose of a park.” (*Denise D’Anne, Letter, November 16, 2011 [I-D’Anne-01]*)

“I have not read the EIR, but I don’t think that bright lights and artificial turf a park make. And the whole idea of a park is to bring nature into the city and this does not do it. Thank you.” (*Denise D’Anne, public hearing comment [I-D’Anne3-01]*)

“The crowds attracted to the fields in the evenings, especially those from out of San Francisco, would also disrupt the tranquility that local residents currently enjoy.” (*Charles Denefeld, Letter, December 10, 2011 [I-Denefeld2-05]*)

“And the fact that it’s in Golden Gate Park is a problem too, as people have said. This is a natural open area and artificial turf does not belong there.” (*Ellen Edelson, public hearing comment [I-Edelson2-06]*)

“Dear Mr. Wycko – do what ever you can to stop this travesty in Golden Gate Park.” (*Nancy Elsner, Letter, December 12, 2011 [I-Elsner-01]*)

“I’m a member of the Harvey Milk Lesbian, Gay, Bisexual, Transgender Democratic Club, and we oppose the corruption of the Beach Chalet and fields by the laying down of Astro turf and the installation of stadium lights.

Parks, first of all, are for people and other living things, so no Astro turf.” (*Susan Englander, public hearing comment [I-Englander2-01]*)

“Our parks should be a resource for all. It was --again, as the last two speakers have said, it was created to have a balance between the urban environment and nature and this was, again, true of William Hammond Hall and John McLaren’s original vision, something that they shared with Frederick Law Olmsted in his creation of Central Park in New York City. And also the desire to make San Francisco a distinctive place by providing both for its residents and for the nation, a place, a distinctive and beautiful place to recreate within the city.

The city is part of our infrastructure and it does help make us unique. Aside from Central Park, how many other city parks do you know of that are commonly referred to by many Americans? Certainly Golden Gate Park is one of the top city parks in the country.

We’re a city that’s hungry or green space and not faux green. We want a natural look by working with nature and we want something that’s free to the public. When I was unemployed the Park was my refuge. When I was ill with cancer the Park was a restorative space. And I’m close to being an elder now and the Park will be my delight as long as I am welcome there. I want it to be a delight and not a blight for all. So keep out the Astro turf and keep out the stadium lights please. Thank you.” (*Susan Englander, public hearing comment [I-Englander2-05]*)

“Both Jack Spring and my father felt very strongly about retaining the rural character of the Park.

What’s being proposed here is something very different. I passed by Crocker-Amazon Playground which many years ago before I went to law school I was a recreation director at and I saw what they did out there with the klieg lights and the Astro turf and everything else. Frankly, what’s being proposed for Golden Gate Park is Stalag 17 meets Golden Gate Park. It turns the whole philosophy of what the Park was intended to be on its head.

Jack Spring I know felt very strongly on this. My father did too. Maintain the rural character of Golden Gate Park particularly the central and western portions. It was intended to be a natural

reserve. It was actually modeled after Central Park in New York. The same concepts were involved. The only difference is Central Park was founded in 1850. Golden Gate Park was 20 years later. But the same philosophy was involved, creating an urban environment kept as rural as possible for the people in the cities. This is not in line with that. It's going totally a different direction.

Frankly, I think the city's park should be kept a park and it shouldn't be made into a fun thing just to, quote, 'be gifted' with one thing after another. I know that John McLaren's favorite thing when he got his monument was putting hedges around it because he wanted to maintain the rural character. know Jack Spring's attitude was that way. I know my father's attitude was that way. All the old line Rec and Park people I think pretty much have the same view of this. Don't change the character of the Park." (*Terrence Faulkner, public hearing comment [I-Faulkner-01]*)

"I guess it is a foregone conclusion that the City of SF will move ahead with this plan, and I am only one person who has reservations. I must say, however, that putting phony turf in Golden Gate Park, adding spectator seating and installing lights that will take away the only truly 'dark sky' area in our City just to appease sports enthusiasts doesn't preserve our one precious resource one bit. The devastation of the historical significance of th~ park seems to be enough not to pursue the plan. Humans, adults AND children, need unfettered places to explore and play. Paving over coveted GG Park land in the name of increasing accessibility is simply "doublespeak"." (*Michele Garside, Letter, December 12, 2011 [I-Garside-01]*)

"We are concerned that the DEIR failed to address the installation of synthetic turf and high intensity stadium lights that will further disrupt the unique character of the Park, beach and surrounding neighborhoods during many hours of the night and day." (*Johnathan Goldberg, public hearing comment [I-JoGoldberg-02]*)

"Your proposed plan will completely wreck what is special about this end of the park. COMPLETELY. WRECK. IT. This kind of uber-development is more appropriate for the eastern end of the park, where you already have substantial development, the museums, etc. Please leave us in the Outer Sunset alone, we like things as they are, with darkness so we can see the stars and enjoy the quiet and a little bit of solitude in an urban setting.

You are trampling on people out here in the Outer Sunset. Please consider the impact on those of us who live here. Thank you." (*Steven Hill, letter, December 11, 2011 [I-Hill-01]*)

"The concept of a sports complex in Golden Gate Park is anathema to me. It is in the wrong park at the wrong place being at once furthest removed from the client base, relative to the park, and

adjacent to a sensitive wildlife area, notwithstanding the Great Highway." (Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-07])

"In Golden Gate Park, the only coastal area is at its west end. Notwithstanding that someone decided to create soccer fields at that location years ago, there is no need to build on that mistake nor to perpetuate the current use. The impact of the loss of the coastal area to an athletic complex has not been adequately explored or presented in the DEIR." (Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-10])

"GG Park is an icon and it already plagued by too many people and events. It should be left as natural as possible, artificial turf is dangerous to children and it recues the space for the wildlife in GGP." (Katherine Hyde, email, December 11, 2011 [I-Hyde-02])

"The west section of Golden Gate park is a true gem for this city and its residents. While I do not know why these projects are proposed, I cannot think of any valid reason to completely tarnish one of the most beautiful, wonderful spots in San Francisco." (Sean Joyce, email, November 29, 2011 [I-Joyce-01])

" The plan will result in the increased use of Golden Gate Park: there is insufficient analysis of the impact this large athletic center will have upon the limited carrying capacity of Golden Gate Park." (Jason Jungreis, email, November 21, 2011 [I-Jungreis2-36])

"...Specifically, our discomfort with the project concerns the cost of its implementation. ... Artificial turf is not only contradictory to the natural environment harmonious to Golden Gate Park, but it is a considerable -- and unnecessary expense." (Noel Kirshenbaum, email, December 6, 2011 [I-Kirshenbaum-01])

"In the same way, under Accountable Planning Initiative, the Beach Chalet plan conflicts with the goal of protecting the neighborhood character of the area as testified to by numerous local residents and many meetings ..." (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-11])

“Under the Regulatory Framework section, it is stated that this area is attendant on and adjacent to the California Coastal Commission’s Local Coastal Zone. ... The natural character of the beach will be degraded, and improving and stabilizing the dunes will be impacted by any losses in the western windbreak.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-45]*)

“...and synthetic fields with stadium lighting will not ‘emphasize the naturalistic landscape qualities existing at the western portion of the park.’ “ (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-46]*)

“And this is a natural setting, at the western end of Golden Gate Park that deserves to be preserved in a natural state.” (*Pinky Kushner, public hearing comment [I-Kushner2-02]*)

“Whoever could conceive or seriously consider a plan to so thoroughly degrade this last quiet corner of San Francisco obviously doesn’t live here. I invite you to come take a walk through the western edge of the park after sunset, when the sky is glowing over the ocean, see the first stars winking down, maybe the moon poking up out of the trees to the east while its ghost light replaces the last embers of the sun. Or more usually, watch the world disappear into a cold gray blanket of fog while the foghorns sound mournfully in the gathering dark. This is a beautiful, magical place. The last urban refuge for those of us who really don’t like cities, but somehow love San Francisco.

Pave over a few acres of grass, build TEN sixty foot light towers blazing away until 10 PM EVERY NIGHT(!), surround the whole thing with a black plastic fence, you will really finish off the illusion of wilderness that is being destroyed bit by bit anyway.” (*Nathan Lang, email, December 11, 2011 [I-NLang-02]*)

“Map Figure IV -A-I: Show and label debris/composting facilities on Overlook Dr. It would be more thorough for the figure to indicate the areas now used for debris processing which include the Richmond/Sunset site (RS) and at the Overlook Reservoir site. The GGPMP intended green debris to be taken to Overlook Drive atop and along side of the new reservoir, which has been constructed with infrastructure bond funds. What is the status of the Overlook Reservoir, and the Overlook composting operation?” (*Deborah Learner, letter, November 29, 2011 [I-Learner-11]*)

“I work at a cultural center in South of Market and love city life. The natural beauty of the western edge of the park at sunset where it meets the beach contributes to the vibrant city/nature

contrasts in San Francisco ... one of the elements of this city that make is to unique and magical. Having facilities accessible to youth is critical, but the natural beauty of Golden Gate Park should be protected." (*Lex Leifheit, email, December 1, 2011 [I-Leifheit-02]*)

"Every walk I take I pass by the soccer fields, no persons about... just birds, wind, sun, bright grass, sometimes fog, surrounded by trees noises of the ocean and birds ... and I am quiet On other days, when the fields are filled with players, I watch the games briefly children or adults with their colors, running and laughing This park, once sand, is a monument. This park seems sacred I rather see it become sand again, with natural plants ... than be harmed. Our world has so little free space, too many fences, too many lights, that we can barely see the stars." (*Larry Letofsky, email, December 7, 2011 [I-Letofsky-01]*)

"It is not necessary to destroy the green grass and upgrade the field to become the so-called high standard. The additional stadium lights and parking will only make the surrounding neighborhood worse. On the other hand, the environment of the field should be integrated with the park, which is what it is right now." (*Man Kwong Louey, email, December 12, 2011 [I-Louey-01]*)

"I am writing today in opposition to the planned artificial turf soccer complex at the Beach Chalet soccer fields. The pastoral western end of Golden Gate Park is not an appropriate location for seven acres of artificial turf or 60 foot high stadium night lighting. ... You have received extensive testimony, both oral and written, documenting the significant adverse impacts to the people and wildlife that live and visit the area if this project is approved." (*Anmarie Mabbut, email, December 12, 2011 [I-Mabbut-01]*)

"Having lived for 10 years in Palo Alto without easy access to the beach, we would hate to see this unique natural gift compromised. Liz runs barefoot on the beach, such as this morning, and I walk it most mornings. Please don't take an action that could hurt it." (*Kathleen McCowin, email, December 8, 2011 [I-McCowin-05]*)

"...This is extremely incongruous to the historical and asthetic fabric of Golden Gate Park . It would create a use factor at night that will certainly bring the typical urban problems that the Park is supposed to be a respite from. The Park is a naturalised horticultural jewel that was intended to be a sanctum from the urban hardscape. Coating six acres of Golden Gate Park with plastic would be a travesty historically and horticulturally. It would certainly go against our best efforts to be seen as The Greenest City." (*Terry McDevitt, email, January 1, 2012 [I-McDevitt-06]*)

“The project is a significant environmental disaster for Golden Gate Park and its surrounding communities. Though somebody already closed with this, I want to close again with this. Don’t let your legacy you paved paradise and you put up a parking lot and you paid a dollar and a half to go to a tree museum.” (*Shawna McGrew, public hearing comment [I-McGrew3-01]*)

“The Draft treats project adverse impacts as if they are limited an isolated site. In doing so, it tends to ignore the damage done to one’s entire experience of the western end of Golden Gate Park. This is likely to leave policy makers with the mistaken impression that the adverse impact on the Historical and Aesthetic Resources are small technical matters.” (*Greg Miller, letter, December 9, 2011 [I-GMiller-01]*)

“But let me make that particular point. This is --not from PROSAC but from me. I think the DEIR apparently establishes a priority of paved fields over the natural character of Golden Gate Park. I fully appreciate the need for fields. I’ve got three children, two of them who play soccer and I’ve got a grandson who plays soccer.” (*Dennis Mosgofian, public hearing comment [I-Mosgofian2-02]*)

“But there’s a bigger issue here and that is, very simply, that it’s all about Golden Gate Park. It’s not about artificial turf. And Golden Gate Park is, as you’ve been told over and over again as the DEIR says, it’s natural. It’s not supposed to be artificial. ...” (*Dennis Mosgofian, public hearing comment [I-Mosgofian2-04]*)

“It also fails to take the perspective wide enough to encompass the project’s probable or possible impacts on the treasured western end of Golden Gate Park and Ocean Beach which is inseparable from the Park as a recreational and natural destination.” (*Rasa Moss, public hearing comment [I-Moss2-02]*)

“I do not believe that something that would benefit so few residents, when they can go elsewhere to play, is justifiable to ruin something as wonderful as the Park for so many residents. Thank you.” (*Anna Myers, public hearing comment [I-Myers-03]*)

“It is requested that the Planning Department not approve this proposed project, as it would create significant negative impacts to the character of the west end of Golden Gate Park, degrade

the park use experience of the 200,000 residents of the Sunset and Richmond district and other residents and tourists that enjoy the quiet naturalistic setting of the west end of the park, and will have significant adverse effects on the environment and our resident and migratory wildlife.” (Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-01])

“Artificial turf in no way has the character of natural grass. It will change the look of the area and the feel of the area from one of a peaceful meadow when not in play, to one of industrial sports complex.” (Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-12])

“I feel that the impact of additional crowds on the adjacent neighborhood is understated. Having friends and relatives living in that area, I constantly hear about the growing impact of large crowds on the daily life of this community, marathons, Bay to Breakers, Surf contests, etc.

Golden Gate Park was intended to be an ‘Oasis in the City’, a refuge from urban cares. Free to all, regardless of economic status. All structures were to be rustic in nature. As Planning Commissioners, this is a plan to stick with.” (Dennis O’Rourke, email, December 2, 2011 [I-O’Rourke-02])

“I have reviewed the DEIR and find that it is deficient in several critical aspects. First, the DEIR fails to analyze the impacts of the proposed changes in the context of the entire park. Instead, the impacts analysis focuses exclusively on the western portion of the park. In fact, I was unable to find a single exhibit within the bound portion of the DEIR that shows the entire park. It is essential that the entire park be included in the analysis. Golden Gate Park was designed as a single unit and needs to be consistently viewed in that context. For example, imagine that a museum curator decided it would be a good idea to alter the painting of the Mono Lisa - possibly adding a bright and dazzling ring. Would such a change have a profound affect on the entire painting? I dare say yes. Similarly, by adding artificial turf and 70 new light standards to the Chalet Fields the character of the entire park would be impacted - this needs to be studied in the DEIR.” (Chris Pattillo, letter, December 8, 2011 [I-Pattillo-02])

“And it would totally alter the nature of the Park and encroach on the beaches area as well as the neighborhood.” (Yope Posthumus, public hearing comment [I-Posthumus2-04])

“It is requested that the Planning Department not approve this proposed project, as it would create significant negative impacts to the character of the west end of Golden Gate Park, degrade the park use experience of the 200,000 residents of the Sunset and Richmond district and other

residents and tourists that enjoy the quiet naturalistic setting of the west end of the park, and will have significant adverse effects on the environment and our resident and migratory wildlife.” (Jamie Ray, letter, December 12, 2011 [I-Ray-01])

“Artificial turf in no way has the character of natural grass. It will change the look of the area and the feel of the area from one of a peaceful meadow when not in play, to one of industrial sports complex.” (Jamie Ray, letter, December 12, 2011 [I-Ray-13])

“The majority of the components of this proposed project would adversely effect majority of residents who are park visitors and enjoy the relaxing naturalistic setting of the west end of the park, but particularly the 200,000 residents of the Sunset and Richmond district, for whom Golden Gate Park is our neighborhood park.

Golden Gate Park is becoming ever less hospitable for resident use as a neighborhood park, as it becomes ever more used as an event venue for marathons, concerts and the like.

This project would change the character of the park and negatively effect the environment and resident and migratory wildlife.

The west end of Golden Gate Park provides, and will hopefully continue to provide a place to get away from the noise and lights of the city and enjoy the quiet of nature. Bird songs, the wind in the trees ... not blinding stadium lights and vuvuzelas.” (Jamie Ray, letter, no date [I-Ray3-08])

“In addition, I did not see anything in the DEIR about the relative impact on the park and surrounding neighborhood of thousands of additional people who will use the Beach Chalet soccer fields until 10 p.m. every night during times when the west end of the park or the Great Highway are closed for special events. Special events dramatically affect the west end of GG Park almost every weekend from May through October. A few events that cause virtually every road (and sometime foot access) to be closed in the west end of the park include music festivals Hardly Strictly Bluegrass and Outside Lands and road races and walks such as AIDS Walk, Nike Women’s Marathon, San Francisco Marathon and Bay to Breakers.” (Renee Richards, email, December 8, 2011 [I-Richards-09])

“But that means the overflow cars from the lots will have to park along the Park roads, doesn’t it? And 110W will the public feel about that? Especially in the West End, that is supposed to give urban dwellers a whiff of the countryside when they need it (See the Master Plan IV,B·14)?” (Dan Richman, letter, no date [I-Richman-06])

“As a resident of the Sunset District, I am a frequent user of Golden Gate Park and Ocean Beach. I am OPPOSED to the proposed changes would impact the local area and detract from everyone’s enjoyment of our parkland.

First and foremost: These projects are short term misuse of natural beauty of Golden Gate Park and San Francisco’s general funds - we will be borrowing against our environment, land, property, and throwing good money (from the General funds and other resources) after bad, all of which belongs to future San Franciscans - See a link to the SPUR report below” (*Diane M. Rivera, email, November 28, 2011 [I-Rivera-02]*)

“There must be more of a natural link between the park and the beach.

The beach should not be marred with this very urban soccer complex proposal.” (*Diane M. Rivera, email, November 28, 2011 [I-Rivera-06]*)

“San Francisco is becoming increasingly more dense. Golden Gate Park is a treasure for all SF residents, and it is ALL of OUR responsibility to preserve this precious open space for everyone’s enjoyment and for the enjoyment of future generations of San Franciscans. ...

Here is an excerpt from SPUR’s findings:

‘Planning for uncertainty on a dynamic coastline we know that sea levels are rising due to melting polar ice and thermal expansion of the oceans. The State of California projects sea-level rise of 16 inches by 2050 and 55 inches by 2100. The frequency and severity of storms are also likely to increase, and local policymakers have no choice but to adapt. Climate-change adaptation consists of policy and design responses to the negative effects of climate change that have already been ‘locked in,’ regardless of how we address carbon emissions going forward. Adaptation will be required in many arenas, from water supply to bio-diversity to extreme heat events, but few are as vivid and pressing as sea-level rise.

At Ocean Beach, this means that the sort of erosion episodes that took place in 1997 and 2010 will happen more frequently. As the shoreline recedes, critical wastewater infrastructure along Ocean Beach will face increasing pressure and will need to be protected, reconfigured or abandoned. Natural habitat and recreational amenities are threatened as well. Although we have a pretty clear picture of what will happen as sea levels rise, there is a great deal of uncertainty about its timing and extent.

Ocean Beach is the city’s first real test in responding to the effects of climate change. The proximity of critical public infrastructure to the coast throws the challenges into high relief.

Where should we hold the coastline? What is the economic value of a beach? A dune system? A threatened bird species? When and how will private property be exposed to coastal hazards?

There are also significant limitations in the available data about the effects of sea-level rise. Existing studies paint a general picture of likely impacts but do not account for local factors like coastal armoring and topography, which will shape coastal processes." (*Diane M. Rivera, email, November 28, 2011 [I-Rivera-08]*)

"The Park cannot sustain or support the addition of a fourth playing field and extended hours of play. The quality of the Park experience will be diminished for both residents and visitors due to traffic congestion and lack of parking." (*David Romano, email, December 9, 2011 [I-Romano-05]*)

"Are we going to squeeze every last bit of life from Golden Gate Park and pave paradise to put up a parking lot." (*David Romano, public hearing comment [I-Romano2-05]*)

"I disagree with the DRAFT EIR that states: (the project) 'would not result in a substantial change in the character of the vicinity. Therefore, impacts related to land use were determined to be less than significant.' On the contrary, this project poses numerous threats to the character of our neighborhood and the peace and tranquility associated with the Beach Chalet area, including the current grass soccer fields and nearby trails." (*Mark Russell, email, November 23, 2011 [I-MRussell-01]*)

"Also I wanted to say I've only been blind for six years, and 35 years ago I played soccer and we played on a grass lawn and it was great. I wouldn't trade it for anything in the world.

And now that I'm blind, I enjoy the Park differently than other people do. I don't look at the grass and say, 'Wow, it looks awfully green today.' There are a lot of times when I'll be walking with my friends and I'll say, 'Wow, do you smell that? Do you smell the fresh-cut lawn?' And my sighted friends will say, 'Wow, you're right. That is one of the best smells in the world.'

You'll never get that with Astroturf. In fact, you'll get quite the opposite. I have smelled Astroturf, I've fallen on Astroturf. It's not a pleasant experience as a sportsman or for anyone else as a matter of fact.

Also there are memories I have of Golden Gate Park. It's been my backyard for years. In fact, I kind of consider it the City's backyard and, like the past speaker said, it's a restorative place. Even now that I'm blind I hear the birds, I hear the wind in the trees, I smell the cut grass. And there's this one memory I have. I was walking through the Park and it had just rained and the

sun had come out. And it was in the twilight in the gloaming, and the grass was luminescent.”
(*John Sargent, public hearing comment [I-Sargent-02]*)

“The DEIR treats project adverse impacts as if they are limited to an isolated site. In doing so, it tends to ignore the damage done to one’s entire experience of the western end of the park. There is a conflict between the philosophy of restoring the Murphy windmill and the philosophy of putting in a sports complex with artificial turf and stadium lights. The windmill restoration was completed in October, 2011.” (*Kathleen Stern, email, December 11, 2011 [I-Stern-02]*)

“A sports complex adjacent to the Park with artificial turf and stadium lighting is intrusive and incompatible with the surroundings.” (*Kathleen Stern, public hearing comment [I-Stern2-02]*)

“I write today to express my deep opposition to the proposed renovation plan to the Beach Chalet Soccer Fields. I believe that this renovation project is abusive ... and also to the legions of residents who find recreation, solace and sanctuary in the wild western end of Golden Gate Park. I for one have been enjoying the wildlife and wild spaces of that area for some thirty years. ...”
(*Joyce Warriner, email, December 8, 2011 [I-Warriner-01]*)

“The recreational use of the western end of the park by urban dwellers: seeking an hour or two of natural scenery, a chance to watch a red shouldered hawk hunt for gophers in the fenced-in grass soccer fields, an encounter with a raven or a red fox; or just a stroll along the old railroad trail that runs along the soccer fields is in my opinion tremendous and greatly under estimated apparently by the Dept of Rec and Parks and most certainly by the Draft EIR.

The Draft EIR virtually dismisses the potential impact on the wild and natural ambiance of the area. would like to ask that a more impartial study be done to address the impact on the aesthetics of this area, a study that would evaluate the recreational value of all of the uncounted individuals who enjoy the green; children who do not play on athletic teams, seniors, bird watchers, amateur photographers, just about anyone seeking a few moments of calm and respite, Considering the real impact of these drastic renovations on the park’s wildlife should be a key concern of the study.” (*Joyce Warriner, email, December 8, 2011 [I-Warriner-02]*)

“A really important thing I want to make a point of which is up here, I brought something just before I came. This --these have been playing fields for 80 years and this is not a change in use. I found something here, this is from 1959, it is the very first POA Journal that’s talking about the very first PAL team, it happened to be a soccer team. And it’s actually, this photograph was taken

at the Beach Chalet in May of 1959. So these fields were soccer fields back then.” (Lorraine Woodruff-Long, public hearing comment [I-Woodruff-Long2-02])

“This is not a zoning change. Let’s make sure that we make it right for the families and kids that have been using these facilities for generations. Thank you.” (Lorraine Woodruff-Long, public hearing comment [I-Woodruff-Long2-04])

“These sentiments demonstrate their passion for more soccer fields, but without respect for the location of this project inside of our nationally registered historic place. Like any beneficiary of a proposed project, they want to see it built as they desire.

The current DEIR has not adequately evaluated all the impacts to the Golden Gate Park or the surrounding neighborhoods. Please provide the additional analysis requested of the EIR by those who have taken the time to read the DEIR and find it incomplete.” (Nancy Wuerfel, letter, December 12, 2011 [I-Wuerfel2-01])

“I want to call to your attention your own agenda, Item 15, and it says that at 5:00 o’clock they’re going to talk about the project site would remain in its current as an athletic field complex within an urban park. Oh, that’s not true. This is not an urban park. This is Golden Gate Park. All night tonight you’ve heard about that. If this is what the problem is is that somebody has misunderstood Golden Gate Park as something ordinary, then we have a much larger issue. So I just want to put that out there.” (Nancy Wuerfel, public hearing comment [I-Wuerfel3-01])

Response LU-1

Many comments address the project’s potential impact on the existing land use character of the project site and vicinity. As noted under Impact LU-3 of the Initial Study, the land use of the project site currently consists of soccer fields, with supporting facilities including a parking area and a restroom building. The proposed project would modify the appearance of the site, but the existing use would remain the same and the defining characteristics of the site as an active recreational area would continue. As discussed in Section III, Plans and Policies, of the EIR, and reiterated in Section X.E, Plans and Policies, of this document, the Golden Gate Park Master Plan (Park Master Plan) designates the project site as a “Major Recreational Area.” According to Objective I, Policy C of the Park Master Plan, these areas are designed and maintained for specific, structured, and programmed recreational uses, including sports activities. The project would continue the use of the project site as a location for soccer use and other ground sports, and would remain consistent with its designation as a Major Recreational Area.

Multiple comments state the proposed project is out of character with the west end of Golden Gate Park. Commenters state that this end of the park is more forested and pastoral in character than the eastern end, and the project would be inconsistent with this area. While this characterization of the western portion of the park is accurate overall, the project site was designed and is used for athletic recreation (as discussed on p. III-7 of the EIR). As noted on page II-9 of the EIR, the western portion of the park also includes several other active recreational facilities, including the Golden Gate Park Golf Course, the Polo Fields, archery fields, Bercut Equitation Field, and the 45th Avenue playground, as well as the project site. Although the project site is surrounded by largely pastoral and sylvan areas, it has been designated and is publicly accessible specifically for athletic use and would continue that use under the proposed project.

In response to comment A-SFHPC-07, which states that mitigation measures should clearly state that the project design be as naturalistic as possible to match what currently exists, the project has already been designed to relate to the surrounding areas while still meeting the project objectives. As described on EIR page II-4, several modifications were made to the site design during the project design process, resulting in the proposed project as analyzed in the EIR, in order to integrate the project into the existing recreational features of Golden Gate Park. Nevertheless, as noted in the preceding paragraph, the project site is not considered a “naturalistic” area by SFRPD; it is an active recreational facility.

Several comments also discuss the project’s consistency with the City’s General Plan and the Park Master Plan in terms of the preservation of open space in this area of Golden Gate Park. Consistency with these plans is discussed more fully in Chapter III of the EIR, Plans and Policies (and in responses to comments in Section X.C of this document). In terms of land use, the character of the project site as an active recreational facility would be preserved under the proposed project. The project would require a General Plan Referral to identify potential conflicts, including those involving land use character, with the General Plan. Any physical environmental effects that could result from conflicts with the General Plan are analyzed in the relevant sections of the EIR. The decision-makers would therefore consider other potential inconsistencies with the General Plan, independent of the environmental review process, as part of the decision to approve or disapprove the proposed project. Any potential conflict not identified in this environmental document would be considered in that context and would not alter the proposed project’s physical environmental effects analyzed in this EIR.

Commenters also refer to potential effects of the proposed project on other areas of Golden Gate Park as well as the surrounding neighborhoods and public facilities, including nearby Golden Gate National Recreation Area Lands such as Ocean Beach. Effects on sensitive natural resources and wildlife in the vicinity of the project site are discussed in Section IV.F, Biological Resources, of the EIR and in Section X.M of this document. Traffic and transportation effects in nearby neighborhoods are addressed in Section IV.D of the EIR and Section X.K of this document. Several of the comments discuss the proposed project in terms of land use effects related to the aesthetic character of the project site. Impacts of the project on the visual and aesthetic character of the project site are addressed in the EIR in Section IV.B, Aesthetics. Potential impacts regarding

changes in the historic character of the project site and the historical cultural landscape are discussed in the EIR in Section IV.C, Cultural Resources. Please also refer to responses to comments regarding impacts to the visual and historic character in Section X.I, Aesthetics and Section X.J, Cultural Resources, respectively, of this document.

A number of the comments summarized above also express opposition to the proposed project. These comments are noted and will be considered by the decision-makers when the matter of project approval is before them.

Comment I-Learner-11 requests that Figure IV.A-1 be revised to identify debris disposal sites within Golden Gate Park. These areas are not relevant to the proposed project, or analysis of impacts associated with the proposed project.

In response to comment A-NPS-03, which states that text on page IV.A-3, 1st sentence should be revised to be consistent with Figure IV.A-1, which appears to show the Great Highway as being approximately 250' away from the project site, the text has been revised as follow:

The Great Highway, a four-lane road that runs the length of the San Francisco 's western shoreline, is located about ~~one thousand~~ 250 feet west of the project site.

This revision does not change the analysis or conclusions presented in the EIR.

H. Aesthetics

H.1 Overview of Comments on Aesthetics

The comments and corresponding responses in this section cover topics in Chapter IV, Section IV.B, of the EIR. These include topics related to:

- AE-1, Aesthetics
- AE-2, Nighttime Lighting/Views Effects
- AE-3, Daytime Views Effects
- AE-4, Consistency with City's Plans and Policies

To the extent that comments responded to in this section also discuss other topics, such as land use, biological resources or consistency with plans and policies, these comments are also addressed in those respective sections of the Responses to Comments document.

H.2 Aesthetics [AE-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFHPC-03	I-Baum-01	I-Khan-03	I-GMiller-05
O-PAR2-06	I-Citron-04	I-Kohn2-02	I-GMiller-11
O-PAR3-07	I-FDavis-01	I-Koivisto-15	I-GMiller2-02
O-SCSFBC-08	I-FDavis-02	I-Koivisto-17	I-GMiller2-03
O-SPEAK2-05	I-de Forest-03	I-Koivisto-19	I-GMiller2-04
O-SPEAK2-09	I-Dennenberg-02	I-Kuhn-02	I-GMiller2-11
O-SPEAK3-08	I-Edelson-04	I-Kukatla-02	I-GMiller3-03
O-SPEAK4-05	I-Hillson-01	I-Learner-17	I-Posthumus-02
O-SPEAK4-09	I-Hillson2-04	I-McDevitt-06	I-Richman-03
I-Anderson-02	I-Jungreis2-37	I-GMiller-02	I-Warriner-02
I-Barish-07	I-Jungreis2-38		

"The HPC disagrees with the finding in the DEIR and believes there will be a big change to the aesthetics of the park." (*Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-03]*)

"Despite significant alterations that would result in the appearance of the western end of the park from the proposals for the soccer fields, the DEIR concludes that they would not significantly impact its aesthetics. While that may be the opinion of some, it does not take into account the 'cumulative effects' of not only the proposals for the soccer fields but also of the proposed water

treatment plant that would be adjacent to them.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-06]*)

“Aesthetics: Selected viewpoints and lighting simulations are minimal and questionable. View choices seem to be chosen intentionally to avoid the areas of greatest impact of the project. Viewpoint B is too far south and looks north, while the fields are east of this viewpoint. If this view were taken further north, the project and its impacts would be clearly seen under the trees that border the fields. Viewpoint E is located midway up the hill instead of from the top of Sutro Park. Sutro Park is used at night for Dark Sky viewing, contrary to the DEIR statements. There are no simulations from the road that winds up to the Cliff House area. The preliminary environmental studies did have simulations from this location. The road up to the Cliff House is not only a classic SF viewing area but is also on the 49-mile scenic drive. There is no viewpoint from Ocean Beach or the Promenade, looking directly at the fields.

We are requesting day and night-time simulations for all of these areas. In addition, the night-time simulations should include all of the various typical weather conditions at BCAF, including but not limited to a low-lying fog as well as the higher marine layer of clouds typical at BCAF, the reflection of the light from the hard surface of the field, and the bounce out to the neighborhood. All night-time simulations must be done with the fields at maximum lighting at night in full darkness, with the time of day and date of the year clearly stated.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-07]*)

“In other places, the DEIR does not mention the Water project at all under cumulative impacts. For instance, page IV.B-35 says:

Impact C-AE: The proposed project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would not have a cumulatively considerable contribution to impacts related to aesthetics.

Page IV.B-35 describes several other more minor and more distant project as having no visual impacts, but neglects to mention the Water project. Page IV.B-35 then incorrectly states that ‘**No other projects in sufficiently close proximity to the project site are reasonably foreseeable**, such that cumulative effects related to visual character, urban design, view corridors, or scenic views, or light and glare would be anticipated.’ As Exhibit B shows, the Water project is directly adjacent to the proposed Beach Chalet project site. The clearing of trees and tall ‘shrubs’ (up to 30-feet tall) would certainly have at least a visual impact on the western end of Golden Gate Park, and would be a cumulative loss of habitat birds, insects, and other wildlife.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-08]*)

“With the right graphics, it can be demonstrated that the impact of the proposed project would be visually significant; the EIR does not contain adequate graphics or photographs taken in sufficient light and thus the EIR says the project would not be visually significant (see the photographs presented in Figs, 11-2, 11-3 and 11-5 which are so dark that they cannot be read and as such do not constitute readable graphics as required by CEQA);” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-05]*)

“The proposed project will ...compromise the visual and functional integrity with the increase in activity and hours of operation of the proposed sports facility.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-09]*)

“**Visually significant impacts** The proposed project would cause visually significant impacts from numerous vantage points but the EIR does not contain adequate graphics or photographs taken in sufficient light. Most photographs appear to have been taken near dusk and lack focused detail. There are many visual vantage points which are not represented, enabling readers to say the project would not cause visually significant impacts.

...A significant impact will result on the visual quality of the west end of the Park; the graphics and the text are inadequate in showing this impact. A very dark satellite overhead image is not satisfactory.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-08]*)

“With the right graphics, it can be demonstrated that the impact of the proposed project would be visually significant; the EIR does not contain adequate graphics or photographs taken in sufficient light and thus the EIR says the project would not be visually significant (see the photographs presented in Figs, 11-2, 11-3 and 11-5 which are so dark that they cannot be read and as such do not constitute readable graphics as required by CEQA).” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-05]*)

“The proposed project will compromise ... the visual and functional integrity with the increase in activity and hours of operation of the proposed sports facility.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-09]*)

“Both during the day and at night, show two simulations for each view. One is to show the amount of light and darkness currently in this area. The Second is to show, in the full dark, all

lighting, including the proposed stadium lights at the highest amount of lighting planned for the Beach Chalet fields and all proposed parking and pedestrian lighting:

From Ocean Beach due west and south west of the project area, looking back to Golden Gate Park and the area of the Beach Chalet Athletic fields;

From the Great Highway Promenade immediately across from the Beach Chalet, looking back to Golden Gate Park and the Beach Chalet Athletic Fields;

From the road up to the Cliff house, looking down to the beach and to the Beach Chalet Athletic Fields.

From the railroad path due west of the center of the Beach Chalet fields, looking at the project area. Show also the change in light on the path area from the current darkness to the fully lighting project." (*Raja Anderson, letter, December 12, 2011 [I-Anderson-02]*)

"The following four additional views of the project should be included: a view from the Ocean Beach due west of the project looking east toward the project both during the day and after dark, and a view from the Cliff House looking toward the project both during the day and in the evening." (*Jean Barish, letter, December 12, 2011 [I-Barish-07]*)

"How could any reasonable human being conclude that the aesthetic effect of the huge banks of lights for night time play was 'insignificant'? That is ludicrous. One might conclude that the fields were a good idea anyhow. But this one judgment demonstrates that the intention of those doing the study was to end up making it easy to approve the soccer fields.

I point to the aesthetic issue as only one of many examples of such bias by the writers of the DEIR." (*Terry Baum, letter, December 12, 2011 [I-Baum-01]*)

"Both during the day and at night, show two simulations for each view. One is to show the amount of light and darkness currently in this area. The Second is to show, in the full dark, all lighting, including the proposed stadium lights at the highest amount of lighting planned for the Beach Chalet fields and all proposed parking and pedestrian lighting:

- From Ocean Beach due west and south west of the project area, looking back to Golden Gate Park and the area of the Beach Chalet Athletic fields;
- From the Great Highway Promenade immediately across from the Beach Chalet, looking back to Golden Gate Park and the Beach Chalet Athletic Fields;

- From the road up to the Cliff house, looking down to the beach and to the Beach Chalet Athletic Fields.
- From the railroad path due west of the center of the Beach Chalet fields, looking at the project area. Show also the change in light on the path area from the current darkness to the fully lighting project." (*Ben Citron, letter, December 11, 2011 [I-Citron-04]*)

"Not only does the Report essentially gloss over or ignore the aesthetic and environmental aspects of what amounts to paving over one percent of Golden Gate Park; it ignores or deliberately minimizes crucial technical aspects of the proposal." (*Fred W. Davis, Letter, July 15, 2011 [I-FDavis-01]*)

"The very idea of turning an 11 acre meadow into a formal 'Astroturf'-paved 'night baseball-lit' sports arena is an obscenity and contrary to everything Golden Gate Park should be! Do you think John McLaren would approve?? Really?? Even if human aesthetics were of no concern; what of ..." (*Fred W. Davis, Letter, July 15, 2011 [I-FDavis-02]*)

"Nor do I believe that the proposed project 'would not have [read 'make'] acumulatively considerable contribution to impacts related to aesthetics.' Rather, it would probably encourage future 'developers,' whether public or private, to inflict unsightly 'improvements' upon the area. A large and always vulnerable part of the glory of San Francisco is that it has so many areas that, though built upon, adjoin ones of relatively unspoiled nature. Keep San Francisco beautiful!" (*John de Forest, Letter, December 11, 2011 [I-de Forest-03]*)

"Both during the day and at night, show two simulations for each view. One is to show the amount of light and darkness currently in this area. The Second is to show, in the full dark, all lighting, including the proposed stadium lights at the highest amount of lighting planned for the Beach Chalet fields and all proposed parking and pedestrian lighting:

- From Ocean Beach due west and south west of the project area, looking back to Golden Gate Park and the area of the Beach Chalet Athletic fields;
- From the Great Highway Promenade immediately across from the Beach Chalet, looking back to Golden Gate Park and the Beach Chalet Athletic Fields;
- From the road up to the Cliff house, looking down to the beach and to the Beach Chalet Athletic Fields,

- From the railroad path due west of the center of the Beach Chalet fields, looking at the project area. Show also the change in light on the path area from the current darkness to the fully lighting project." (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-02]*)

"Both during-the day and at night, show two simulations for each view. One is to show the amount of light and darkness currently in this area. The Second is to show, in the full dark, all lighting, including the proposed stadium lights at the highest amount of lighting planned for the Beach Chalet fields and all proposed parking and pedestrian lighting:

- From Ocean Beach due west and south west of the project area, looking back to Golden Gate Park and the area of the Beach Chalet Athletic fields;
- From the Great Highway Promenade immediately across from the Beach Chalet, looking back to Golden Gate Park and the Beach Chalet Athletic Fields;
- From the road up to the Cliff house, looking down to the beach and to the Beach Chalet Athletic Fields.
- From the railroad path due west of the center of the Beach Chalet fields, looking at the project area. Show also the change in light on the path area from the current darkness to the fully lighting project." (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-04]*)

"The DEIR has major flaws and is inaccurate and incomplete with the findings on aesthetic impacts. I oppose completely turfing it artificially and with all the big lights.

For example, the criteria for judging visual impacts are arbitrary and inconsistent with my personal experience." (*Rose Hillson, letter, December 7, 2011 [I-Hillson-01]*)

"Finally, important views of missing completely. The DEIR does not simulate the classic view from the Cliff House. The DEIR has no view from the beach towards the Park. Here we see the Beach Chalet with the moon rising behind. What will this view look like with 150,000 watts of light next to it." (*Rose Hillson, public hearing comment [I-Hillson2-04]*)

"Aesthetically, the western view of Golden Gate Park from Ocean Beach will be blighted by the reduction in trees and the installation of numerous tall artificial lighting poles and by the artificial lighting itself: there is insufficient analysis of this aesthetic impact." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-37]*)

“The DEIR uses inferior simulated pictures of the fields, amenities, environmental impacts, and lighting: there is insufficient analysis of appropriately accurate simulations of these elements.”
(Jason Jungreis, email, November 21, 2011 [I-Jungreis2-38])

“Aesthetics: Both during the day and at night, show two simulations for each view. One is to show the amount of light and darkness currently in this area. The Second is to show, in the full dark, all lighting, including the proposed stadium lights at the highest amount of lighting planned for the Beach Chalet fields and all proposed parking and pedestrian lighting:

- From Ocean Beach due west and south west of the project area, looking back to Golden Gate Park and the area of the Beach Chalet Athletic fields;
 - From the Great Highway Promenade immediately across from the Beach Chalet, looking back to Golden Gate Park and the Beach Chalet Athletic Fields;
 - From the road up to the Cliff house, looking down to the beach and to the Beach Chalet Athletic Fields.
 - From the railroad path due west of the center of the Beach Chalet fields, looking at the project area. Show also the change in light on the path area from the current darkness to the fully lighting project.” (Tehmina Khan, email, December 10, 2011 [I-Khan-03])
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“Through faulty analysis, invalid premises and specious conclusions, not to speak of carefully chosen locations from which all photographs were taken, the drafter of the EIR has achieved the following:

He has managed to discount the aesthetic impact of 60 lights, including ten 60-foot stadium lights.” (Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-02])

“For the views of the projected site, the claim is made that the site is visually obstructed by trees on all sides. This may be true now (though it is not visually obstructed from large portions of the western trail), but people who live here and frequent the area have seen the great changes that occur to the views of these fields after storms. And, with the cutting of trees/shrubs anticipated by the project, many more of these obstructions will be removed. Since the project proponents have already identified the trees/shrubs that will need to be destroyed in order to put in the light towers and synthetic turf, why aren’t there pictures of the site with these trees/shrubs highlighted in the DEIR so that neighbors can also know which trees/shrubs are being discussed? Transparency leads to a better discussion of the issues by all concerned, as opposed to neighbors scrambling to try to get information in the dark. Additionally, since the light towers rise 20 to 30 feet above the obstructing vegetation, they will be visible no matter what. Aesthetically, during daytime, the towers would be ugly and damage the scenic view of the windmills and tree

canopy with the western part of the city rising behind them” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-15]*)

“The report continues on p. 11 to state that the site is not visible from the south or southwest or the Ocean Beach public sidewalk. The lights, though, will be visible from all three of those areas. Golden Gate Heights is again ignored in the discussion.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-17]*)

“The views provided are inadequate. Specifically the view from 48th and Lincoln is at street level, yet living areas in houses in the outer Sunset are on the second or third floors, and the apartments in that immediate area are four or five stories tall. The apartments across from Safeway are much taller. Even from a second-floor height, the 60’ light towers will be blindingly visible. Since Lincoln at 48th is not an area frequented by pedestrians at night (either the wind or the fog prevents casual nighttime strolling), the main impact of the lights is on the residents. Yet this view, which purports that the lights will have minimal impact on the area, fails to show what the lights will look like from the heights the residents will be at when viewing them.

The view from 48th and Lincoln is disingenuous. Simple geometry shows that very little in the park will be visible above the tree line when the triangle formed by the viewer, the lighting towers at ground level, and the top of the lighting towers has such a steep angle for the hypotenuse. Farther back from the park, though, where the same angle of vision is much smaller, much more is visible. Specifically, standing at the intersection of Judah and La Playa looking north, not only would the light towers be visible, but the light would be impinging on all the streets in line with the fields for multiple blocks.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-19]*)

“The 60 foot lighting towers, while acknowledged as being bright are considered not aesthetically significant, because of their relatively small percentage of the greater visual field . That depends on where you are standing. I happen to live across from Sutro Heights Park., and even from there, the present view would be degraded.” (*Thomas Kuhn, email, December 11, 2011 [I-Kuhn-02]*)

“I find the Draft Environmental Impact Report to be deeply flawed.... I request that the following areas be explored further:

1) The grassy field along with the trees and shrubs is a living ecosystem that provides aesthetic (natural features and natural beauty of grass and trees) and health benefits (feeling of touching grass and tree barks as opposed to touching plastic and concrete). Please show how the aesthetic and health benefits will be mitigated.” (*Rakesh Kukatla, email, December 11, 2011 [I-Kukatla-02]*)

“IV.B-16-33: It would be helpful to see a map identifying the locations of the viewpoints used in evaluating the view impacts of the field lights.” (*Deborah Learner, letter, November 29, 2011 [I-Learner-17]*)

“The lights- This is extremely incongruous to the historical and asthetic fabric of Golden Gate Park. It would create a use factor at night that will certainly bring the typical urban problems that the Park is supposed to be a respite from. The Park is a naturalised horticultural jewel that was intended to be a sanctum from the urban hardscape. ...” (*Terry McDevitt, email, January 1, 2012 [I-McDevitt-06]*)

“Some of the Draft’s observations about the project’s impact of visual resources of the Park and its surroundings are in error or incomplete.” (*Greg Miller, letter, December 9, 2011 [I-GMiller-02]*)

“Section IV -B of the DEIR contains a number of visual simulations intended to help the reader form an impression of the visual impact of the project. A significant amount of information is missing or wrong.

Figure IV.B-3 illustrates a direct view of the fields with the 60’ night lighting poles. In the simulation, the poles appear to be positioned between each of the fields. This is inconsistent with the Project Description which states, ‘There would be two light standards each at the north and south ends of the facility ... The other six light standards would be located between the centermost fields ...’ (Page 11-15) The Figure should be corrected in the Final EIR.” (*Greg Miller, letter, December 9, 2011 [I-GMiller-05]*)

“The DEIR states that ‘Although only scenic vistas need be considered under CEQA, views from other nearby public vantage points are also discussed and depicted herein, for informational purposes’ (Page IV.B-19) The DEIR includes both day and night simulations of the view from Sutro Heights. Curiously, the DEIR does not even mention a much more famous viewpoint - southward along the beach from the Cliff House area. Such a view, especially at sundown, should be discussed and simulated in the Final EIR. It is one of the iconic viewpoints of the City. It is also experienced by many more people.” (*Greg Miller, letter, December 9, 2011 [I-GMiller-11]*)

“The bulk of the DEIR’s section on Aesthetics is devoted to a series of computer-adjusted photographic ‘Visual Simulations’ of typical day and evening views. As described on page IV.B-

17, 'The evaluation of potential impacts associated with the proposed project includes both a comparison of the 'before' and 'after' visual conditions, as portrayed in the simulated images and a qualitative assessment of the degree of visual change that would result in the project'.

For such an analysis to be credible, ... conditions must be met:

1. The choice of sample viewpoints must be representative of the key visual resources of the surrounding area.

Omitting well-recognized and important viewpoints or selecting a direction of view that deliberately avoids 'seeing' obvious project impacts undermines the credibility of the entire analysis." (*Greg Miller, letter, December 9, 2011 [I-GMiller2-02]*)

"As I have pointed out in another comment letter, the DEIR has committed a number of such errors. To summarize:

The view southeast from the Cliff House area, along the beach is not even mentioned in the DEIR, despite the assertion that the, ' ... effects on scenic vistas need to be considered under CEQA' (page IV.B-19)

The views from the Cliff House are world famous and have helped define the identity of San Francisco in the minds of millions of visitors and residents over the years. The final EIR should contain an evening simulation from this viewpoint." (*Greg Miller, letter, December 9, 2011 [I-GMiller2-03]*)

"The trail along the railway grade is a popular walking path connecting the Murphy Windmill on the south with the Beach Chalet and Dutch Windmill on the north. The DEIR page IV.B-11 states, 'This view is considered scenic for the purpose of this EIR because it is made up of naturalistic features associated with Golden Gate Park and is used by the public for recreational purposes'. Figure IV.B-4 simulates a view from the southern end of the trail, looking north. In the discussion of the simulation results, the report states, 'None of the elements proposed as part of the project would be visible from this vantage point and the project site would continue to be obscured by the surrounding vegetation' (page IV.B-21).

This conclusion is true for this particular location on the trail, but it is misleading. There are numerous points along the same trail a bit further north (nearer to the Beach Chalet) where the field can clearly be seen under and through the intervening tree canopy. The view of the fields is an important component of the experience of these segments of the trail. There are several places where the sports light towers will be seen over the trees from the trail. See Photos 1, 2, and 3. The final EIR should incorporate a simulated viewpoint in this area of the trail." (*Greg Miller, letter, December 9, 2011 [I-GMiller2-04]*)

“Views over and through the trees from the old railroad path looking south east - the light towers will be clearly visible here, both during the day and at night.” (*Greg Miller, letter, December 9, 2011 [I-GMiller2-11]*)

“Page IV.B-36 states, ‘A lighting study prepared for the proposed project by Musco Lighting illustrates that within a very short distance of the project site boundaries (approximately 150 feet), light measurements at heights of approximately 60, 70, 80, 90, and 100 feet above ground would drop to zero, due to the shielding and focusing of the lights.’ The associated footnote 7 cites, ‘Musco Lighting, Illumination Summary, January 29, 2010 and April 28, 2010’. On Friday, December 9, 2011, I examined the cited report in the SF Planning Department files. The Musco report is out of date - the number of sport lighting standards, their location, and the total number of lamps supported by the standards do not match the lighting system proposed in the DEIR on page II-15.” (*Greg Miller, letter, December 11, 2011 [I-GMiller3-03]*)

“The western end also contains many lakes and meadows. The introduction of a sports complex with artificial turf and stadium lights is out of character - aesthetically, historically and culturally - with the rest of the western portion of the Park. The sight of the 60-foot-tall galvanized steel light poles would be intrusive during the day. The lighting will be very intrusive on the extended neighborhood, as well as the beach area.” (*Yope (Johannes) Posthumus, email, December 12, 2011 [I-Posthumus-02]*)

“And speaking of those 60-foot-high spotlights (the average single-family house in San Francisco, by the way, is approximately 25 feet above the sidewalk), how can an examining body come to the conclusion the lights ‘would not have an adverse effect on a scenic vista, etc.’ (IV.B-18) when there is no indication in your pages of anyone in the surrounding neighborhoods being asked their opinion of the proposed lights, nor the proposed project in general. You call this an Environmental Impact Report, yet overlook the most vital segment of the environment there is in a city - the people who live there. The people who own property there.” (*Dan Richman, letter, no date [I-Richman-03]*)

“The recreational use of the western end of the park by urban dwellers: seeking an hour or two of natural scenery, a chance to watch a red shouldered hawk hunt for gophers in the fenced-in grass soccer fields, an encounter with a raven or a red fox; or just a stroll along the old railroad trail that runs along the soccer fields is in my opinion tremendous and greatly under estimated apparently by the Dept of Rec and Parks and most certainly by the Draft EIR.

The Draft EIR virtually dismisses the potential impact on the wild and natural ambiance of the area. would like to ask that a more impartial study be done to address the impact on the aesthetics of this area, a study that would evaluate the recreational value of all of the uncounted individuals who enjoy the green; children who do not play on athletic teams, seniors, bird watchers, amateur photographers, just about anyone seeking a few moments of calm and respite, Considering the real impact of these drastic renovations on the park's wildlife should be a key concern of the study." (*Joyce Warriner, email, December 8, 2011 [I-Warriner-02]*)

Response AE-1

Comments A-SFHPC-03, I-FDavis-01, I-FDavis-02, I-GMiller1-02, I-Hillson-01, I-Jungreis2-37, I-Jungreis2-38, O-SPEAK3-8, I-Warriner-02, I-Baum—01, I-Richman-03, I-Kuhn-02, I-Posthumus-02, Kohn20-2 and I-Kukatla-02 generally disagree with conclusions presented in Section IV.B., Aesthetics, and state that aesthetic impacts of the project would be significant. These comments further state that there is insufficient analysis to support the conclusions reached in this section. The EIR uses various methods to assess impacts of the proposed project on aesthetic resources, including conducting site reconnaissance, evaluating the proposed project plans and drawings, analyzing light distribution from a light study prepared specifically for the project, reviewing photographs of the project area, preparing daytime and nighttime visual simulations, and performing a comparative analysis of nighttime views. In preparing visual simulations, viewpoints included scenic areas and short-range, mid-range, and long-range public views of the site. Thus, the analysis is comprehensive and is responsive to the City's CEQA significance criteria in that it considers whether implementation of the proposed project would: (1) have a substantial adverse effect on a scenic vista; (2) substantially damage scenic resources, including but not limited to trees, rock outcroppings, and other features of the built or natural environment that contribute to a scenic public setting; (3) substantially degrade the existing visual character or quality of the site and its surroundings; or (4) create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area or that would substantially affect other people or properties. Specifically, the EIR concluded that the proposed project would not have a substantial adverse effect on a scenic vista or substantially damage scenic resources because the project site is located at the edge of the Golden Gate Park, where naturalistic features (i.e., the park, beach, ocean) and urbanized features (i.e., the Great Highway, Beach Chalet Restaurant, Murphy Windmill and Millwright's Cottage) interrelate with one another, and because the project site is screened and would continue to be screened from most public views in the area (criteria 1 and 2). The EIR further concluded that the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings because the proposed project would appear generally consistent with the overall look and feel of other nearby facilities, in the sense that most of them are composed of both naturalistic and built forms, because the new features of the site, while visually different from existing conditions, would not be demonstrably adverse and would be consistent with the site's primary function as a formally developed recreational area, and because the existing and proposed vegetation would continue to screen the project site from most of the surrounding views (criterion 3). Lastly, the

EIR concluded that the proposed project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area or that would substantially affect other people or properties because the proposed project, because the nighttime lighting, while noticeable from some of the surrounding areas during evening games, would not result in noticeable amounts of spillover (based on a lighting study) and would not reach homes located in the surrounding residential neighborhoods (criterion 4).

The EIR recognizes that aesthetic analyses are inherently subjective and, as acknowledged on p. IV.B-28, in the context of the replacement of grass with synthetic turf, what one individual may find to be offensive, others may not. The same holds true for other components of the proposed project: what may be visually intrusive to one observer may be little noticed by another. The approach taken in the EIR is consistent with CEQA requirements and the City's CEQA procedures, and impacts were evaluated by professionals experienced in CEQA analysis. The narrative analysis and the visual simulations presented in Impacts AE-1 and AE-2, EIR pages IV.B-29, that, with the exception of the new field lighting (discussed in Impact AE-3 and below in response to Comment AE-2), conclude that the changes proposed as part of the project would result in aesthetic effects and alteration of visual character that would be limited in degree beyond the immediate project site and that the project "would not have a substantial adverse effect on a scenic vista or substantially damage scenic resources" and "would not result in substantial adverse impacts on the visual character and quality of the project site." Therefore, the aesthetics analysis in the EIR is sufficient to support the conclusions reached.

Comments I-Anderson-02, I-Barish-07, I-GMiller2-02, I-Citron-04, I-Dennenberg-02, I-Edelson-04, I-Khan-03, I-GMiller2-04, I-Koivisto-17, I-Koivisto-19, O-PAR3-07, O-SPEAK2-05, O-SPEAK3-8, O-SPEAK4-05, and I-Kohn2-02 state that the selected views for visual simulations are insufficient, question the methodology employed in the simulations, or request that additional simulations be prepared from other areas surrounding the site. Some comments further state that visual simulations deliberately omit certain viewpoints to understate the impacts. The EIR identifies viewpoints that are representative of the types of views available of the project site from public vantage points. These viewpoints were identified based on their sensitivity, site visibility, and amount of use by the public. In determining viewpoints to be included in the EIR analysis, a wide range of potential viewpoints was considered for sensitivity and visibility, and then a number of these sites were photographed. The listed sites under consideration were then narrowed and would best represent the worst-case impact on aesthetic resources from most locations. Vantage points include higher elevations from which the entire site can be seen within its surrounding context. It is noted that visual simulations can only represent a moment in time, and it is not possible to represent all possible views of the site, nor is this required under CEQA: "An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences" (State CEQA Guidelines Section 15151). In response to comments that request that various weather conditions be simulated, simulating variability in weather would distort the simulations and diminish their accuracy, because views of the project site would be obscured. Clear weather conditions were chosen in simulations specifically because the site would be most visible during that time and therefore the changes proposed under the project

would be most apparent. Also see page IV.B-17 in the EIR and additional discussion under Response AE-2 concerning visual simulation methodology.

In response to comments such as I-Jungreis2-37, I-GMiller1-11, I-GMiller2-3, and I-Hillson2-04, which state or suggest that views other than those simulated would be adversely affected by the proposed project and that they should be simulated and/or discussed in the EIR (for example, Cliff House area, other points along the Great Highway, other areas of the park etc.), as discussed above, the EIR considered a selection of viewpoints that generally represent the types of views available of the project site. As stated on page IV.B-3, while the project site is visible from other more distant viewpoints in San Francisco, such as Golden Gate Heights (approximately 2 miles from the project site, compared to Sutro Heights, which is approximately 0.6 mile north of the project site), changes in the site's appearance would be most pronounced from the vantage points selected for EIR visual simulations. It is noted that views and potential impacts from the Cliff House area would be similar to views and impacts from Sutro Heights, which is nearby, at a similar elevation, and also provides direct views of the project area to the south. Thus, the visual simulations in the EIR representing views and potential impacts from Sutro Heights would be similar to any produced for the Cliff House area.

In response to comment I-GMiller1-05, which states that Figure IV.B-3 is inconsistent with a statement in the Project Description on page II-15 that states that "there would be two light standards each at the north and south ends of the facility... The other six light standards would be located between the centermost fields." Figure IV.B-3 does, in fact, illustrate the correct configuration of the proposed light standards. The light standard in the foreground would be one of the two standards installed at the north end of the site. The other light standards shown in the distance would be those installed between the center fields. It is noted that EIR Figure II-6, which includes placement of proposed light standards, has been revised to clarify the location of other project features, such as landscaping. See Chapter 11, DEIR Text Revisions.

In response to comment I-Koivisto-15, which states that the EIR should include simulations of the project once the trees and shrubs have been removed, the removal and replacement of vegetation is shown in EIR Figure IV.B-3 on page IV.B-20 (in the background of the field). Some planting would also occur in the foreground (north of the field) but it is not simulated because that would block the majority of this view. As shown in the visual simulation, the trees and shrubs that would be removed would be noticeable in the immediate location of the removal, but would not be noticeable from most public viewpoints, and therefore additional visual simulations are not warranted.

Some comments (I-de Forest-03, O-PAR2-06, O-SCSFBC-08) state that the project would result in a cumulatively considerable contribution to impacts related to aesthetics when combined with the proposed San Francisco Westside Recycled Water Project and the proposed clearing of trees and shrubs near the project site. The EIR discussed cumulative impacts of the proposed project under Impact C-AE on page IV.B-37 and determined them to be less than significant. As discussed, the various projects that contribute to the geographic context for the cumulative analysis (i.e., the area within a 0.5-mile radius of the project site) may improve the visual context, as in the case of the

Murphy Windmill project, or would not be within the same viewshed at any given moment, i.e., observers of one would not simultaneously be able to see another. In addition, the proposed San Francisco Westside Recycled Water Project would generally not be visible to the general public because of its more obscured location.

Comment I-GMiller3-03 states that the Musco Lighting, Illumination Summary is out of date and the lighting standards do not match the proposed field lighting in the EIR. The assertion that the lighting standards in the Illumination Summary do not match the proposed field lighting in the EIR is erroneous. The Musco Lighting Illumination Summary, prepared in January 2010, analyzes the same lighting standards described in the Project Description of the EIR. As stated on p. II-15 of the Project Description, the proposed lighting would consist of 10, 60-foot tall light standards using 10, 1,500-watt metal halide lamps, which is consistent with the "Equipment List for Areas Shown," as displayed in the upper left corner of the Illumination Summary. In addition, technological advancements related to sports field lighting have not progressed so rapidly since January 2010 as to have rendered the information presented in Illumination Summary outdated.

Regarding comment I-Learner-17, which requests that a map be provided identifying the location of the viewpoints used in evaluating the view impacts of the field lights, such a map is provided in EIR Figure IV.B-1 on page IV.B-4.

Comments O-SPEAK2-09 and O-SPEAK4-09 state that the proposed project will compromise the visual and functional integrity with the increase in activity and hours of operation of the proposed facility. The proposed project is located on a site that is consistent with the uses identified by the various plans and policies governing the site (see Chapter III, Plans and Policies, of the EIR). As discussed in Chapter III, the proposed project would "improve the site's function as a recreational resource by increasing the amount of potential play hours at the site, introducing spectator seating, renovating the restroom building to serve more park users, provide a higher quality facility and meet ADA standards, meet the latest water efficiency standards, and providing a small playground that would allow greater use of the facility by the public." The proposed project would be consistent with the Golden Gate Master Plan, which identifies the site as a "Major Recreational Area," which is intended to meet specific recreational and sports needs. The proposed project, therefore, would be consistent with its intended function, including the proposed level of activity, that has been anticipated and planned for by the SFRPD. The intensity of the site's use may be noticeable, but it would not be considered an adverse visual impact.

To the extent that a change in operating hours would impact existing visual resources or views currently experienced in the project vicinity, these have already been considered in the EIR and are discussed further in this Comments and Responses document. As discussed in Section IV.B, Aesthetics, of the EIR, the proposed project would result in less than significant impacts related to the visual character and quality of the project site and its surroundings (see the discussion under Impact AE-2). As noted, while the visual character of the project site would be noticeably different due to the introduction of features that would result in a more developed look as well as the introduction of more visitors to the site, this would not demonstrably degrade the visual

character of the site because it is intended for public use and already experiences a high number of visitors for games, tournaments, practices and other recreational activities.

H.3 Nighttime Lighting/Views Effects [AE-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-NPS-01	I-Bufferum-04	I-Koivisto-14	I-GMiller2-12
A-NPS-06	I-Citron-07	I-Koivisto-16	I-GMiller2-13
A-NPS-07	I-JClark-01	I-Koivisto-18	I-GMiller2-14
A-NPS-08	I-JClark-02	I-Koivisto-20	I-GMiller2-15
A-NPS-09	I-Cope-04	I-Koivisto-21	I-GMiller4-01
A-NPS-10	I-Corley-01	I-Koivisto-22	I-Myers-02
A-SFPC-Antonini-05	I-Darrigrand & Claflin-02	I-Koivisto-23	I-Ogilvie-08
A-SFPC-Antonini-09	I-de Forest-02	I-Koivisto-24	I-O'Leary-04
A-SFPC-Borden-04	I-Denefeld-02	I-Koivisto-27	I-O'Leary2-01
A-SFHPC-04	I-Denefeld2-04	I-Koivisto-28	I-O'Rorke-01
O-GGAS2-17	I-Dennenberg-05	I-Koivisto-29	I-Pfister-02
O-GGAS3-03	I-Donjacour-01	I-Koivisto-30	I-Pfister-04
O-GGAS3-04	I-Dowell-01	I-Koivisto-34	I-Ray-09
O-PAR3-02	I-Edelson-07	I-Koivisto-39	I-Ray2-01
O-RCA-03	I-Edelson2-04	I-Koivisto-52	I-Ray6-01
O-SCSFBC-27	I-Englander2-04	I-Koivisto2-01	I-Richards-04
O-SCSFBC-28	I-Foree-Henson-01	I-Koivisto2-02	I-Richman-02
O-SCSFBC-29	I-Goggin-01	I-Koivisto2-03	I-Richman-03
O-SCSFBC-31	I-Goggin-03	I-Koivisto2-04	I-Rivera-05
O-SCSFBC-32	I-Goggin-04	I-Lampert-01	I-Roller-01
O-SFCC-03	I-Goggin-05	I-Learner-18	I-MRussell-04
O-SFPARKS-38	I-Goggin2-01	I-Leifheit-01	I-Schoggen-06
I-Anderson-05	I-Hahn-04	I-BLewis-07	I-Solow2-06
I-Anderson-20	I-Hicks-01	I-Lieb-03	I-Spoelstra-01
I-Arack-01	I-Hill-01	I-McDevitt-06	I-Spoelstra-02
I-Arack-06	I-Hillson-03	I-Meindinger-01	I-Spoelstra-03
I-Arack2-02	I-Hillson-05	I-GMiller-10	I-Spoelstra-04
I-Arack2-04	I-Hillson2-02	I-GMiller-16	I-Spoelstra-05
I-Barish-06	I-Horton-01	I-GMiller-17	I-Spoelstra-06
I-Baum-01	I-Hyde-01	I-GMiller2-01	I-Spoelstra-07
I-Baum2-01	I-Hyde-06	I-GMiller2-05	I-Spoelstra-09
I-Bowman-01	I-Ivanhoe-05	I-GMiller2-06	I-Spoelstra-10
I-Brant-02	I-Jungreis2-26	I-GMiller2-07	I-Spoelstra-11
I-Bridges-07	I-Jungreis2-27	I-GMiller2-08	I-Spoelstra-12
I-Browd-03	I-Khan-06	I-GMiller2-09	I-Stern2-02
I-Brown-03	I-Kohn2-02	I-GMiller2-10	I-Weeden-03
I-Brown-05	I-Kohn2-07		

“We encourage the Environmental Impact Report (EIR) to treat Dark Night Skies as a unique resource in the environmental setting of the project. The EIR should describe the Dark Night Sky baseline condition at Ocean Beach and, as part of the environmental setting, describe Ocean Beach and adjacent coastal areas (Lands End, Sutro Heights Park, and Lincoln Park) of San Francisco as having much lower outdoor lighting intensity than the interior and urban center of the city. For this coastal area, it is important that the environmental setting describe Lands End as the core of the city’s dark sky zone and its use as a gathering area by local astronomers for night sky observing. Sufficient darkness in these sections of the sky is very rare elsewhere in the heavily light-polluted inner bay area. This visitor use is promoted and is a management emphasis under our National Park Service (NPS) Management Policy on Dark Skies.

This policy emphasizes that improper outdoor lighting can impede the view and visitor enjoyment, as well as disrupt natural resource processes. The EIR should address the level of light intrusion onto Ocean Beach that will occur as a result of the project and, based on the level of light intrusion, include an analysis of how this will affect visitor views of the dark night sky and nocturnal behavior and biology of Ocean Beach shorebirds based on published literature.

The coastal areas managed by NPS surrounding San Francisco are protected from light intrusion because they are managed by the NPS to achieve our Dark Night Sky management policies. NPS Management Policies direct us to work cooperatively with neighbors and local government agencies to prevent or minimize the intrusion of artificial light into the night scene of the ecosystems of parks. Through the EIR, NPS hopes to gain an understanding of the light intrusion that will affect Ocean Beach and work with San Francisco Recreation and Parks Department (SFRPD) to minimize this intrusion.

Dark night skies are an important attribute and resource at Ocean Beach and throughout GGNRA. Dark night skies should be identified as a unique resource (CEQA Guidelines sec. 15125) in the EIR.” *(Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-01])*

“The DEIR acknowledges NPS lightscape/night skies policy, but does not quantify the light intrusion that would occur along Ocean Beach directly adjacent to the project. The DEIR’s consideration and analysis of lighting impacts is focused primarily on Golden Gate Park and lands east of the Great Highway. Although the EIR states, ‘...the project would noticeably illuminate the project site as compared to existing conditions, light spillover into the adjacent areas, including Ocean Beach, would not be substantial.’ there is no quantifiable information or analysis in the EIR that supports this statement.” *(Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-06])*

“NPS recommends the City provide lighting with the least impact that meets its project objectives. Illuminating Engineers Society’s (IES) RP-6 standards, suggest that the Beach Chalet

athletic fields only warrant Class IV lighting for general use, with Class III lighting only used for tournament events. Please provide the rationale to explain why the preferred lighting design is brighter than IES standards, and why the Class IV lighting cannot be used for general use.” (Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-07])

“IV.B-33: This seems to be a typo intended to be ‘134,000 lumens per light,’ (not 134 lumens).” (Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-08])

“Page IVB-1 0: The site is clearly visible from Sutro Heights Park and the West Fort Miley area of Lands End, and would be particularly visible with the proposed lighting. It is important to mention the potential impact to the visitors looking in this direction from Land’s End, considered to be the center of the San Francisco’s dark sky zone. Similarly, the nighttime view from the paved Ocean Beach walkway or promenade could be affected by light spilling over from the Proposed Project because, as stated in the DEIR, the light standards would be visible from the Ocean Beach promenade adjacent to the project area. Please append Table IV.B-1 to include a line item for Ocean Beach views from along the promenade.” (Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-09])

“Impact AE-3: The DEIR only provides two evening view simulations, none of which includes Ocean Beach. We encourage the DEIR to provide an evening visual simulation from Ocean Beach promenade; at a location directly perpendicular from the midpoint of the Beach Chalet Fields (approximately 1,000 ft. north of Viewpoint C). From this viewpoint the EIR should quantify the amount of light spillover that will occur, and then based on these illumination levels and glare from the proposed project, analyze and discuss the effects of this light spillover from a visitor use and biological perspective (primarily shorebird nocturnal behavior discussed below). Without this quantification and analysis, we are unsure the conclusion statement (page IV.B-37), ‘Based on the discussion above, the development of the proposed project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area or that would substantially affect other people or properties.’ is supportable.” (Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-10])

“As far as the glare from the lights which has been brought up a lot, there’s been a big improvement and anybody who’s gone by AT&T Park, which has a very high degree of lighting to be able to play major league baseball, the glare is very minimal there. You see that there are lights on there. It does not flood the whole sky with lights. So this has been improved and I would expect that the lights that would be used here would probably be adapted.” (Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-05])

“Then there were some comments about the fog. Being a resident of western San Francisco, I would not say it’s foggy a majority of the time. Probably in July and August it is. But the other months we have our foggy nights and we have our clear nights and winter is typically, when it’s not raining or overcast, very clear, crisp nights.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-09]*)

“I think that the issues that were brought up today,... the additional looking at the lights in the light pollution and the fog issues, I think are all important ones that we need to look at.” (*Gwyneth Borden, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Borden -04]*)

“The HPC believes that the proposed project will adversely affect daytime and nighttime views of the area.

One Commissioner believes bringing night time lighting is the biggest impact of the proposed project and is more problematic and impactful than replacing the existing natural fields with artificial turf.” (*Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-04]*)

“The DEIR incorrectly states that the Project would maintain visual access between the park and beach, because it would create the visual blight of the added stadium lighting. Part of the aesthetic viewscape is what can be seen (or not seen) when it is dark.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-17]*)

“There’s many other examples of the inadequacies of the study, for example, the lights ...” (*Michael Lynes, Golden Gate Audubon Society, public hearing comment [O-GGAS3-03]*)

“It also fails to provide adequate mitigation measures, for example, ... Does nothing for the lights. ...” (*Michael Lynes, Golden Gate Audubon Society, public hearing comment [O-GGAS3-04]*)

“Lighting - It is of utmost importance that the Dark Sky environment of Ocean Beach is maintained. All lights should be on motion sensors, and no lights should be left on all night. The

added sky glow from the reflection of lights off of the field surface should be taken into account in all lighting level calculations. Lighting levels should not exceed minimum illumination levels set forth by a reputable professional standard.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-02]*)

“The view from the Sunset and Richmond Districts will be more like the view of ATT Park from the Bay Bridge. The view from Ocean Beach will be forever ruined. The simulations were incomplete and did not realistically provide the view after the installation of the towers. The view from the Cliff House, the ocean, and from the Sunset and Richmond Districts.” (*Richmond Community Association, letter, December 12, 2011 [O-RCA-03]*)

“Impacts of Lighting. The DEIR findings, described in Impact AE-3 and Impact BI-2, that there are no significant impacts to adding 150,000 watts of lighting, is not substantiated by evidence. The DEIR lacks the analysis to make this determination. This is true for the impact of lighting on both aesthetics and biological resources.

The DEIR also does not consider the 9-acres of brightly lit fields as a source of light.

Importantly, the DEIR supplies no quantitative data or calculations that would judge the amount of light intensity seen by observers at various distances. The DEIR simply offers statements, some of which are contrary to established evidence and experience at other locations in San Francisco.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-27]*)

“DEIR has significant error in lighting estimation. The DEIR presents inaccurate information, and a dramatic underestimation of the brightness of the lights to be used. Page JVb-33 states:

The proposed project would use the same type of lighting standards (Musco brand) as already employed at the Crocker Amazon site during evening games. The light standards are capped units that emit **134 lumens per lamp**, and have been designed specifically for sports fields, with the goal of lighting the field evenly while minimizing the spread of light upward.

However, the project also proposes that the lamps to be used will be 1500 watts each, which emit 134,000 lumens. The DEIR analysis of the impacts of lighting is off by a factor of 1000, and needs to be revisited.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-28]*)

“Affects of lighting on aesthetics. The DEIR incorrectly states that there is no impact of lighting on aesthetics, and does not take into account nearby cultural resources and tourist sites, including

the Cliff House, Sutro Heights Park, and the Balboa Natural Area, all located upon hills less than three quarters of a mile away.

Table ES-1 (page ES-9) states:

Impact AE-3: Development of the proposed project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area or that would substantially affect other people or properties.

The 150,000 watts of lights on 60-foot poles and on the ground, as well as the light reflected off of 9-acres of brightly lit fields would be a substantial new source of light, visible from within the park and the surrounding natural areas frequented by tourists and residents. This western quarter of Golden Gate Park is, by design, a relatively dark area, required to be 'naturalistic' according to the Golden Gate Park Master Plan. Similarly, the adjacent Golden Gate National Recreation Area is preserved as a natural area. The amount of lighting would substantially affect other people and property.

Within the National Park Service boundary, and near the site, is the Cliff House, a popular area for tourists and residents located on a hill and known for its views. The National Park Service describes the Cliff House:

For almost one hundred and fifty years, visitors have traveled to the Cliff House at the westernmost tip of San Francisco's coastline to **experience the magnificent natural setting** and to enjoy entertainment and seaside recreation. ...

The lights and the 9-acres of brightly lit fields would be a major detraction to views from the Cliff House after- sunset. The Cliff House is open to the public at night.

Even closer to the project site are the Balboa Natural Area (approximately 2500 feet from the project site) and Sutro Heights Park, which are both elevated on hills. Sutro Heights Park is a popular location for residents and tourists and is commonly used to view sunsets-a time when the lights will be on.

The San Francisco Chronicle referred to Sutro Heights Park as 'a dramatic bluff overlooking the Pacific Ocean.' ..." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-29]*)

"Secondly, the DEIR contains no analysis of the effects of lighting in fog. In place of data is a statement (page IV.B-34), 'Specifically, under foggy conditions, the lighting would be more diffused and would likely be more visible higher up in the sky and from vantage points further away.'

The evidence of other facilities in San Francisco shows just the opposite: the lights and the brightly lit fields provide a large, lit volume of fog that is visible from large distances, impacting the wildlife on the ground surrounding the site and in the air.

Also, overhead shields do not prevent upward light spill in fog, a condition that is common at the project site on the coast. Fog reflects light in all directions, including upward and outward, which will impact wildlife." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-31]*)

"The project site is adjacent to the Golden Gate National Recreation Area, which the federal government preserves as a natural area, and which includes an extensive habitat restoration area.

The DEIR on page III-10 quotes Golden Gate National Recreation Area Management Policies 2006, stating that the federal government will 'seek the cooperation of park visitors, neighbors, and local government agencies to prevent or minimize the intrusion of artificial light into the night scene of the ecosystems of parks.'

However, the proposed lighting will be set at 60-feet in the air. There are no buildings or trees of that height between the proposed lighting and the Golden Gate National Recreation Area, nor is there likely to be." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-32]*)

"And the concern over lighting seems misplaced when the site is next door to a restaurant, its lighted parking lot and the Great Highway." (*San Francisco Chamber of Commerce, letter, December 1, 2011 [O-SFCC-03]*)

"Impact AE-3: Development of the proposed project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area or that would substantially affect other people or properties. (Less than Significant) (DEIR page IV.B-12)

The stated opinions and the photos hop renderings in the DEIR do not constitute a photometric study, as was requested in the scoping portion of this EIR.

It is our position that the specific calculations should be included for the observed luminance glare effects that will be created by the scattering of light particles by coastal fog. The visual effects of the light pollution should include 'discomfort glare', 'disability glare', 'light clutter', 'light trespass', 'skyglow', and 'backdazzle'. The scope of the neighborhoods affected should be comprehensive and not limited to direct line of sight. The effect on the safety of driving conditions of automobile traffic should be studied, (including but not limited to the Great Highway and La Playa Rd). It is our position that Impact AE-3 is a (Potentially Significant Impact)." (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-38]*)

“In addition to the stadium lighting, there will be lighting for paths and lighting for parking also - what will be the cumulative impact on this ‘wild’ end of the Park for people? What will be the cumulative impact for wildlife?” (*Raja Anderson, letter, December 12, 2011 [I-Anderson-05]*)

“I belong to the Yeashore Community, a religious group which has evening Bonfires on Ocean Beach every month from May to November. The proposed new lights would seriously negatively impact our ability to have our gatherings and services. It will ruin the connection to nature we are trying to achieve at Ocean Beach to be inundated with artificial lights.” (*Raja Anderson, letter, December 12, 2011 [I-Anderson-20]*)

“I am against this project to renovate the Beach Chalet Soccer Field with artificial turf and huge stadium light which will create glare and illumination totally out of character with the surrounding environment of the park and the residential areas, both north and south of the park.” (*Patricia Arack, letter, December 12, 2011 [I-Arack-01]*)

“When will that last flock of geese honk overhead in the night sky? Is this the legacy we want Golden Gate Park administration to have? The death of the habitats and the flora and fauna in the area? The stadium lights will destroy the ambient light in the heavens for everybody. Visually, these poles are ugly stalks sticking up about 30 ft above the tree line. Please don’t do this to our park.” (*Patricia Arack, letter, December 12, 2011 [I-Arack-06]*)

“Two things that I am very much against, the stadium lights, this will cause a substantial degree of degradation of the visual character at night.” (*Patricia Arack, public hearing comment [I-Arack2-02]*)

“These bright lights will cause a glare. The visual impact, if you see this photograph, the stadium pole rises very, very, much higher than the tree line and I don’t know how many poles are there going to be, 10, 15, I forget. But it’s going to be a truly changed --a true negative change to this environment.” (*Patricia Arack, public hearing comment [I-Arack2-04]*)

“The DEIR states that the evening photographic analysis of the proposed project to Crocker Amazon is an ‘approximate’ example of what the project site would look like in the evening. Since comparison with Crocker Amazon is not valid, additional research is needed to determine the effect of lighting at the project site. This is especially important when considering evening

views, since the western side of San Francisco has much more fog than the eastern side of the City, a difference that can significantly affect light transmission and reflectance. Additionally, it is not clear whether Crocker Amazon has the same amount of lighting, as measure by the number of lights and the amount of lights, in lumens. Clarification of this is requested. (*Jean Barish, letter, December 12, 2011 [I-Barish-06]*)

“How could any reasonable human being conclude that the aesthetic effect of the huge banks of lights for night time play was ‘insignificant’? That is ludicrous. One might conclude that the fields were a good idea anyhow. But this one judgment demonstrates that the intention of those doing the study was to end up making it easy to approve the soccer fields.

I point to the aesthetic issue as only one of many examples of such bias by the writers of the DEIR.” (*Terry Baum, letter, December 12, 2011 [I-Baum-01]*)

“Just to take the very first thing that is considered, which is the aesthetic impact, the people who wrote this report decided that there was an insignificant aesthetic impact of having 150,000 watts of light at night and 70 huge light poles.

Now, I’m sorry, but I don’t think anybody’s saying, ‘Oh, darling, let’s go out and stroll and bathe under the glare of the beautiful lights of the stadium.’ Or ‘Lets go out and watch the sunset behind those fabulous light poles.’ It is absolutely idiotic to say that there’s an insignificant aesthetic impact.

The only way that somebody could say that was if they came to this --the job of writing this report, of studying the situation with orders to come up with a report that absolutely validated the installation of the soccer fields.” (*Terry Baum, public hearing comment [I-Baum2-01]*)

“...In addition, I am concerned about the impact of the lights on the Ocean Edge. ...” (*Arnita Bowman, letter, December 12, 2011 [I-Bowman-01]*)

“The EIR is obviously flawed and inadequate in its minimizing of the huge construction’s effects on ... light pollution for the whole western Sunset district.” (*Michael Brant, letter, December 2, 2011 [I-Brant-02]*)

“The SF Recreation and Parks Dept. is proposing to replace 9 acres of open, naturally-growing grass in Golden Gate Park with synthetic turf and to install several 60-foot tall lights that will

illuminate the western end of Golden Gate Park for the first time. This project will ... increase disturbances to neighbors and wildlife ..." (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-07]*)

"I attended the Planning Commission meeting on Dec. 1 and heard speaker after speaker present lucid, compelling arguments refuting the DEIR's conclusions. They addressed the destruction of ... the entire issue of light pollution." (*Gary Browd, letter, December 7, 2011 [I-Browd-03]*)

"... I am opposed the 60 foot sports lights because I think they will ruin the experience of the park and Ocean Beach at night." (*Jessica Brown, letter, November 30, 2011 [I-Brown-03]*)

"I love this city, I enjoy biking, hiking and enjoying stargazing at the beach or enjoying nights at the Beach Chalet and Cliff House. These experiences will all be ruined for us if this project is allowed to move forward." (*Jessica Brown, letter, November 30, 2011 [I-Brown-05]*)

"...What is the cumulative effect of the parking lot and walkway lighting as well as the fields lighting? Has this been measured? How is the increase in artificial night lighting compatible with San Francisco's goals of decreasing light pollution?" (*Nancy Buffum, letter, December 12, 2011 [I-Buffum-04]*)

"In addition to the stadium lighting, there will be lighting for paths and lighting for parking also. What will be the cumulative impact on this 'wild' end of the Park for people? ..." (*Ben Citron, letter, December 11, 2011 [I-Citron-07]*)

"And I'm six blocks from South Sunset. And you know, people come up here and say that, you know, that the lighting would not have an impact. I'm Six blocks away and I could look out my back windows and I can see those lights. And so that's why I felt it was really important to come here and express my concern.

Also, you know, Golden Gate Park is my --and city residents --it's their playground. You know, we have a beautiful coastline. And Golden Gate Park shouldn't have artificial turf and it shouldn't have those lights shining." (*Janet Clark, public hearing comment [I-JClark-01]*)

"The last thing I want to say is, like, are we more worried about having one --one more soccer field with those magnificent lights in such a sacred place as Golden Gate Park?" (*Janet Clark, public hearing comment [I-JClark-02]*)

"Less lighting would reduce light pollution and visual impacts on the surrounding residents such as myself." (*Jeffrey Cope, public hearing comment [I-Cope-04]*)

"...You'll see the lights and those have to be weighed against the benefits." (*Jackie Corley, public hearing comment [I-Corley-01]*)

"The DEIR does not satisfy really important questions; mainly for us the awful blaze of light at the site. Without simulation how could developers even know what the impact will be. How can the planning department permit such a huge pollution by light of a precious natural resource, that is the dark of night by the ocean. Soccer is fine but turning the area into a sports complex with full illumination is an abomination." (*Jacqueline Darrigrand and William Claflin, Letter, December 9, 2011 [I-Darrigrand & Claflin-02]*)

"I am not persuaded by the EIR that the project would have no 'significant' effect on the 'scenic resources.' Stadium lights near the Beach Chalet would certainly violate the lovely natural atmosphere of the area." (*John de Forest, Letter, December 11, 2011 [I-de Forest-02]*)

"The artificial turf and lighting in Golden Gate Park would unfairly deprive many like myself of recreational opportunities such as bird watching, star-gazing, and enjoying the present atmosphere of tranquility." (*Charles Denefeld, Letter, December 12, 2011 [I-Denefeld-02]*)

"In addition, the scale of the proposed project and the powerful, late-evening lighting would negatively impact the quality of life of local residents. The lights would obliterate much of the star gazing in my neighborhood, and detract from its atmosphere of peace and open space." (*Charles Denefeld, Letter, December 10, 2011 [I-Denefeld2-04]*)

“In addition to the stadium lighting, there will be lighting for paths and lighting for parking also – what will be the cumulative impact on this ‘wild’ end of the Park for people? ...” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-05]*)

“As was pointed out at the hearing, the report underestimates the impact of the stadium lighting, as it does not take into account the reflective effect of the often-present fog.” (*Annemarie A. Donjacour, Letter, December 8, 2011 [I-Donjacour-01]*)

“I live just a few blocks from this project, and I enjoy the night light at Ocean Beach pretty much every night so I feel personally impacted.” (*Jessica Dowell, public hearing comment [I-Dowell-01]*)

“In addition to the stadium lighting, there will be lighting for paths and lighting for parking also - what will be the cumulative impact on this ‘wild’ end of the Park for people? ...” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-07]*)

“And I totally agree that not only the people of the Ocean Beach immediate area but the Richmond and the Sunset --I live on 26th Avenue and I can see the ocean from my back window. So these lights and the glow of the lights will impact me and impact all of my neighbors.” (*Ellen Edelson, public hearing comment [I-Edelson2-04]*)

“No stadium lighting. This will only increase the level of light pollution on the coast which is something of great concern generally in urban areas.” (*Susan Englander, public comments [I-Englander2-04]*)

“My husband & I live on the Great Highway between Noriega/Ortega. You would think we could see stars most nights. Only in winter, right now, looking east can we see stars. Most nights St. Ignatius playing fields are lit up like what is proposed at the west end of GGPark. We also have triplicate traffic lights, both directions, on the upper Great Hwy and street lights. All creating a daytime light effect for both residents and animals to the West.” (*Elizabeth Foree and Ralph Henson, Letter, December 9, 2011 [I-Foree-Henson-01]*)

“Failure to recognize the significance of the dark-sky resource existing near and along San Francisco’s ocean coast. San Francisco is nearly unique among comparably-sized U.S. cities in having a significant dark-sky resource along its ocean coast. This resource is due to several factors in combination: (1) The fact that the dark-sky resource’s core areas, namely Sutro Heights Park and Sutro Historic District, are surrounded on 2 sides by dark ocean (most comparable cities are completely surrounded by suburban areas contributing more or less to artificial sky glow), (2) The pattern of urban planning featuring less illuminated residential and commercial areas around the dark-sky resource (most coastal cities have their most illuminated areas along their oceanfront), (3) In the case of Sutro Heights Park, an unobstructed flat horizon of some 270 degrees, and (4) The preservation of Sutro Heights Park and Sutro Historic District parkland free of artificial night lighting (most parkland within close proximity to urban centers includes more or less obtrusive night lighting.) Moreover, the city’s dark-sky resource is easily accessible by public transit -- a feature that is probably unique among U.S. cities.” (David E. Goggin, Letter, December 10, 2011 [I-Goggin-01])

“Failure to recognize the full richness of the southern night views as seen from valuable dark-sky sites to the north of the proposed project location. It should be recognized in considering the proposed project’s impact of the dark-sky resource discussed above that the major parklands from which the dark-sky resource can be best enjoyed are located to the *north* of the proposed project, and thus the proposed project lies to the *south* as seen from those parklands. This is particularly problematic and of concern since most of the celestial sphere visible from San Francisco’s latitude lies in the *southern* half of the sky, including sections of the lower southern sky (e.g. in the direction of the center of the Milky Way) rich in many readily visible star clusters, nebulae, etc. Moreover, unlike most of the inner Bay Area where much of the low southern sky is heavily light polluted, the low southern sky (laying largely over ocean) from the point of view of these parklands is comparatively dark and transparent.” (David E. Goggin, Letter, December 10, 2011 [I-Goggin-03])

“Failure to present complete photometric data on field, parking lot, and pedestrian lighting. Although the DEIR provides a diagram of the luminaire proposed for field illumination and seems to assume that such a luminaire emits no uplight, the most cursory glance at that diagram calls this assumption into question. The DEIR fails to provide any independently-measured photometric information (e.g. to at least the level of detail described in Illuminating Engineering Society’s TM-15 in terms of zonal lumen distribution) for any of the luminaires to be used in the proposed project *nor for those luminaires’ as-installed orientations*. This lack of even the most basic photometric characteristics precludes any real public evaluation of the project’s proposed lighting. Remarkably, such a fundamental metric as the number of lumens emitted per fixture appears to be misquoted by the DEIR by a factor of a thousand!

Failure to include sufficient details about reflectivity characteristics of artificial turf proposed to be installed. Of the total luminous flux emitted by the proposed project into the environment, a

very large proportion would likely to be due to reflection of light upward off the field surfaces themselves. Estimating this luminous flux requires accurate information on the reflectivity of the proposed artificial turf(s). Independently-measured reflectivity information on the particular artificial turf(s) proposed for use should be included, but is not.

Failure to include a rigorous, quantitative, and thorough photometric study of the effect of direct and reflected uplight from the proposed project's lighting on artificial night sky brightness. The DEIR fails to quantitatively model the effect of both direct and reflected uplight on either the zenith night sky darkness or on the darkness of the low southern night sky, as seen from Sutro Historic District, Sutro Heights Park, and other nearby locations. Such modeling should be based on the latest science of atmospheric scattering, should take into account the angles and spectral power distribution of *all* light emanating from the proposed project (both direct and reflected), and should be done for foggy, cloudy, and clear-sky conditions. Such modeling should predict *and quantify* the actual expected change in artificial sky glow in various parts of the sky as seen from various locations near and around the proposed project resulting from the various alternatives being considered. For example, calculation of the change in artificial night sky brightness on clear nights, as seen from Sutro Heights Park looking in the direction of the proposed project site at 5, 10, 15, 20, 30, 45, 60, and 90 degrees above horizontal should be carried out. The simulated photos presented in the DEIR are neither sufficiently precise nor sufficiently sensitive to estimate the effect of the project's proposed lighting on either clear or cloudy night sky brightness." (David E. Goggin, Letter, December 10, 2011 [I-Goggin-04])

"Failure to analyze ecological impacts of re-reflected light off clouds. In addition to direct light and forward-scattered light entering the surrounding ecosystem, during cloudy conditions a very large proportion of the light reflecting upward off field surfaces would strike the cloud bases and be re-reflected into the surrounding environment. Even during clear sky conditions, the sky may be expected to be significantly brighter than at present. The effect of likely bright artificial sky glow during (but not limited to) cloudy conditions on the ecology of e.g. insects, birds, mammals, and plant life in the parks, wildlands, and even residential back yards surrounding the proposed project site appears to be basically missing from the DEIR." (David E. Goggin, Letter, December 10, 2011 [I-Goggin-05])

"It's disappointing that no real analysis of the effects of the light reflecting upward in the field surfaces themselves was included in the Draft EIR. The Draft EIR's Photoshopped pictures and vague and naive verbiage are not sufficient.

Instead a full and rigorous analysis of the actual effects of the reflected uplight should be done.

The light reflecting upward from the field surfaces would not be trivial. It might well be the major part of the project's light emissions into the environment. Assuming that the artificial turf

is made to duplicate the appearance of natural grasses as closely as possible, then the artificial turf should be expected to be about 25 percent reflective, as is natural grass.

So it seems likely that of the 150,000 watts' worth of light produced, the majority of which illuminates the field surfaces, something like 30,000 to 35,000 watts' worth of light would be reflected skyward off the field surfaces. That's the same uplight as you would get by laying 20 to 23 of the 1500-watt fixtures on the field and pointing them upward. That's a lot of light.

Sutro Heights and Land's End are prime astronomy locations in San Francisco's last bit of dark sky resource. Few similar cities enjoy parklands easily accessible to residents and families where the universe can be so easily seen. For our coastal zone, the southern part of the sky is rich, for example, with beautiful star clusters that includes nebulas easily visible with small telescopes or even binoculars. But the Draft EIR hardly acknowledges this valuable resource.

There has been much concern expressed that reflected uplight could create a large patch of new sky glow in the southward line of sight from these prime locations. The Draft EIR completely fails to model and quantify the project's effects on sky darkness at various angles as seen from these parklands. Full quantitative analysis of the project's effects on artificial night sky brightness should be carried out. Vague guesses are not sufficient.

The effects of reflected uplight could also be very significant in cloudy or foggy conditions. On cloudy nights, that 30-to 35,000 watts' worth of light reflecting upward off the field surfaces would bight illuminate the clouds with a strange and unnatural glow." (*David Goggin, public hearing comment [I-Goggin2-01]*)

"That the soccer field will generate light pollution: We are so lucky in San Francisco to be able to go to areas in and near our city that are very natural. This is a precious gift that we must protect! The impact of intense night lighting on an area of Golden Gate Park that has been naturally dark since it was established should be protected. Fog can increase the amount of light reflected from this type of lighting." (*Thomas Hahn, letter, December 9, 2011 [I-Hahn-04]*)

"I support the renovation of the Beach Chalet soccer fields. I am a player and a coach in the city and the facility truly needs to modernized. As a resident and homeowner (who is in the process of paying property taxes) in the Outer Richmond, my only concern is the lighting that will be installed and the hours of use. We do need lighting, however the pitches could be closed at 8 to allow those who live out here an opportunity to enjoy our neighborhood (and our view) in a more natural setting." (*Tom Hicks, letter, December 8, 2011 [I-Hicks-01]*)

"Your proposed plan will completely wreck what is special about this end of the park. COMPLETELY. WRECK. IT. This kind of uber-development is more appropriate for the eastern end of the park, where you already have substantial development, the museums, etc. Please leave

us in the Outer Sunset alone, we like things as they are, with darkness so we can see the stars and enjoy the quiet and a little bit of solitude in an urban setting.

You are trampling on people out here in the Outer Sunset. Please consider the impact on those of us who live here. Thank you." (Steven Hill, letter, December 11, 2011 [I-Hill-01])

"The draft discusses the simulated evening view from Sutro Heights, 'Although the lights would draw attention with the intensity of the lighting, they would not dominate this panoramic view ...'

This fails to take into account the intense point sources of light that the sports lighting systems create. These lights stand out from miles away. This photo shows the view of the night lights at South Sunset Playground taken from about one mile away. Even at that distance the sports lights are brighter than nearby streetlamps." (Rose Hillson, letter, December 7, 2011 [I-Hillson-03])

"Finally, important views are missing completely. The DEIR does not simulate the classic view from the Cliff House. The DEIR has NO view from the beach towards the park -- here we see the Beach Chalet with the moon rising behind. What will this view be like with 150,000 watts of light next to it?" (Rose Hillson, letter, December 7, 2011 [I-Hillson-05])

"The Draft discusses the simulated evening view from Sutro Heights, 'although the lights would draw attention with the intensity of the lighting, they would not dominate this panoramic view.' This fails to take into account the intense point light sources that the sports lighting systems create. These lights stand out from miles away.

This photo shows the view of ... South Sunset Playground taken from about one half mile away. Even at that distance, the sports lights are brighter than nearby streetlamps." (Rose Hillson, public hearing comment [I-Hillson2-02])

"When I drive home at night and turn from Sloat Boulevard onto 44th Avenue, my attention is always drawn to the bright and glaring lights at the soccer fields on South Sunset Playground between 40th and 41st Avenue and I am instinctively scared that there is a big fire. Actually, you can see the lights all the way from the beach. The lights proposed for the soccer fields in the western end of Golden Gate Park will have even a bigger negative effect as you expect to see a dark sylvan area and not a sports arena. Their visual impact is not adequately addressed in the DEIR (no photo montages) nor is their impact on the wildlife, especially birds, sufficiently considered." (Inge Horton letter, December 1, 2011 [I-Horton-01])

“Lighting will be detrimental to the wildlife and to the people who live in the area.” (*Katherine Hyde, email, December 11, 2011 [I-Hyde-01]*)

“In addition to the stadium lighting, there will be lighting for paths and lighting for parking also - what will be the cumulative impact on this ‘wild’ end of the Park for people? ...” (*Katherine Hyde, email, December 11, 2011 [I-Hyde-06]*)

“I am most concerned about the proposed lights and their effects on night views in the area. Figure IV-B-10 is somewhat informative, but is taken from an angle where the traffic and other lights surrounding the Great Highway are very distracting. Before and simulated after views from perhaps Cabrillo and 47th Avenue and Irving and 47th Avenue could be more enlightening as to the effects these lights might have. The view of the Crocker-Amazon Fields at figure IV.B-11 demonstrates the potential impact these lights could have on nighttime views. This degree of lighting seems more appropriate for Kezar Stadium than for the western end of Golden Gate Park.” (*Richard Ivanhoe, letter, December 13, 2011 [I-Ivanhoe-05]*)

“The plan requires numerous lighting towers providing nighttime lighting: there is insufficient analysis of the impact of this nighttime lighting on the Urban Night Skies Project.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-26]*)

“The plan requires numerous lighting towers providing nighttime lighting: there is insufficient analysis of the impact of this nighttime lighting on the residents who live in the area.

The plan requires numerous lighting towers providing nighttime lighting: there is insufficient analysis of the impact of this nighttime lighting on the residents who live above the area.

The plan requires numerous lighting towers providing nighttime lighting: there is insufficient analysis of the impact of this nighttime lighting on Sutro Heights Park which looks down on the area.

The plan requires numerous lighting towers providing nighttime lighting: there is insufficient analysis of the impact of this nighttime lighting on those who use the western end of Golden Gate Park.

The plan requires numerous lighting towers providing nighttime lighting: there is insufficient analysis of the impact of this nighttime lighting when taking into consideration the low marine fog layer that often envelopes the area.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-27]*)

“In addition to the stadium lighting, there will be lighting for paths and lighting for parking also – what will be the cumulative impact on this ‘wild’ end of the Park for people? What will be the cumulative impact for wildlife?” (*Tehmina Khan, email, December 10, 2011 [I-Khan-06]*)

“Through faulty analysis, invalid premises and specious conclusions, not to speak of carefully chosen locations from which all photographs were taken, the drafter of the EIR has achieved the following:

He has managed to discount the aesthetic impact of 60 lights, including ten 60-foot stadium lights.” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-02]*)

“One of the most laughable elements of the DEIR are the ‘before’ and envisaged ‘after’ photos. As another commentator, Greg Miller, has persuasively pointed out, each photo has been taken from a carefully chosen location that de-emphasizes the impact of the project. True, 60 -foot, 15,000 watt lights have a less-than-overwhelming impact when viewed, singly, from a distance of 1,500 feet, in bright sunlight. (Cf. Figures IV.B-5d and IV.B-S.) What, however, do they look like when viewed from 100 feet away with all 10 of them together in one shot? The only night-time photos are taken from Sutro Heights, over-half a mile away. They most assuredly, do not illustrate the impact of the full blast of the 10 stadium lights at night.” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-07]*)

“On p. 3 it states that the lit soccer fields will be minimally visible from Golden Gate Heights. A definition of Golden Gate Heights would have been useful here, or a map, but based on the views from friends’ houses in the area near Lincoln High School, since beach fires are visible from Golden Gate Heights stadium lighting will be even more so. This statement about Golden Gate Heights is an example of a statement made in the DEIR with no supporting evidence, seemingly used to avoid answering a question asked in the scoping session.

It is unclear why views are from no more than 0.25 miles away when the area defined as being potentially impacted by the project was earlier defined as encompassing a much larger area. As I thought was made clear in the scoping session, these lights are visible at great distances (there was additional evidence presented about this in regards to the South Sunset fields’ lights at the comment session on 12/1/11) and the questions of how great a distance and how bright are important.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-14]*)

“For some reason, even though it was specifically requested in the scoping session, there are no projected views of the lights in the fog. Indeed, the definition of Visual Sensitivity given in footnote a of Table IV.B-I lists many qualities to be used to determine light effects, but these are not quantitative properties as far as I can tell, and fog is not among them. How these qualities are combined to come up with a rating, based on what evidence, is missing. And nowhere in the definition is there a mention of the effects of weather on Visual Sensitivity.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-16]*)

“In the short discussion of Light and Glare on p. 12, the contention is made that the site is in between urban areas that already produce light. This is where the difference between aesthetic considerations and pollution is important. Light pollution is defined as ‘the alteration of natural light levels in the outdoor environment owing to artificial light sources’ or ‘the alteration of light levels in the outdoor environment (from those present naturally) due to man-made sources of light.’ The presence of some light pollution already does not negate the problems of adding on more light pollution. Just because air is smoggy doesn’t mean you can burn more petroleum with impunity. In fact, the presence of high air pollution triggers Spare the Air days, where it is illegal to set fires and people are encouraged to take transit. The presence of light pollution in the park, by analogy, should trigger the need to reduce light pollution in the park, not increase it. The Evening Views provided are very problematic for numerous reasons, and cast little to no light on the effect of the project as stated. They, instead, muddy the issue by providing views that have little connection to the realities of both the project and the area. (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-18]*)

“The views provided are inadequate. Specifically the view from 48th and Lincoln is at street level, yet living areas in houses in the outer Sunset are on the second or third floors, and the apartments in that immediate area are four or five stories tall. The apartments across from Safeway are much taller. Even from a second-floor height, the 60’ light towers will be blindingly visible. Since Lincoln at 48th is not an area frequented by pedestrians at night (either the wind or the fog prevents casual nighttime strolling), the main impact of the lights is on the residents. Yet this view, which purports that the lights will have minimal impact on the area, fails to show what the lights will look like from the heights the residents will be at when viewing them.

The views are all for twilight, but during twilight there is another light source (the setting sun and after glow on the horizon) competing with the artificial lights. The issue with these proposed stadium lights is not how that they will shed light during the day but how they will disrupt the night. The views fail to show how the lights will look during nighttime conditions, which is precisely when they will be most disruptive. This was brought up during the scoping session, but is sidestepped in the views provided in the DEIR.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-20]*)

“There is no fog or even ocean haze in the air in any of the views, yet this area is foggy the majority of nights, as those of us who live here know. The Cliff House lights, for example, have a very different spread on the rare clear night than on a foggy night. Fog substantially changes light bounce and glare, but is addressed nowhere in the pictures and is mentioned only in one sentence that I could find in the DEIR. This was an area I specifically asked be considered in the scoping session as the effects of fog on light transmission are enormous and we get a lot of fog, yet it is ignored in the DEIR.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-21]*)

“The only elevation view provided is from Sutro Heights, but Golden Gate Heights overlooks this entire area and all of its residents will have a clear, unobstructed view of these lights every night. Why is this not considered? It was brought up at the scoping session.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-22]*)

“There is no view from the beach, yet the beach users (human and non) will be strongly affected by these lights. Why is this not addressed in the DEIR? It, too, was brought up at the scoping session as an important point that needed to be considered. The lights will be very visible from the beach, and will affect not only humans but animals in the GGNRA as well, and may be bright enough to affect aquatic life.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-23]*)

“On p. 16, in fact, it is stated that because the calculated projections of light distribution and brightness matched the actual measurements for the same at South Sunset (though it does not state under what conditions) and Crocker Amazon, the assumption is that the same will be true for Golden Gate Park fields. With no consideration of fog, though, this assumption is faulty.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-24]*)

“The photos and the PhotoShopped versions are interesting in what they don’t show. For instance, I am sure the management of the Beach Chalet Restaurant would be much more interested in a night view, probably a night view from all directions, of the proposed project from their building. Will the stadium lighting flood out the restaurant views of the beach, for example, and eliminate the stars?” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-27]*)

“The statements on p. 30 that the surrounding vegetation would entirely screen the project, and no field lighting would be noticeable from the surrounding neighborhoods depend on the pictures on p. 31 (Figure IV.B-9), which I have already demonstrated to be misrepresentations in

several ways. There is no other evidence to support this statement.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-28]*)

“The one mention concerning fog comes in the Summary on p. 36. (2nd paragraph, end of the first sentence, in a parenthetical example, and the next sentence). The multiple concerns about light bounce, repeatedly brought up at the scoping session and well documented by many with long experience of SF weather (see the Sidewalk Astronomers, the Astronomical Society of the Pacific, and the physics dept at SFSU, for example), were entirely ignored in the statement:

However, even under conservative conditions, the spillover of the lighting would not be expected to travel so far as to adversely and substantially affect the closest neighborhoods, which are located approximately 800 feet from the project site. (p. IV.B-36)

There is no evidence for this assertion at all in the DEIR. Similarly, there is no evidence supporting the conclusion that dusk conditions hold true for nighttime conditions. The only evidence given to support the claim that the light measurement will drop to zero at different distances above ground level (due to shielding and focusing) is a report prepared by a lighting manufacturing company; this statement is contradicted by the pictures of the project included in the DEIR and ignores the loss of trees/shrubs on light spread, as well as entirely ignoring the impact of light bounce. It also implies that there is a biological effect from the lights since the only possible viewers at these heights above the stadium lights allowed in the DEIR are birds, aircraft, and spacecraft. This statement, faulty as it is, is misplaced in the DEIR in aesthetics when it rightly belongs in the section on biological impacts.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-29]*)

“Suddenly, also on p. 36, it seems that there are lights for this project that will remain on after 10 p.m.? This is new information. What is the ‘short period of time’ these additional lights would be on? And why is the only impact being considered of the lighting on the human public view? Much is being ignored, especially the very real and large impact of stadium lighting on the nature of the western end of the park and the western side of the city, and the effects of light pollution on plants, animals, insects, and humans subject to it.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-30]*)

“The following, from p. 24, seems to contradict statements in other section of the DEIR:

The addition often new 60-foot-tall steel lamp poles would be a highly visible new addition to the landscape, not only during the day, but also at night in an area of the park which has been historically dark at night.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-34]*)

“The majority of the public space and recreational resources affected by the proposed project are SFRP-managed only when considering ground. The affects of the light extend well beyond the park into GGNRA space and the ocean, and the affects of light, possible increased wind, transportation of tire crumbs, and traffic impacts will also affect the surrounding neighborhoods.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-39]*)

“And nothing in the lighting information in this section discusses the very negative impacts of five additional hours of light pollution to what is now a dark ecosystem.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-52]*)

“...in the information on lighting I found that the views provided from the Sunset, specifically the view from 48th and Lincoln was at street height yet the houses in the Outer Sunset have living areas in second and third floors exclusively. From those heights, the 60-foot lights will be blindingly visible and this has not been addressed.” (*Ellen Koivisto, public hearing comment [I-Koivisto2-01]*)

“There’s no consideration for fog except one sentence unsupported by specifics. This area is foggy the majority of nights, as those of us who live there know. Fog substantially changes light bounce and is not address in the Draft EIR.” (*Ellen Koivisto, public hearing comment [I-Koivisto2-02]*)

“The only elevation view is from Sutro Heights but I think it’s called Golden Gate Heights between 16th and 20th and Kirkham and Pacheco, is that right? Is that Golden Gate Heights? Okay.

They have a clear unobstructed view of these lights every night. And I don’t know why that wasn’t considered. It was brought up in the scoping session. There is no view from the beach given, yet the beach users will be affected and, again, I don’t know why this wasn’t addressed if the beach users were brought up in the scoping session.” (*Ellen Koivisto, public hearing comment [I-Koivisto2-03]*)

“All the views are at twilight but the effect of the lights will be so much greater after full dark, as had been brought in the scoping section, yet this was not addressed as well.” (*Ellen Koivisto, public hearing comment [I-Koivisto2-04]*)

"Aesthetics: Having lived in a small town with a stadium, I know that the glare from the lights carries well over a mile. In the case at hand, that would include Land's End, where the Parks Service has occasional star parties.

Has this been addressed?

Will the EIR have an estimate for how far from the site the glare will shut out starlight?

Likewise, residents already have experience with the glare from the lighting for the Outside Lands concerts every year, and it is not considered 'less than significant' to many of those residents. It would appear to me that the soccer complex would have more of an impact, in that the lighting would be in use almost every night rather than just a weekend. In other words, what might be a small nuisance for two nights of a year might be a much greater one for, say, 100 nights of the year.

Are you able to quantify the increase in impact for a constant over one-time source?" (*Gabriel Lampert, email, December 4, 2011 [I-Lampert-01]*)

"It would also be helpful to see an additional nighttime field lighting simulation of the proposed Beach Chalet Soccer Field lights from Ocean Beach! Great Highway, which is in relatively close proximity to the athletic field." (*Deborah Learner, letter, November 29, 2011 [I-Learner-18]*)

"I am writing to oppose a Beach Chalet Soccer Fields renovation that would add significant artificial light after sunset." (*Lex Leifheit, email, December 1, 2011 [I-Leifheit-01]*)

"I am also very concerned about Light Pollution: We are so lucky in San Francisco to be able to go to areas in and near our city that are very natural. This is a precious gift that we must protect! The impact of intense night lighting on an area of Golden Gate Park that has been naturally dark since it was established should be protected. Fog can increase the amount of light reflected from this type of lighting. Since this part of San Francisco is known for its fog, the potential is great for light pollution from the field lights." (*Beth Lewis, letter, December 4, 2011 [I-BLewis-07]*)

"I am also very concerned about Light Pollution: People living in the surrounding areas as well as birds, mammals, and the insects they feed on, will be negatively affected by extensive night lighting." (*Reddy Lieb, letter, December 5, 2011 [I-Lieb-03]*)

"The lights- This is extremely incongruous to the historical and asthetic fabric of Golden Gate Park .It would create a use factor at night that will certainly bring the typical urban problems that the Park is supposed to be a respite from. The Park is a naturalized horticultural jewel that was intended to be a sanctum from the urban hardscape. Coating six acres of Golden Gate Park with plastic would be a travesty historically and horticulturally. It would certainly go against our best efforts to be seen as The Greenest City." (Terry McDevitt, email, January 1, 2012 [I-McDevitt-06])

"...please prevent these proposed lights from ruining the beauty of our golden gate park!. the daylight savings provides much evening use of these fields. new surface; yes. lights; no! thank you," (Roger Meidinger, email, December 9, 2011 [I-Meidinger-01])

"Of greatest importance would be to include a sunset or evening version of the same scene showing the effect of the night lighting in the Final EIR." (Greg Miller, letter, December 9, 2011 [I-GMiller-10])

"Views over and through the trees from the old railroad path looking south east - the light towers will be clearly visible here, both during the day and at night.

Views under the trees from the old railroad path looking south-east. This vegetation is kept trimmed up by staff from the ground level, for clear views of the path from the fields and back again. The low newly-planted vegetation are native plantings that are unlikely to grow up to screen the fields at ground level." (Greg Miller, letter, December 9, 2011 [I-GMiller-16])

"Views under and through the trees from the old railroad path looking east. This vegetation is kept trimmed at the ground level, for clear views into the playing areas. The tops of the trees are wind-pruned and are unlikely to grow much higher." (Greg Miller, letter, December 9, 2011 [I-GMiller-17])

"Although the project would erect ten 60' high light standards with a total power consumption of 150,000 watts, the DEIR contains no rigorous technical analysis providing quantitative data on the amount of light seen by an observer at some distance. Indeed, when the DEIR introduces limited technical information, it is sometimes obviously incorrect. In describing the 1500 watts sports lighting lamps, page IV.B-33 states, 'The light standards are capped units that emit 134 lumens per lamp ... '. 134 lumens is approximately the amount of light emitted by a 10-watt

light bulb. The final EIR should correct this obvious error.” (Greg Miller, letter, December 9, 2011 [I-GMiller2-01])

“The DEIR presents simulated views from the Ocean Beach Promenade (Figure IV.B- 5). In the words of the DEIR, ‘ ... the visual sensitivity of areas along Ocean Beach and the Great Highway is considered high because these views from the public areas are defined by natural features, serve as popular recreational and vista sites, and engender a high expectation of quality views’ (page IV.B-11). In reviewing the results of the simulation, the DEIR concludes, ‘Owing to the distance to the site from the promenade, during the day the proposed poles and standards would create a level of view disturbance similar to Great Highway street lights. . . . As such, the overall views towards the project site from this public vantage point would not substantially change, and this impact would not be significant.’ The DEIR does not even include an evening or night view from the Beach or Promenade. Once again, the problem lies in the choice of viewpoint. The chosen site point is located well to the south of the project, near the intersection of the Great Highway and Lincoln Way. The direction of view seems to be directly north - it is likely that the sports lighting standards closest to this viewpoint are out of view, to the right of the photo. How far are the light standards seen in this simulation from the view point? My estimate would be between 1,100 to 1,500 feet.” (Greg Miller, letter, December 9, 2011 [I-GMiller2-05])

“A more relevant simulation viewpoint would be further north on the Promenade, close to the center of the west side of the Park. The direction of the view should be eastward, towards the Park. At such a location, the nearest light standards would be 2-3 times closer and their apparent height 2-3 times greater. The final EIR should include such a simulated view.

I know from personal experience that this stretch of the Beach is very popular on clear evenings. Hundreds of people gather at dusk just to enjoy the fine view of the sunset. The view eastward towards the Park and the windmills is an important part of the experience. The final EIR needs to give people a fair and accurate representation of the impact of the night lighting to this area.” (Greg Miller, letter, December 9, 2011 [I-GMiller2-06])

“Photo 4 shows a picture of the night sports lighting at South Sunset Playground, viewed from near the intersection of the Great Highway and Wawona. The viewer’s distance from the lights is approximately 2,400 feet. Notice that the intense bluewhite sports lights appear brighter than nearby streetlights. From a viewpoint on the Ocean Beach Promenade, centered on the Park, the nearest sports light standards will be about 500 feet away. Light intensity generally falls off in proportion to the square of distance, so one would expect the apparent brightness to be greater than illustrated in Photo 4.

This simulation could be accomplished in a manner similar to the night simulations of the Sutro Heights view. A normal photo of the scene taken in the evening would be overlaid by a photo of similar sports lights taken at ground level, with the appropriate orientation relative to the lighting fixture, at a distance of about 500'. The lights at Crocker-Amazon fields are the same type as proposed for this project (page IV.B-33). They can be used as the subject of the simulation overlay. Care would have to be taken to ensure the photographic exposure of the lights in the overlay matched the exposure of the base view." (Greg Miller, letter, December 9, 2011 [I-GMiller2-07])

"Evening and night views are particularly sensitive to the techniques used to control the exposures of the base photographs and the project lighting overlays. Consider Figure IV.B-10, which simulates an evening view from Sutro Heights southward towards the Beach Chalet Fields. The fields are about 3,500 feet from the viewpoint. The lower image in the Figure would lead most people to believe that the visual impact of the project will be modest. The brightness of the field and of the sports light lamps themselves seem low and at about the same level as neighboring traffic and street lights.

The process used to produce this image is described on pages IV.B-33 and 34: A base photo of the scene was taken (Upper half of Figure IV.B-10). An existing artificial turf field with similar night lighting (Crocker Amazon) was identified. A night photo was taken of the fields at a distance similar to the Sutro Heights view point (lower half of Figure IV.B-11). A portion of this photo was cropped, rotated, and inserted as an overlay onto the base photograph. The resulting overlaid photo was the simulated view seen in the lower half of Figure IV .B-10.

I was surprised at the dimness of the lit fields in the Sutro Heights simulation, so I performed an experiment. On a recent evening, I went up to Alta Vista Drive and took my own photo of the Crocker-Amazon fields. I adjusted the exposure of the shot to the point that the captured image matched the brightness of the actual scene as well as possible. My horizontal distance to the fields was about 3,600 feet - a good match to the actual Sutro Heights view point.

Photo 5 is the lower photo in Figure IV.B-11 of the DEIR used as the overlay in the Sutro Heights simulation. Photo 6 is my photo from Alta Vista Drive. Remember that the exposure of this photo was adjusted to match what I could actually see that night. Despite the presence of intervening trees in my photo, the field surface is quite a bit brighter than the DEIR photo. Also note the extreme brightness of the point source lights associated with the sports lamps.

Control of photographic exposure (brightness) is a key issue in such a simulation. The exposure of the base photo must be at a level that credibly represents what a normal person would see at night from a view point. The overlay of the lit artificial turf fields must have a matching exposure. To give an extreme example, if I adjusted the brightness of an overlay to the level seen through a welder's goggle, then the resulting simulation would probably show the simulated fields as a black patch. The final EIR needs to explain how exposure levels (brightness) of the base and overlay photos were controlled in these simulations. If sufficient control of this aspect was

not exercised, then the night simulations should be re-done.” (referenced photographs included in comment letter) (*Greg Miller, letter, December 9, 2011 [I-GMiller2-08]*)

“Figure IV.B-9 simulates the view into the Park from 48th Avenue and Lincoln Way. The DEIR concludes, ‘ ... the proposed lighting is unlikely to spill over the site’s boundaries substantially enough to adversely affect the surrounding neighborhoods. Also, the spillover would not affect the amount of light of the night sky.’ (page IV.B- 34)

The base photo was apparently taken on a clear night. A very common feature of the western end of San Francisco, particularly on the late spring, summer, and early autumn evenings is fog or low overcast skies. The latter are a particular concern. The marine layer creates a thick cloud layer that can be as much as 1,500 feet thick. The floor of this layer varies in altitude from sea level to as much as 900 feet above sea level. A typical elevation would be about 500 feet above sea level. Within the cloud layer, visibility is similar to being in a fog bank -generally less than 100 feet. Below and above the cloud bank, the visibility is similar to general Bay Area visibility - varying between 5 to 20 miles.

The DEIR discusses the impact of ground fog in a sketchy and non-technical way on page IV.B-36. It draws conclusions about the dispersion of reflected light without presenting any facts. In effect, it ignores the impact of low overcast I described above.

A low overcast situation produces different results than a clear night sky. Under this condition, the brilliant sports lights shine down onto the plastic grass field. Some of that light is reflected back upwards into the sky. This reflected light travels upward and hits the bottom of the marine layer cloud bank. The cloud bank, in turn, reflects the light back downward. At each reflection the light is scattered. This both diminishes it’s intensity per unit area and diffuses it over a much wider area. There is a significant likelihood that the average illumination of the surrounding forests, meadows, beaches, and neighborhoods would be considerably increased under such conditions. Photo 7 is a photo of the summer night skies over the 2010 Outside Lands Concert taken from the northern edge of the Park, near Spreckels Lake. This puts the viewpoint about 1,300 feet from the Polo Fields. I have no detailed information regarding the type, intensity, or orientation of the lights in that instance. I simply offer the photo as an indication of potential adverse lighting impacts which have not been addressed in the DEIR. The final EIR needs to do a rigorous analysis that takes into account the reflectivity and light dispersion characteristics of both the plastic grass field surface and the overlying cloud bank to determine the increase in sky brightness and ground illumination.” (referenced photographs included in comment letter) (*Greg Miller, letter, December 9, 2011 [I-GMiller2-09]*)

“In another comment letter on historic resources, I cited some examples of arbitrary aesthetic judgments made in the DEIR. I will discuss an additional case involving the assessment of night lighting impacts. As indicated above, the night sports lighting creates intense point sources of light that stand out at great distances. In reviewing the simulation view from Sutro Heights, the

DEIR states ‘Although the lights would draw attention with the intensity of the lighting, they would not dominate this panoramic view, because includes many different features and covers a vast area. Thus, this change is not considered substantial and the effect would not be significant. ‘

What aesthetic principal is being applied in this instance? It seems to somehow involve the fraction of the total area of a scene. It implies that a visual impact, however distracting and incongruous to the rest of the scene, is not significant if it only covers a small percentage of the visual field. We all know that it not the case in real life. We all remember as teenagers, dreading that pimple that would pop up on the end of our nose. That pimple was focused on by everyone we ran into that day, whether they wanted to notice it or not. Will the new lighted field become the pimple on the face of Golden Gate Park?

Clearly, aesthetics is a somewhat subjective topic. Is there a recognized authority for the aesthetic rules being applied by the DEIR?” (Greg Miller, letter, December 9, 2011 [I-GMiller2-10])

“Views under the trees from the old railroad path looking south-east. This vegetation is kept trimmed up by staff from the ground level, for clear views of the path from the fields and back again. The low newly-planted vegetation are native plantings that are unlikely to grow up to screen the fields at ground level.

Views under and through the trees from the old railroad path looking east. This vegetation is kept trimmed up at the ground level, for clear views into the playing areas. The tops of the trees are wind-pruned and are unlikely to grow much higher.” (Greg Miller, letter, December 9, 2011 [I-GMiller2-12])

“Night Sports Lighting at South Sunset Playground as seen from the Intersection of Wawona and Great Highway, a Distance of about 2,400 feet.

Note that the distant sports lights are bluish in color while the nearby street lights are yellowish.” (referenced photographs included in comment letter) (Greg Miller, letter, December 9, 2011 [I-GMiller2-13])

“Photo 5. Image of Crocker-Amazon Fields used in DEIR as an overlay for Simulation of Night View from Sutro Heights.

Photo 6. My photo from a similar viewpoint - exposure adjusted to match what I could see.” (referenced photographs included in comment letter) (Greg Miller, letter, December 9, 2011 [I-GMiller2-14])

“View of the overcast night sky above the 2010 Outside Lands Concert taken from the north side of the Park, looking across Spreckels Lake. Time: approx. 9:30 p.m. after full sunset.” (referenced photographs included in comment letter) (*Greg Miller, letter, December 9, 2011 [I-GMiller2-15]*)

“First of all, the EIR concludes that there are no significant adverse impacts on the visual effects particularly of the lights. And they paint this in terms of, if I recall correctly, ‘Well, yes, the fields will be bright at night, say, when viewed from Sutro Heights but only subtends a very small area of the visual field which is vast so it’s not going to bother anybody.’.

I find that reasoning very questionable because the lights are incredibly intense spotlights that can be viewed for miles. So what happens when you look at a scene and there’s something that’s very visible and very intense? Your vision’s distracted to that. The rule that they’re using doesn’t take that into account.” (*Greg Miller, public hearing comment [I-GMiller4-01]*)

“I am very concerned particularly about the stadium lighting that is being proposed to be put in. I’m sure as San Francisco residents you’ve all had the privilege of sitting on Ocean Beach after dark looking at the waves. It’s beautiful. And from all the pictures I’ve seen, from all that I can imagine, having huge nearly spotlights put in so close to the beach would absolutely ruin that.” (*Anna Myers, public hearing comment [I-Myers-02]*)

“The lights will be seen for miles. This is in conflict with the city’s commitment to reduce nighttime light pollution to protect wildlife.” (*Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-08]*)

“Massive light standards towering over the entire region is disgusting and will be equivalent to a deer staring into headlights. This night light pollution is an absolute deal-breaker whose destruction to the tranquility of the area needs no further discussion. This domineering beacon of light will be visible for hundreds of miles out to sea and will dominate a bird’s-eye-view for visitors flying into the Bay Area. The reflection off thick foggy sky will reverberate and be inescapable for many surrounding blocks of homes.” (*Andrea & Rick O’Leary, email, December 11, 2011 [I-O’Leary-04]*)

“The beach, the ocean, the fog, with these huge lights extended into it. This is called a light pollution. Every little dinky town I can think of and even many of the and most of the large cities

in this country have standards about dark skies, the black skies. What is considered a standard so that you don't pollute that anymore than we already have.

Does San Francisco not have any of these standards? And if so, what do they say? I didn't see anything in this EIR study that said anything about that. I know of tiny little towns that pick their light fixtures very carefully so that they can still see stars at night." (*Andrea O'Leary, public comment [I-AO'Leary2-01]*)

"I do not believe that the impact of this proposed artificial lighting on wildlife and residents is adequately addressed in the DEIR." (*Dennis O'Rourke, email, December 2, 2011 [I-O'Rourke-01]*)

"Given the sensitive nature of the site and the apparent conflict with the Master Plan, it would be appropriate to assume the precautionary principle in assessing impacts. For example, at night the lighting could have a much greater visual impact than depicted, if there were lowhanging clouds from a marine layer. The assumption is apparently made in Aesthetics that because there are already various illuminations in the night-time environment, some additional lighting would not be significant. In fact, the size and character of the lighting of the athletic fields would change my perception of the character of the interface of the Park and the Ocean and that part of the Park generally. The DEIR clearly is wrong on Aesthetics because many people in fact are disturbed by the impacts of the project and oppose the full proposed project. The DEIR should mention that the Aesthetic impacts would be very significant for a large proportion visitors to the Park." (*Charles Pfister, email, December 12, 2011 [I-Pfister-02]*)

"Finally, I would like to see some specific data on the degree of illumination that could occur on Ocean Beach near the Park under various atmospheric conditions. If there is any additional illumination on the Beach, it could affect the Beach as habitat for wildlife, as, for example, many shorebirds on the beach, including the Western Snowy Plover, are nighttime feeders and could be affected by any change in illumination." (*Charles Pfister, email, December 12, 2011 [I-Pfister-04]*)

"The lights will be seen for miles. This is in conflict with the city's commitment to reduce nighttime light pollution to protect wildlife. (See environmental impact section) Not to mention our adoption of the Green City Initiative to reduce excess power usage." (*Jamie Ray, letter, December 12, 2011 [I-Ray-09]*)

“... light up the night sky when we walk at night ... amongst other concerns.” (*Jamie Ray, letter, no date [I-Ray2-01]*)

“Has this report been already included in the DEIR? (downward facing is better than out. Blue green better than yellow red. RPD suggests to utilize these features plus a timer to turn off at 10 pm.” (*Jamie Ray, email, December 14, 2011 [I-Ray6-01]*)

“This boggles the mind in light of the ongoing efforts of the National Park Service to convert the Golden Gate National Recreation Area into a more protected National Park in which human and domestic animal use will be highly restricted in the adjacent Ocean Beach and Fort Funston areas. Installation of ten 60’ towers with stadium lighting that will remain on until 10:00 pm every night is completely contrary with not only the historic and wild nature of the West End of Golden Gate Park, but of Ocean Beach and the GGNRA.” (*Renee Richards, email, December 8, 2011 [I-Richards-04]*)

“Do the ‘light and glare’ (IV.B-12) from cars and residences compare to that produced by 60 to 100 60-foot-high 1500 watt halide spotlights?” (*Dan Richman, letter, no date [I-Richman-02]*)

“And speaking of those 60-foot-high spotlights (tile average single-family house in San Francisco, by the way, is approximately 25 feet above the sidewalk), how can an examining body come to the conclusion the lights ‘would not have an adverse effect on a scenic vista, etc.’ (IV.B-18) when there is no indication in your pages of anyone in the surrounding neighborhoods being asked their opinion of the proposed lights, nor the proposed project in general. You call this an Environmental Impact Report, yet overlook the most vital segment of the environment there is in a city - the people who live there. The people who own property there.” (*Dan Richman, letter, no date [I-Richman-03]*)

“The lighting will detract from the beauty of Ocean Beach.

The lighting will, because of the extreme bright lighting, most importantly, take away the night sky and our ability to see the stars at night.” (*Diane M. Rivera, email, November 28, 2011 [I-Rivera-05]*)

“I don’t --I’m not an engineer but I’m not an idiot. If you tell me you’re going to put up these lights and it’s not going to have any impact, that’s ridiculous.” (*Terry Rollerli, public hearing comment [I-Rollerli-01]*)

"Of specific concern are ... light pollution to residences in the area, ..." (*Mark Russell, email, November 23, 2011 [I-MRussell-04]*)

"I am also opposed to putting up banks of lights at the fields. Light pollution is a problem for all of us. To put these lights up in what is now a natural part of the park, destroying the natural rhythms of the day and night, beaming light onto a part of Ocean Beach at night is offensive. There are few places where one can escape the constant presence of artificial light in the city. I don't think that one more of them should be destroyed by large banks of light." (*Leida Schoggen, letter, November 29, 2011 [I-Schoggen-06]*)

"The only question I have about the proposed Beach Chalet Renovation project is exactly how tall the field light poles have to be to properly illuminate the new artificial field complex. Shorter would be better if an adequate amount of illumination can still be achieved.

If they have not already done so, I request that the City Fields Foundation provide technical comparison of the efficiency ... of 60', 45' and 32' light poles to light Beach Chalet including the proposed locations for the different height light poles, the type of light fixtures to be used on the different size light poles, and some estimate of the amount of spill over and reflected light for the different height light poles and fixtures (light pole heights are approximate). Again, if it has not already been done, perhaps a field lighting contractor could provide the requested lighting comparison. ..." (*Andrew Solow, email, December 1, 2011 [I-Solow2-06]*)

"One of the striking aspects in the DEIR is that there is no lighting plan calculation at all of the illumination on the sport field, the parking lot and walkways. Only some numerical values are given in the text and some reference to the Crocker Amazon site for the types of lights to be used.

For a proper evaluation of the lighting plan in the DEIR the results of these calculations should have been presented as an absolute minimum, with the planned number and type of fixtures. Without this it is impossible to judge if the proper illuminances are applied during operation. Also the extent of illuminated area's on and around the sport field (including the walkways and parking lot) cannot be judged in a sensible way." (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-01]*)

"The impact of lighting onto the surroundings, such as light nuisance, sky glow and indirect illuminances due to the back scattered light from the atmosphere is only described qualitatively and not quantitatively.

The fact that the lighting impact under cloud cover conditions and fog is about 10 to 20 times more severe than during clear sky conditions has been heavily neglected in the DEIR.

The DEIR lacks any estimate or calculation of the increased overhead night sky brightness and sky glow above the horizon at some distance(s) during cloud cover and fog conditions.

Due to this it's impossible to judge the impact on the surroundings and the expected sky brightness and sky glow in a objective way." (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-02]*)

"Although some attempts have been made to give a representation of the night time view of the illuminated sport field in the DEIR, these kind of representations can be misleading.

It takes great effort to match the proper and true brightness of the planned illuminated sport field into an existing photo. The Crocker Amazon Playing Field has been inserted into the photo (on page IV.B-32). However the DEIR states that the Beach Chalet Athletic Sport Field has 32% brighter lights. Therefore it is doubtful that this aspect has been properly corrected for. Also, EIR asserts that the Beach Chalet Athletic Sport Field will be equipped with fully shielded fixtures. This is questionable since the lights of each individual lamppost are visible in the photo, which is taken well above the plane of the sport field.

In general matching photo's in Adobe Photoshop is insufficient without the proper scaling of the known luminances of the objects and in the original photo's. The DEIR is inconclusive on this aspect." (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-03]*)

"For a proper assessment of the applied and quantified illuminances at the sport field and the expected light impact on the surroundings in a quantative way the following two subjects should be elaborated and quantified in far more detail in the DEIR:

1. Lighting plan calculation
2. Lighting impact analysis

The next two sections describe the requirements that these two subjects must meet.

1. REQUIREMENTS LIGHTING PLAN CALCULATION

The lighting plan calculation should cover:

- the illuminance (foot-candles) of the sport field, the parking lot and the walkways and the area's just outside the sport field, parking lot and walkways (e.g. by presenting foot-candle contours)

– the light nuisance at various points around the sport field (e.g. at the residential areas, in the easterly park direction, at the beach and so on) by calculation of:

- o brightness (candela) from the fixtures
- o vertical illuminances

These calculations should be done with the proper photometric and geometric data (including the shielding and pointing direction of the sport field fixtures) together with the exact number of fixtures to be installed. This includes the fixtures at the walkways and parking lot (and if applicable any other lighting at or around the sport field buildings).

In order to put the light nuisance into perspective and for comparison the brightness (candela) and vertical illuminances should be compared within common brightness levels/illuminances of e.g. certain familiar lamps at a certain distance, the sun, the moon or even a candle." (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-04]*)

"The lighting impact analysis should be based on the calculation of the scattering of light originating from the sport field and that is reflected back by the atmosphere. This gives rise to sky glow and illuminates the surroundings further away from the sport field. Especially under fog conditions the illumination levels rise substantially.

The lighting impact analysis should be performed with an appropriate light pollution model, which takes into account scattering of gas molecules (Rayleigh scattering), water droplets and aerosols (Mie scattering) at the maximum eye visibility wavelength of 555 nm.

The lighting impact analysis should present sky brightness values for an observer at certain preselected critical points and looking towards the sport field (e.g. from a point at the beach, residential areas and at a point in easterly direction of the park). The sky brightness values should be calculated for different viewing angles above the horizon.

The illumination levels in the park well outside the sport field, which could influence nocturnal animals and can be of nuisance in the residential areas facing the park should be calculated at some distances from the sport field. Ideally a contour plot for an area within 250 m around the sport field would be included in the final EIR.

Also these results should be placed in perspective to compare them with appropriate 'reference values' for sky brightness and with moonlight illuminances levels (e.g. half and full moon).

For these calculations the following data is needed:

- all input data used in the lighting plan (under 1):
- the position, geometric and photometric data of all fixtures

– the reflectivity of the ground surface at and around the sport field (grass, artificial turf, parking lot, walkways)

– a choice for which meteorological conditions the calculations should be performed. My recommendation is to perform modeling for an ‘average’ fog condition, during low cloud cover and clear sky. For this the following meteorological parameters are needed (most can be probably obtained through the MET-office at the San Fransisco International Airport):

- visibility during fog conditions
- average cloud base during non-fog conditions
- annual frequency of cloud cover” (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-05]*)

“EIR page IVb-34: Owing to the differences in height between the fight poles at the Crocker Amazon (80 feet above ground level) and the proposed fight poles at Beach Chalet (60 feet above ground level), spots on the Beach Chalet fields would be approximately 32 percent brighter than their corresponding areas on Crocker Amazon. However, at the lower height, the Beach Chalet fighting would likely be obscured by nearby trees or buildings.

Comment: This is a questionable statement. Only with a proper lighting calculation plan this can be quantified if the lights will be obscured or not.

Here two aspects are involved. One is the view of the lamps themselves (although they are capped, you can see the lamps from certain points). The second is the view of the playing field. This is only partly shielded by trees and buildings (only the edges), depending on the viewing point. The proposed view in Figure IV.B-10 on page IV.B-32 indicates that the playing field will be seen at certain angles. The image also indicates that direct light from the fixtures will be seen as the viewing angle is downwards. If this is really the case then the fixtures will emit light above the horizontal and thus contribute to the sky glow. This also can cause light nuisance for the residential areas around the sport field.

Another point in the statement is that the light poles are lower and the lights ‘would be approximately 32 percent brighter’. In principle then the amount of light on the sport field is 32% too high. With a proper light calculation plan this can be calculated more precisely and probably reducing the amount of lamps.” (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-06]*)

“EIR IV.B-34: Based on the evening views comparative photographic study conducted for the proposed project, it appears that, although the project site would likely appear substantially brighter as compared with existing conditions or other illuminated areas in the vicinity, the proposed lighting is unlikely to spill over the site’s boundaries substantially enough to adversely affect the surrounding neighborhoods. Also, the spillover would not affect the amount of light of the night sky, as the sky appears similar above the athletic field lights as above other areas with

no athletic field lights. Specifically, under foggy conditions, the lighting would be more diffused and would likely be more visible higher up in the sky and from vantage points further away. Other existing light sources, such as street lighting and residential and commercial building lighting, also result in light diffusion and this project would contribute to the existing general 'glow' that can occur during foggy conditions.

Comment: These are questionable and qualitative statements. During foggy conditions the whole sporting field will be like a glowing bright cloud and the surroundings will be brightly lit up to a factor 10 to 20 times brighter than under clear sky conditions.

During cloudy conditions the clouds over the sport field will be very bright and shed the reflected light back to the surroundings. The sky will be 10 to 20 times brighter than under clear sky conditions.

So during a number of these occasions the proposed lighting is likely to spill over the site's boundaries substantially enough and will affect the surrounding neighborhood (so complete opposite of the statement in the EIR)." (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-07]*)

"EIR page IVb-33: The proposed project would use the same type of lighting standards (Musco brand) as already employed at the Crocker Amazon site during evening games. The light standards are capped units that emit 134 lumens per lamp, and have been designed specifically for sports fields, with the goal of lighting the field evenly while minimizing the spread of light upward.

Comments: This is an obvious error in the EIR. A lamp that emits 134 lumens equals a light bulb of about 10 Watt. There will be 1500 Watt lamps installed. This value should be 134 klumens (134000 lumens) to be correct." (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-09]*)

"EIR page IV.B-36: Factors that affect the impact of lighting are numerous and include the brightness of surrounding lighting, such as residential lights and moonlight, and the 'bounce' of the field lights off the surrounding structures, the ground, and particles of water in the air (i.e., fog). Thus, the impact of additional artificial lighting on light spillover can depend on such things as the reflectivity and wetness of the synthetic turf, fog conditions, and the phase of the moon. (1) However, even under conservative conditions, the spillover of the lighting would not be expected to travel so far as to adversely and substantially affect the closest neighborhoods, which are located approximately 800 feet from the project site. The distance from the project site and the site's screening by the surrounding vegetation (2) would virtually eliminate any spillover lighting that could otherwise enter people's homes. Although only evening (dusk) conditions are illustrated in the visual simulations, this determination would also hold true for nighttime conditions, which, for the purposes of the proposed project, are the hours between total sundown and facility closure. A lighting study prepared for the proposed project by Musco Lighting7

illustrates that within a very short distance of the project site's boundaries (approximately 150 feet), (3) light measurements at heights of approximately 60, 70, 80, 90, and 100 feet above ground level would drop to zero. due to the shielding and focusing of the lights.

Comments: (1) light always travels in a straight line and will be seen at the closest neighborhoods. However the light intensity decreases with increasing distances. There are no quantitative data in the EIR from lighting calculations to judge the amount of light intensity seen by an observer at some distance. This is a real missing issue in the whole EIR and it needs to be remedied In the final EIR.

(2) Due to trees light from the lamps and reflected light from the field can be obscured. However it cannot be judged if this is valid for all houses at the border of the park. Nevertheless residents will see the sky glow above the sport field.

(3) This statement is very weak, no data presented; only a statement is given. Secondly there is a huge difference in how this is measured. Has the horizontal illuminance been measured (the light that falls on a horizontal surface), or has the vertical illuminance been measured (the light that falls on a vertical surface and this is what enters people's home)? Finally, it is very important to quantify 'spillover'. These calculations for horizontal and vertical illuminances need to be made in order to be able to make a valid judgment about the amount of light entering people's home or that is seen by an observer.

(3a) 'would drop to zero'. This phrase is almost always encountered in EIRs and permits and is wrongly used to show that there is no light impact. In general people use illuminance meters to measure this. It very strongly depends on the quality of light meter. The majority of the light meters used cannot measure accurately below about 0.05 fc (0.5 lux), although the resolution on the display can be 0.001 fc (0.01 lux). A value of 0.025 fc (0.25 lux) is the amount of light received under a full moon high in the sky. Stating that 'it drops to zero' is technically and Scientifically wrong. It should (shall) be stated that the light level is less than a certain value (e.g. < 0.05 fc).

(4) The definition of 'spillover' is lacking in the EIR." (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-10]*)

"EIR IV.B-34: Based on the evening views comparative photographic study conducted for the proposed project, it appears that, although the project site would likely appear substantially brighter as compared with existing conditions or other illuminated areas in the vicinity, the proposed lighting is unlikely to spill over the site's boundaries substantially enough to adversely affect the surrounding neighborhoods. Also, the spillover would not affect the amount of light of the night sky, as the sky appears similar above the athletic field lights as above other areas with no athletic field lights. While these assumptions may change during particularly foggy weather conditions, they would not be expected to change so much that lighting at the fields would substantially affect views of the project site from the surrounding public vantage points. Specifically. under foggy conditions, the lighting would be more diffused and would likely be

more visible higher up in the sky and from vantage points further away. Other existing light sources, such as street lighting and residential and commercial building lighting, also result in light diffusion and this project would contribute to the existing general 'glow' that can occur during foggy conditions. The proposed project would not result in direct light and glare in people's homes and field lighting would be turned off by 10:00 p.m. Based on the discussion above, this impact would be less than significant.

Comments: As stated earlier the big omission in the EIR is a decent lighting plan calculation. Only the illuminance values for the sport fields are given and a type of luminaire in the text, without a light plan calculation with illuminances contours as a result.

The following is missing in the DEIR:

- what is the illuminance of the walkways?
- calculation of how far the light reaches to the edges of the park (e.g. fe-contours).
- calculation of the vertical illuminance at the edges of the park (important to estimate the amount of light entering people's home.)
- calculation of the visibility/brightness of the lamps of the sport field for an observer at various distances. Although they are shielded to some extent, there is no quantitative data and they will shed light to the surroundings.
- calculation of the increased night sky brightness in the Park and the surroundings during clear nights, under cloudy conditions and during fog." (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-11]*)

"EIR 11-15: Each light fixture, or assembly, would consist of ten 1,500-watt metal halide lamps. During regulation play and practices (the majority of the time), seven of the ten lamps would be turned on.

Comments: Spectra of metal halide lamps have a substantial blue color component. This blue light component attracts insects and disrupts also the animal and human circadian clock (it breaks down melatonin). This negative aspect is not mentioned in the DEIR.

These lamps are widely used as they have a good color rendering, but with this negative impact. The alternative is high pressure sodium lamps (which are more energy efficient as well), but give an orange-whitish light." (*Henk Spoelstra, letter, December 10, 2011 [I-Spoelstra-12]*)

"A sports complex adjacent to the Park with artificial turf and stadium lighting is intrusive and incompatible with the surroundings." (*Kathleen Stern, public hearing comment [I-Stern2-02]*)

“The Golden Gate National Recreation Area (GGNRA) is calling for the protection of nearby Lands End as a dark skies site where visitors can enjoy observing the constellations. The GGNRA has a planned event called Explore the Night Sky on December 3 at 6:00pm. The GGNRA’s website and their 20 year Master Plan calls for keeping Lands End as one of the places where visitors can enjoy the night skies. Their website states that ‘the National Park Service is dedicated to protecting natural lightscapes where it can and the construction of the new visitor facility at the site reflects that awareness.’ ...

lighting that will be on until 10:00 pm will put an end to these activities.” (Noreen Weeden, email, November 29, 2011 [I-Weeden-03])

Response AE-2

Some comments convey general opposition to night lighting, asserting that the lights are an unnecessary project component, and stating that the project site would provide adequate play hours without the proposed lighting installation. Such comments provide general statements, personal opinion, or restatements of information contained in the EIR but do not address the adequacy or accuracy of any specific analysis presented in the EIR. As such these comments are noted; however, no further response is required.

Methodology and Limitations of Nighttime Visual Simulations

Some comments generally disagree with the EIR conclusions concerning nighttime views in the area or question the methods employed in reaching those conclusions. With respect to night lighting, CEQA directs that the proposed project be evaluated based on whether it would create substantial adverse effects on a scenic vista or substantially damage scenic resources, or whether it would introduce a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area or that would substantially affect other people or properties. Because analysis of impacts of night lighting to visual character and views is inherently subjective and variable, multiple methods were used to assess the potential impacts of the proposed lighting, including conducting site reconnaissance, evaluating the proposed project plans and drawings, analyzing light distribution from a lighting study prepared for the project, reviewing photographs of the project area, preparing daytime and evening visual simulations, and performing a comparative analysis of nighttime views. Visual simulations and analysis was conducted by experience professionals.

In terms of methodology used in preparing nighttime visual simulations, and in response to comments that question this process, these were produced by combining site photography with accurate, rendered computer models (provided by project architects) to predict what would be seen if the proposed project were built. There are no existing CEQA guidelines for the technical production of visual simulations, particularly nighttime visual simulations, although the

methodology used is a typical simulation process and conforms to standard practices in the industry. To prepare the nighttime visual simulations used in the EIR, several representative viewpoint photographs were taken using a full-sensor (no cropping or zoom factor) 35 millimeter (mm) digital camera from which two representative “existing conditions” images were selected for use in visual simulations. A 50mm camera lens was used with a GPS unit to record date, time of day, and geographical location. This information was subsequently integrated into a 3D digital model.

Nighttime “simulations” are often publicity images of buildings at night that are prepared with the intent of highlighting specific project features and are not necessarily accurate depictions of projects. For the purpose of CEQA environmental analysis, technical requirements must be met to accurately depict current and proposed future conditions. Therefore, views of what the project site would look like at dusk were simulated, rather than what the site would look like during complete darkness because lights, both existing and proposed, can be represented more accurately in dusk conditions, allowing for a more realistic depiction of the proposed project. Specifically, according to the technical specialist who prepared the evening visual simulations, photographing at dusk is the best way to adequately deal with focus issues, reciprocity failure (meaning “noise” or graininess in photos), underexposing or overexposing existing light sources (which would exaggerate or minimize glare), and to create a useable base with visible features that can be matched for simulations. Shooting later at night introduces a greater margin of error due to absence of skylight.¹

Visual simulations depicting nighttime conditions represent a reasonable prediction as to what the project could look like. However, they are less accurate than daytime simulations because the amount of nighttime ambient lighting changes relatively quickly from one moment to the next. Moreover, it is not feasible to reflect the variations in the weather. As stated on page IV.B34 of the EIR, under foggy conditions, the lighting would be more diffused and would likely be more visible higher up in the sky and from vantage points further away. For this reason, the EIR employs multiple analytical tools to reach its conclusions. It is important to point out that the EIR states on page IV.B-34 that the project site would likely appear substantially brighter as compared with existing conditions or other illuminated areas in the vicinity. However, the EIR concludes that the proposed lighting is unlikely to spill over the site’s boundaries substantially enough to adversely affect the surrounding neighborhoods (this is discussed in greater detail below under the heading *Light Spillover, Reflectivity, and Dispersion*).

Comment I-GMiller2-08 states that the Final EIR should explain how exposure levels of the photos were controlled in the simulations and if sufficient control was not exercised, the simulation should be re-done. The visual simulations developed for the nighttime views included the following methodology: the corresponding f-stop, shutter speed, and white balance used in shooting the existing context photo was mirrored in the virtual camera so that the computer model would be accurate relative to the exposure and color rendering of the existing photograph. That being said, neither the City of San Francisco’s CEQA process nor the State’s CEQA Statutes and Guidelines

¹ Personal communication with Richard Tsai, Field of Vision, March 19, 2012.

currently require the preparation of visual simulations as part of the impacts analysis related to aesthetic resources. They are generally prepared as one informational tool to demonstrate to the public and decision-makers the potential impacts of a proposed project.

In response to comments I-Koivisto-20 and I-Koivisto2-04, which state that the simulations fail to show how the field lights would look during nighttime conditions, as discussed above, this part of the day was chosen because during this time, lighting intensity can be portrayed most accurately in graphics. That is, according to the technical specialist who prepared the visual simulations, the placement of a simulated image of the athletic fields as illuminated at night into a photograph of a completely darkened setting condition would be extraordinarily difficult for the reasons stated above. As noted, the visual simulations were used along with various other methods in reaching EIR conclusions.

In response to I-Spoelstra-12, which states that the EIR fails to mention the blue color component of the lights, in nighttime simulations, the color temperature of the lights was simulated using an assumed value for each lamp type: 5000K for the metal halide lamps of the mast lighting and 8000K for the LED pathway lights. The resulting simulation (EIR Figure IV.B-10) shows the difference in color rendering of the proposed lights (being white to blue-white) in contrast to the orange cast of the existing high-pressure sodium street lights.

Development of the Beach Chalet Lighting System

Some comments request that the EIR include additional calculations estimating spillover and reflected light for different heights of light poles and different types of lighting fixtures. Comment A-SFPC-Antonini-05 is in regard to improvements that have been made to field lighting as part of project design. CEQA does not require the EIR to include or analyze project alternatives at the same level of detail as the proposed project (see also Section 10.O, Alternatives). The Musco Lighting study and EIR contain substantial evidence to support the conclusion that the project would not result in substantial light spillover. The following text, which provides a brief overview of the history of the design of the proposed lighting system, is included for informational purposes and also as a response to Comment A-NPS-07, which recommends that the City provide lighting with the least impact that meets its project objectives, suggest that the Beach Chalet athletic fields only warrant Class IV lighting for general use, with Class III lighting only used for tournament events, and requests rationale to explain why the preferred lighting design is brighter than IES standards, and why the Class IV lighting cannot be used for general use.

In selecting a lighting system for the Beach Chalet site, the SFRPD originally wanted it to match other athletic fields where the proposed technology has been implemented, such as Crocker Amazon. However, in order to be able to host high level tournaments with large numbers of spectators, an increase in light quantity on the fields from 30 foot-candles² (FCs) (Class 3) to 50 FCs

² A foot-candle is a common unit of measurement that conveys the amount of illumination the inside surface of a 1-foot radius sphere would be receiving if there were a uniform point source of one candela in the exact center of the sphere. This can be thought of as the amount of light that actually falls on a given surface. The foot-candle is equal to one lumen per square foot.

(Class 2) was desired. Following review of Musco Lighting's original plan, which included installation of eight to ten 80-foot poles around the perimeter of the field, SFRPD researched other lighting options to determine if a different system would have less impact in terms of light spillover. The option of installing more and taller poles (up to 100 feet in height) was explored and discarded because of potential for greater visibility of poles and lighting from offsite locations. After reviewing the project with community groups and project stakeholders who had concerns about the impact of the initial design, the design was revised by moving the poles from the perimeter of the fields to the interior sideline areas on the fields and reducing pole heights from 80 feet to 60 feet so that views from outside the park would be minimized.

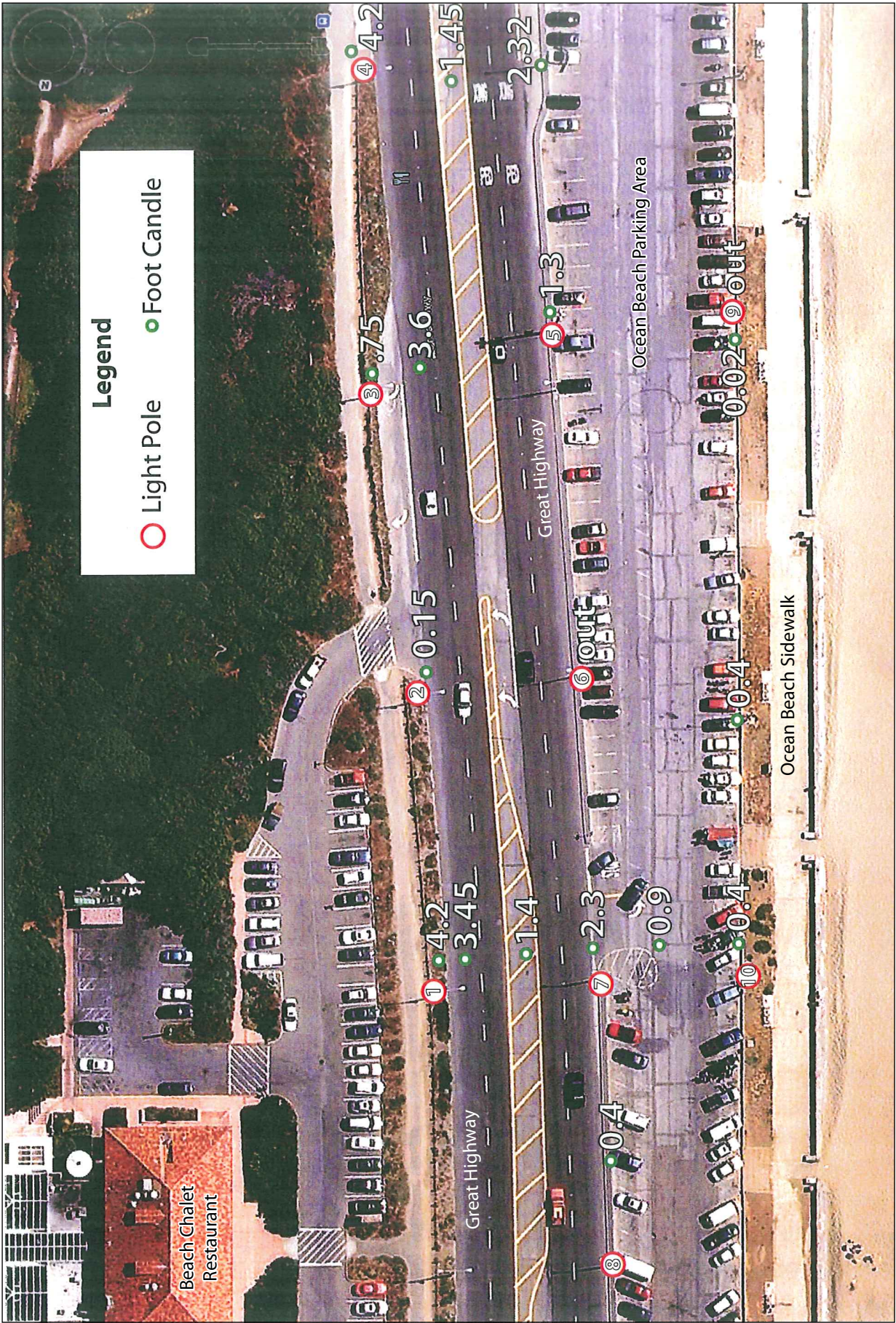
As part of the scoping process, the National Park Service (NPS), which has jurisdiction over Ocean Beach, expressed concerns about light spill and potential impact on dark skies. To address this, SFRPD consulted with one of NPS's lighting experts in Colorado, who stated that, based on his experience, Class 4 (20 FCs) lighting would be acceptable for regular recreational play.³ However, the United States Soccer Foundation indicates that soccer fields should use Class 3 standards.⁴ SFRPD also consulted with NPS staff in Flagstaff, AZ, where a very conservative night sky policy is enforced. Based on these consultations, the lighting system at Beach Chalet was redesigned to incorporate a dual-switch system so that the SFRPD can operate at 30 FCs during normal play and can switch to 50 FCs for championships and tournaments.

Following receipt of the lighting distribution calculations from Musco, the SFRPD staff measured light spillover at South Sunset Playground and at Crocker Amazon fields to confirm that Musco's built-out lighting systems matched lighting plans for those sites. At both locations, light readings on and off the fields matched the range indicated in the plans, with light spillover negligible off the field. (Light readings across the street from each site were the same as light readings two blocks away from the fields, suggesting that street lamps make the biggest contribution to those off-site light readings.) These light readings confirmed that Musco light spillover calculations are reasonably accurate. The lighting tested at South Sunset Playground and Crocker Amazon fields is similar to what is proposed at the Beach Chalet site.

Based on evidence gathered at South Sunset Playground and Crocker Amazon sites regarding accuracy of Musco's lighting plans, light readings were subsequently taken along the Great Highway near the project site. Readings in this area ranged from less than 1 FC to more than 4 FCs (see **Figure X.I-1** on the following page). According to Musco's lighting plans, light spillover 150 feet from the fields, on a flat plane and without obstructions, would yield approximately 0.25 to 0.95 FC. Thus, street lights on the Great Highway currently produce up to four times the amount of light compared to what the new field lights would produce at that distance. Considering that vegetation would continue to exist between the Beach Chalet site and the Great Highway, it is likely that lighting levels would be even lower in this area.

³ Personal communication with Dan Mauer, SFRPD, January 25, 2012.

⁴ Musco Lighting also mentioned that it rarely designs a field using class 4 and that on several occasion, clients have been disappointed with class 4 once it has been installed.



Note: These measurements were taken by SFRPD staff on March 3, 2010, during clear weather conditions.

SOURCE: Google Maps

Case No. 2010.0016E: Beach Chalet Athletic Fields Renovation Project
Figure X.I-1
 Light Meter Readings

Light Spillover, Reflectivity and Dispersion

Many comments state that the project would result in light spillover, light pollution or glare on the nearby areas, such as the nearby parklands, Ocean Beach shoreline, the Great Highway, the Beach Chalet Restaurant and the nearby residential areas. As stated on page IV.B-36 of the EIR, factors that affect the impact of lighting are numerous and include the brightness of surrounding lighting, such as residential lights and moonlight, and the “bounce” of the field lights off the surrounding structures, the ground, and particles of water in the air (i.e., fog). Thus, the impact of additional artificial lighting on light spillover can depend on such things as the reflectivity and wetness of the synthetic turf, fog conditions, and the phase of the moon. However, as stated in the EIR, even under conservative conditions, the spillover of the lighting would not be expected to travel so far as to adversely and substantially affect the closest residential neighborhoods, which are located approximately 800 feet from the project site. The distance from the project site and the site’s screening by the surrounding vegetation would virtually eliminate any spillover lighting that could otherwise enter people’s homes. Although only evening (dusk) conditions are illustrated in visual simulations, this determination would also hold true for nighttime conditions, which, for the purposes of the proposed project, are the hours between total sundown and facility closure (1.5 hours to 5 hours depending on time of year). A lighting study prepared for the proposed project by Musco Lighting⁵ illustrates that within a very short distance of the project site’s boundaries (approximately 150 feet), light measurements at heights of approximately 60, 70, 80, 90, and 100 feet above ground level would drop to zero, due to the shielding and focusing of the lights. That being said, the analysis does state on page IV.B-26 that the proposed field and pedestrian pathway lighting would alter views from the Beach Chalet Restaurant Outdoor Patio. However, the EIR concludes that this view would not substantially change in an adverse manner, and this impact would be less than significant.

In response to comments that state that effects of fog must be incorporated into the visual simulations, the illustration of foggy conditions in visual simulations (particularly those illustrating nighttime views) would lessen their degree of accuracy, because it would be more difficult to accurately depict lighting diffuse conditions and to place the image of the illuminated play fields into the setting photograph. For this reason, this was not done. However, the EIR describes the possible effects of fog on views of and near the project site by stating, on page IV.B-34, that under foggy conditions, the lighting would be more diffuse and would likely be more visible higher up in the sky and from vantage points further away. However, other sources of light in the area, such as street lights along the Great Highway and residential and commercial building lighting, already contribute to light diffusion and the foggy ‘glow’ that occurs during foggy conditions. With project implementation, the overall change of the project during foggy conditions would not be drastic enough to substantially affect views of the project site from the surrounding public vantage points. The EIR concludes that this impact would be less than significant.

In response to comments that state that the EIR does not address light fixtures emitting light into the dark sky above the light fixtures, as stated in the EIR, light spillover above the light fixtures

⁵ Musco Lighting, Illumination Summary, January 29, 2010 and April 28, 2010. This document is available for review at the Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2010.0016E.

would be minimized through the use of metal light shields, which would direct the light down and within the site's boundaries. To the extent that foggy conditions would diffuse the lighting, this is discussed above.

In response to comments that state that the EIR does not account for light reflectivity from the synthetic turf, the proposed synthetic turf may result in more reflectivity than is currently experienced at the site with natural grass, depending on the selected synthetic grass turf. It is noted that there are synthetic turf products available that have less 'plasticity' surfaces and therefore would not be more reflective than grass turf. Based on the use of such turf at other athletic fields throughout the City, any increase in reflectivity from the synthetic turf would not be substantial. This does not change the conclusions reached in the EIR that the proposed lighting would result in less than significant impacts to views or the visual character of the project site.

In response to comments concerning glare impacts, the proposed project would not introduce large mirrored or reflective glass to the project site, either as part of restroom building renovations or anywhere else on the fields or parking lot. Proposed light standards, seating, and plaza facilities would not be composed of reflective materials. Therefore, environmental effects associated with glare would not be significant.

In response to several comments that request that a lighting plan calculate illumination of the sport fields, parking and walkways, and that calculation of the vertical illumination level be made in order to be able to make a valid judgment about the amount of light entering people's house, as stated on EIR page IV.B-36, the project lighting study indicates that "within a very short distance of the project site's boundaries (approximately 150 feet), light measurements at heights of approximately 60, 70, 80, 90, and 100 feet above ground level would drop to zero, due to the shielding and focusing of the lights." Moreover, at a height of approximately 70 feet above the fields (10 feet above the luminaries), the lighting study shows that the maximum illumination level would be 0.06 FC immediately above the fields, or less than 10 percent of the ground-level light levels emitted by street lights on the Great Highway. These calculations are included in the lighting plans, which are provided as Appendix AE of this document. In addition, light meter readings conducted by SFRPD staff at South Sunset and Crocker Amazon facilities indicate that, approximately 3 feet above the synthetic turf, results range between 3 and 4 FCs. As stated in the EIR and above, and based on the light study, no light would enter people's homes. Vegetation that would continue to surround the site would further shield lighting from spilling over into adjacent areas.

In response to comment I-Spoelstra-10, which states that the EIR needs to better define "light spillover," the EIR defined this term as light that extends beyond the targeted object throughout its analysis. As evidenced by the nighttime simulations and review of the Musco Light Study, the nighttime lighting would not spill over onto the nearby areas (of the park or nearby residences) in a way that would adversely affect existing evening or nighttime conditions. In response to this comment, the EIR Glossary page xi has been revised to include the following:

Light Spillover - Lighting that extends beyond the targeted area.

This revision does not change the analysis or conclusions presented in the EIR.

Viewpoint Location Selection

Some comments question the number or locations of viewpoints selected for nighttime visual simulations or request that additional nighttime visual simulations be prepared from various other suggested vantage points surrounding the project site, including Cliff House, Ocean Beach Promenade, east of the project site in Golden Gate Park, and residential areas north or south of park. In response, it is not possible to illustrate every potential view of the project site. The two nighttime vantage point locations selected include a view from Sutro Heights Park representing what the site could look like within a scenic view from the distance and a view from 48th Avenue near Lincoln Way representing what it could look like from one of the closest residential neighborhoods. Because CEQA requires that changes to public views be assessed, both views selected are from public areas. However, based on evidence presented in the EIR, spillover from the project site would not reach areas further than approximately 150 feet from the site's boundaries. Thus, while the new lighting may be visible in the distance from many other locations, actual impacts of the night lighting to views would not be substantial in that it would not enter into people's homes nor be noticeably brighter than existing lighting in the general area (i.e., along the Great Highway). Furthermore, vegetation that would continue to surround the project would block many views of the lighting from public vantage points. In response to comment I-Koivisto2-01, which states that simulations should be done from the second and third floors of nearby residences, as stated above, CEQA does not consider impacts to private views to be significant. However, based on the Musco Lighting study, light spillover would drop to zero within a relatively short distance, and no additional lighting would reach the residences along the park's southern edge. However, as stated above, it is possible that the implementation of the proposed project would modestly interrupt or alter some existing private views currently available from nearby residences. For instance, as stated in the EIR, the light installation may be viewed in the distance by residential units located on upper levels in the Outer Sunset neighborhood along the park's southern boundary. Such views could be perceived as undesirable consequences for affected residents who are used to the existing visual conditions. However, as stated in the EIR, the proposed project's impact on private views would not result in a substantial adverse change and therefore would not be considered a significant environmental impact. In response to comments requesting night-time visual simulations from the Cliff House, such views would be fairly similar to those illustrated in Figure IV.B-10 (views from Sutro Heights Park), since the Cliff House is proximate to Sutro Height Park.

Although the number and location of visual simulations presented in the EIR is considered sufficient for purposes of determining impacts (particularly in light of other methods that were utilized), an additional evening visual simulation has been prepared to provide additional information to the public and decision-makers regarding impacts of the project during the evening hours. This visual simulation shows the view toward the project site from Ocean Beach Public Sidewalk, approximately 1,000 feet north of Viewpoint C (see Figure IV.B-1 on page IV.B-4 of the EIR). This location was chosen because it is just northwest of the edge of the facility's northernmost field and allows for a view that encompasses the length of the project site.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-3, paragraph 2 has been revised:

Photos are included in this section to demonstrate the publicly accessible short-range, medium-range, and long-range views of the project site, and are indicated on **Figure IV.B-1**. For purposes of analysis in this EIR, short-range views are from public vantage points no more than 0.25 mile away; medium-range views are from public vantage points between 0.25 mile and 0.50 mile away; and long-range views are from public vantage points greater than 0.50 mile away. The photographs depicting existing conditions are presented in **Figures IV.B-2a through IV.B-2fe**.

This revision does not change the analysis or conclusions presented in the EIR.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-4, Figure IV.B-1 has been revised (see following page). This revision does not change the analysis or conclusions presented in the EIR.

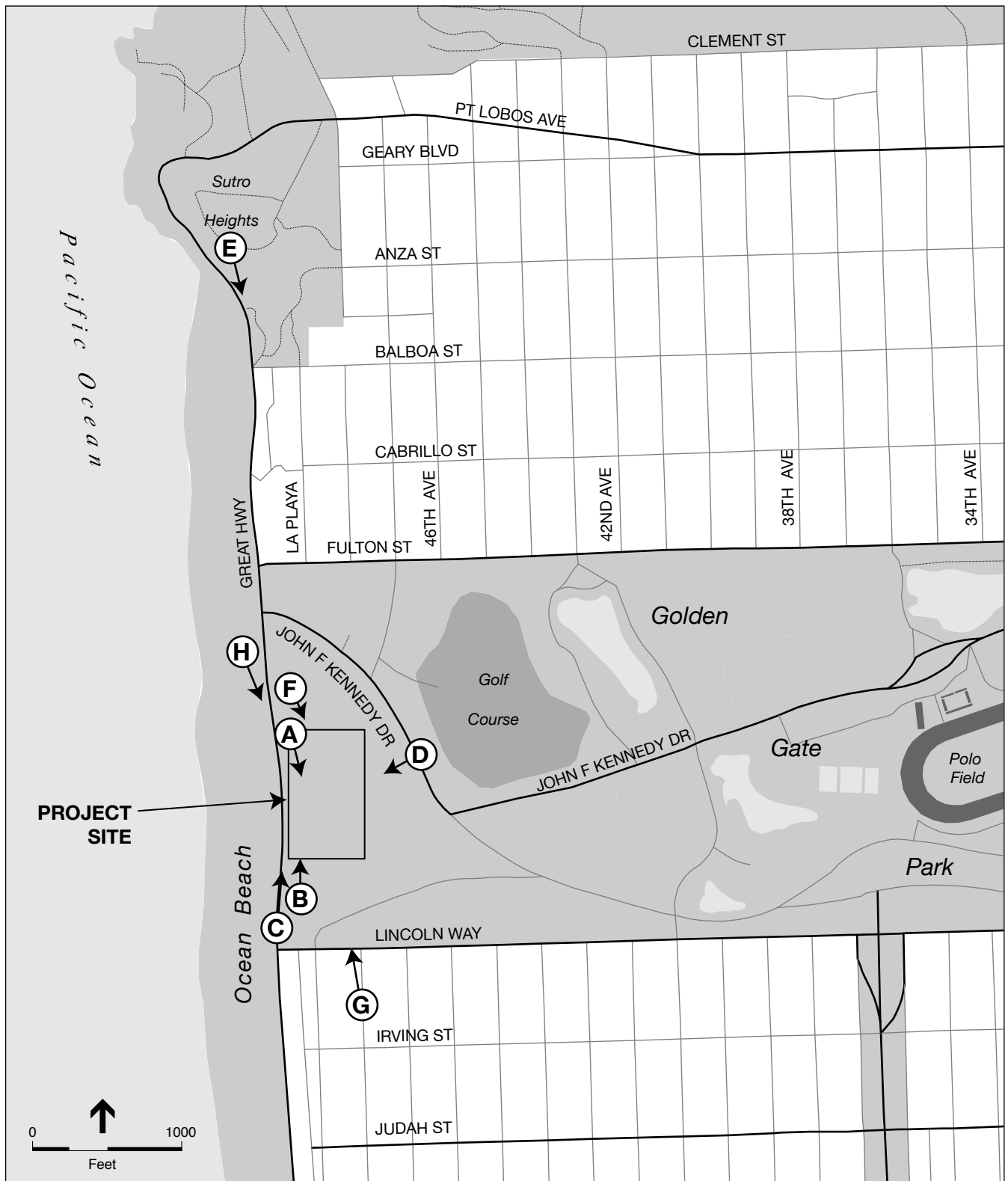
In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-9a had been added to include, Figure IV.B-2f (see page X.H-64). This revision does not change the analysis or conclusions presented in the EIR.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-10 has been revised to include an additional viewpoint:

**TABLE IV.B-1
VISIBILITY AND VISUAL SENSITIVITY OF THE PROJECT SITE**

Scenic Resources and Other Public Viewpoints in Project Vicinity	Representative Viewpoint Location Used in Visual Simulation	Figure Number	Overall Visual Sensitivity	Visibility of Project Site from Selected Viewpoint
Nighttime Views				
<u>Public areas along the western shoreline.</u>	<u>Beachside walkway along the Ocean Beach public sidewalk, approximately 1,000 feet north of Viewpoint C.</u>	<u>IV.B-11</u>	<u>High</u>	<u>The project site is not visible from this vantage point; the site was included to assess visibility of night lighting and glare.</u>

This revision does not change the analysis or conclusions presented in the EIR.



SOURCE: ESA

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Figure IV.B-1 (Revised)
Viewpoint Location Map



Existing View from Viewpoint H at Ocean Beach public sidewalk looking southeast toward the Project Site

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-13 has been revised to include a new paragraph, following the section on Sutro Heights Park:

Ocean Beach Public Sidewalk

Views toward the site from the Ocean Beach Sidewalk, approximately 1,000 feet north of Viewpoint C, depict the expanse of the Great Highway in the foreground, with the Beach Chalet Restaurant clearly visible just beyond. The light emanating from the restaurant interior is one of the dominant features of this view and serves as a contrast to the darkness of the paving of the road in the foreground. The street lights, which line the Great Highway along both east and west sides, can be seen into the distance and cast yellow glows in regular intervals along the Great Highway, diminishing in strength into the distance. The project site is located just beyond vegetation in the right field of the photograph, but is blocked from view by the intervening treeline and appears dark. Several vehicles with headlights on can be seen travelling along the Great Highway (this feature varies from one minute to the next in terms of how much it contributes to this view at any given time).

This revision does not change the analysis or conclusions presented in the EIR.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-30, paragraph 3 has been revised:

Three~~Two~~ evening visual simulations were prepared to assess potential impacts of lighting on public views. One visual simulation is presented from the sidewalk at 48th Avenue near Lincoln Way to represent the effects on proximate residential areas, while the second depicts views from the public trail within Sutro Heights Park. In addition, one simulation is presented from the Ocean Beach Sidewalk. “Before” and “after” images from these vantage points are presented in the lower images of **Figures IV.B-9 through and IV.B-11**.

This revision does not change the analysis or conclusions presented in the EIR.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-32a had been added to include, Figure IV.B-11 (see following page). This revision does not change the analysis or conclusions presented in the EIR.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-33 has been revised to include a new paragraph 2:

As shown in Figure IV.B-11, views from the Ocean Beach Sidewalk would appear very similar to what is seen under existing conditions. The main difference would be the field lights above the tree canopy that would be visible against the dark backdrop of the evening



Existing View



Proposed View

sky. The proposed lights would appear somewhat brighter and 'whiter' than the street lights along the Great Highway; however, it is unlikely that they would dominate this view since the number of proposed light standards visible from this vantage point would be similar to the number of existing street lights in the project area and the additional field lighting would not overwhelm the views. While the color and intensity of the proposed lights would introduce a more 'urban' element to this view, such changes would not be enough to result in a significant adverse visual impact. No other elements of the proposed project would be visible from this vantage point. It is also noted that this visual simulation represents one possible view from the project area and that the proposed lights may appear more intense from other locations along the Ocean Beach Public Sidewalk (i.e., closer to the project site), with some standards visible and others hidden from view by vegetation. However, because this view allows for the entire length of the field to be visible, it is considered a relatively conservative viewpoint for assessing visual impacts.

This revision does not change the analysis or conclusions presented in the EIR.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-34, paragraph 2 has been revised:

Description of Elevated Views. The evening view of Beach Chalet from Sutro Heights, as presented in Figure IV.B-10, is from a distance of approximately 3,500 feet. For comparison, an evening photograph of the Crocker Amazon field was taken from Alta Vista Way, approximately 3,000 feet away. As depicted in the lower image of **Figure IV.B-121**, most of the Crocker Amazon soccer fields, as well as all 11 light assemblies, are visible from this vantage point. This figure also illustrates that the back-to-back assemblies in the center of the fields appear to be no brighter than the single assemblies that illuminate single fields. Based on this, it is likely that back-to-back assemblies at the Beach Chalet facility would also not appear brighter than the single assemblies and that lighting levels would be fairly constant throughout the fields. It also is noted that, as one descends in elevation from this vantage point (at Alta Vista Way), even less of the field and the lights would be visible. It is further noted that the presented photographic analysis of the Crocker Amazon site is conservative, in that more trees exist between the Beach Chalet facility and the nearby residential areas (enough to completely screen the facility from vantage points at 48th Avenue and Lincoln Way) than what appear in photographs of the Crocker Amazon site.

This revision does not change the analysis or conclusions presented in the EIR.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-35 has been revised (see following page). This revision does not change the analysis or conclusions presented in the EIR.

Regarding photos of night sports lighting presented by commenters from South Sunset Playground, Crocker-Amazon Fields, and the overcast night sky above the Outside Lands Concert taken from the north side of the Park (comment I-GMiller2-13, I-GMiller2-14, I-GMiller2-15), these images will be forwarded to the decision-makers. However, the EIR applied standard



View from La Grande



View from Alta Vista Way

SOURCE: ESA

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Figure IV.B-12

Views of Crocker-Amazon Athletic Fields During Nighttime Use

industry methodology to assess the environmental impact of the project, and it is considered adequate for analyzing the environmental impacts of the proposed project.

Impacts of Lighting on the Nighttime Experience

In response to comments that state that the proposed lighting would adversely impact the park or beach users' night experience and their ability to connect with nature in the evening hours, the EIR discusses under Impact AE-3 the extent to which the lighting would affect the project site and the surrounding areas. As concluded on page IV.B-36, the new lighting would illuminate areas within the site's boundaries, which would not be considered adverse at the project site because field users would benefit from it. Farther from the site, the lighting would diminish such that within a very short distance of the project site's boundaries (approximately 150 feet), light measurements at heights of approximately 60, 70, 80, 90, and 100 feet above ground level would drop to zero, due to the shielding and focusing of the lights. Based on the lighting study, this drop-off in light spillover would likewise occur at three feet above ground level. While the users of the park or the beach might be able to see the lights in the distance, proposed lighting would not spill over onto most other park areas or onto the beach. Furthermore, as stated throughout the EIR, vegetation around the site would further prevent light spillover onto other areas. Thus, as stated in the EIR, even under conservative conditions, the spillover of the lighting would not be expected to travel far beyond the project's boundaries. In addition, as stated in the EIR, after facility closure at 10 p.m. most of the lights would be turned off, with parking lot, pathway and security lighting left on for a short period of time after 10 p.m. to allow for safe exit of site users. However, no lights would be left on overnight.

In response to comments I-Denefeld1-02, I-Denefeld2-04, I-Brown-05, and I-Jungreis2-26, which state that the proposed project would disturb stargazing and would impact the Urban Night Skies Project, as stated above, within a very short distance of the project site's boundaries (approximately 150 feet), light measurements at heights of approximately 60, 70, 80, 90, and 100 feet above ground level would drop to zero, due to the shielding and focusing of the lights. Because very little spillover would occur into the night sky, particularly beyond 150 feet of the site's boundaries, views of the night sky would be similar to existing conditions, with minimal glow contributed by the project. Although it is noted in the EIR that the presence of fog diffuses lighting, any changes due to the project would be minimal as compared to existing conditions (existing sources of light near the project site include street lamps and vehicle headlights along the Great Highway). It is also noted that Golden Gate Park is closed between the hours of 10 p.m. and 6 a.m., during which time stargazing and other activities are prohibited within the park.

Comment A-NPS-01 states that Dark Night Skies should be identified as a unique resource in the environmental setting of the project and that the EIR should describe the Dark Night Sky baseline condition at Ocean Beach and, as part of the environmental setting, describe Ocean Beach and adjacent coastal areas (Lands End, Sutro Heights Park, and Lincoln Park) of San Francisco as having much lower outdoor lighting intensity than the interior and urban center of the city. To respond to this comment, the following text has been added on page IV.B-13 of the EIR, after the third paragraph (after the discussion of the Sutro Height Park evening views):

It is also noted that the dark skies constitute a unique resource in the project vicinity. The Ocean Beach and adjacent coastal areas (Lands End, Sutro Heights Park, and Lincoln Park) of San Francisco have a much lower outdoor lighting intensity than the interior and urban center of the city. Specifically, along the coast, Lands End is the core of the city's dark sky zone and is used as a gathering area by local astronomers for night sky observing. Sufficient darkness in these sections of the sky is very rare elsewhere in the heavily light-polluted inner bay area. This visitor use is promoted by and is a management emphasis under the National Park Service (NPS) Management Policy on Dark Skies. NPS Management Policies direct the NPS to work cooperatively with neighbors and local government agencies to prevent or minimize the intrusion of artificial light into the night scene of the ecosystems of parks.

In response to comment text that states that "(T)hrough the EIR, NPS hopes to gain an understanding of the light intrusion that will affect Ocean Beach and work with San Francisco Recreation and Parks Department (SFRPD) to minimize this intrusion," effects of the proposed lighting on the night sky is already discussed on page IV.B-34, where it is stated that, "Based on the evening views comparative photographic study conducted for the proposed project, it appears that, although the project site would likely appear substantially brighter as compared with existing conditions or other illuminated areas in the vicinity, the proposed lighting is unlikely to spill over the site's boundaries substantially enough to adversely affect the surrounding neighborhoods. Also, the *spillover would not affect the amount of light of the night sky, as the sky appears similar above the athletic field lights as above other areas with no athletic field lights.*" (Emphasis added.) While visitor enjoyment is subjective, evening lighting that would be introduced by the proposed project would not be anticipated to alter the views of the night skies to the degree that would materially impede the stargazing experience along the shoreline. Furthermore, the lights would be turned off after 10 p.m., at which point, the night skies could be viewed as under existing conditions.

Impacts of the proposed evening lighting on nocturnal behavior and biology of Ocean Beach shorebirds is discussed in Section IV.F, Biological Resources of the EIR and further in Section X.L of the Responses to Comments section.

In response to comment I-Koivisto-30, which asks which lights would remain on after 10 p.m. and what is the period of time this would last, as stated on page IV.B-36, after facility closure at 10 p.m. most of the lights would be turned off, with parking lot, pathway and security lighting left on for a short period of time after 10 p.m. (until approximately 10:15 to 10:30) to allow for safe exit of site users. However, no lights would be left on overnight. To the extent that lighting would affect biological resources, these impacts are addressed in Section IV.F (Biological Resources) of the EIR on pages IV.F-27 through IV.F-29 and are found to be less than significant.

Comments on Comparative Photographic Analysis

In response to comments I-Barish-06 and I-Spoelstra-06, which state that comparison of the proposed lighting conditions to the Crocker Amazon site is not valid and that additional research is needed to determine the effect of lighting at the project site, the Crocker Amazon site was selected

for comparative analysis of nighttime views because, as stated on page IV.B-17, this facility uses the same type of light standards as would be used at the Beach Chalet Soccer Fields facility (except the poles at 70 feet and 80 feet). Also, similar to the project site, the Crocker Amazon Playing Field is located within a park setting and is surrounded by open space (McLaren Park is east and northeast of the play field) and by residential uses. Comparative photographic analysis is not meant to be a precise representation of what the project would look like – rather, it is an approximation of what it *could* look like, in that it depicts a comparable facility. This additional information was provided to supplement the analysis with a real example, given the limitations of nighttime visual simulation. Thus, it is clear that the conclusions reached in the EIR are based on multiple methods used in combination to approximate and predict what the site could look like during nighttime conditions.

Other Comments Regarding Proposed Field Lighting

Comment I-Pfister-02 states that the EIR is wrong in the assertion that because people are already disturbed by surrounding light sources, that additional impacts from the proposed project would not be significant. The EIR does not draw this conclusion. Rather, the EIR states, on page IV.B-30, that the proposed lighting would not substantially affect views from either close-in or more distant viewpoints, and, on page IV.B-36, that illumination levels off the site would diminish to near zero within approximately 150 feet, such that the proposed lighting would not spill over off the project site to adversely affect nearby residents. CEQA does not require that an EIR analyze environmental impacts of existing conditions, only the changes that would result from the proposed project. As discussed in the EIR, lighting from the project would be most noticeable on the project site and along the site's boundaries, but would quickly diminish in intensity further away such that, changes over existing conditions would not be noticeable within a short distance of the site.

Comments A-NPS-08, I-GMiller2-01, I-Spoelstra-9, and I-Spoelstra-10 state that the EIR does not contain technical analysis on the amount of light that would be seen by an observer from a distance and request the Final EIR make correction to an error on page IV.B-33 regarding lumens and watts. The amount of light that would be seen by an observer from a distance is approximated in the nighttime visual simulations, although it is not possible to provide a precise measurement as to what that amount would be. As requested, EIR page IV.B-33, paragraph 3 has been revised:

Comparison of Two Fields. The similarities that exist between the Crocker Amazon site and the proposed project are that both include synthetic turf, contain a similar number of soccer fields situated within a larger park setting (Beach Chalet contains four fields, while Crocker Amazon contains five fields), and are screened by surrounding landscaping. In addition, both sites are visible from the surrounding hillsides. The proposed project would use the same type of shielded lighting standards (Musco brand) as already employed at the Crocker Amazon site during evening games. The light standards are capped units that emit 134,000 lumens per lamp, and have been designed specifically for sports fields, with the goal of lighting the field evenly while minimizing the spread of light upward. At the Crocker Amazon site, the lamps are arranged in assemblies of six lamps per assembly, with some of

the poles having two back-to-back assemblies to illuminate multiple fields. At the Beach Chalet site, the proposed light poles would have assemblies containing 10 lamps per assembly, seven of which would be used during regulation game play and practice sessions, while all 10 assemblies would be used during tournaments (there could be up to 6 tournaments per year). The light assemblies at Beach Chalet would be installed at a height of 60 feet above ground level, while those at the Crocker Amazon facilities are installed at 80 feet above ground level.

This revision does not change the analysis or conclusions presented in the EIR.

In response to comment O-GGAS2-17, which states that proposed lighting would result in visual blight, which would sever visual access between the park and the beach, this comment expresses a personal opinion and will be forwarded to decision-makers. Although proposed lighting would constitute a change in easterly views of the park from Ocean Beach during the times when they would be operational, views of a dark park are not considered a “scenic” resource under accepted categorization of these. Furthermore, the additional visual simulation that was prepared as part of this Responses to Comments document illustrates that views toward the park from the Ocean Beach public sidewalk would be largely similar to those experienced under existing conditions, with the difference being additional illumination seen in the distance above the project site (see discussion above).

In response to comment I-Koivisto-28, which states that the field lights would still be noticeable even if they were surrounded by vegetation, the EIR acknowledges that light standards would be visible from multiple vantage points, including from the Ocean Beach Promenade and from the Beach Chalet Restaurant patio area (as shown in visual simulations IV.B-5 and IV.B-8). As discussed in the EIR, surrounding vegetation would reduce their visibility but not block it entirely.

In response to comment I-Koivisto-34, which alleges that the EIR includes contradictory text in regards to the addition of ten new street lamp poles, EIR page IV.C-24, paragraph 3, the text is quoted out of context. This text is from the EIR’s Cultural Resources analysis, which evaluates whether the project would cause a “substantial adverse change in the significance” of the project site as a historical resource. As stated on EIR page IV.C-19, this determination rests on a finding that the project would result in “physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be materially impaired,” quoting CEQA Guidelines Section 15064.5[b][1].

The paragraph on page IV.C-24 immediately preceding the text cited by the commenter concludes with the following statement: “Aside from street lights and pedestrian-scale lighting surrounding the Beach Chalet, the Beach Chalet Athletic Fields and most of the western end of Golden Gate Park, has no historical precedent with regard to electrical illumination.” The commenter identifies an alleged inconsistency with text elsewhere in the EIR—presumably in the analysis of aesthetics—in the next paragraph, which begins, “The addition of ten new 60-foot-tall steel lamp poles would be a highly visible new addition to the landscape, not only during the day,

but also at night in an area of the park which has been historically dark at night.” This statement is further explained in the text that follows:

The addition of new poles and lights would alter the character defining land patterns within the Athletic Fields by introducing a large-scale lighting element which is incompatible with the informal and naturalistic character of the fields. Similar to the installation of spectator seating, the addition of new light poles at the center and ends of the field could also alter the character defining feature of the spatial organization of the field as an expansive, uninterrupted plane. The introduction of field lighting would reduce the Field’s integrity. This project element, alone, would not reduce the integrity of the Field to the degree that it loses its ability to convey its historical significance as a contributor to the District. However, this element combined with other proposed elements, such as the spectator seating and synthetic turf described above would collectively reduce in a significant impact to a historical resource.

Therefore, in the context of historical resources, the EIR finds that the installation of field lighting, along with other changes proposed as part of the project, “would materially impair in an adverse manner some of the character defining features of the Beach Chalet Athletic Fields, a contributor to the Golden Gate Park National Historic District” (page IV.C-27), and that this impact would be significant and unavoidable.

In contrast, the analysis of Aesthetics, in Section IV.B, reaches the conclusion that project impacts would be less than significant because the project would neither have a substantial adverse affect on a scenic vista, substantially damage scenic resources, or substantially degrade the existing visual character, as discussed above in the response to Comment AE-1, and because the project would not “create a new source of substantial light ... that would adversely affect ... nighttime views of the area or which would substantially affect other people or properties,” as discussed in this response to Comment AE-2. These impact conclusions are not contradictory because, whereas the determination of a significant cultural impact is based on historic issues, the determination of less than significant aesthetic issues are based on issues related to views and visual character.

H.4 Daytime Views Effects [AE-3]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-SPEAK4-04	I-Hillson2-03I-	I-GMiller-07	I-GMiller4-02
I-Browd-02	Koivisto-13	I-GMiller-08	I-Posthumus-02
I-Hillson-02	I-Koivisto-25	I-GMiller-09	I-Soulard-01
I-Hillson-04	I-Koivisto-26	I-GMiller-16	I-Warriner-03
I-Hillson2-01	I-Kuhn-02	I-GMiller2-12	

“...the 60 foot high light standards of galvanized steel would create a negative visual impact to the pastoral park setting and would violate Policies 2.1 and 2.2 for Conservation of Natural Areas of the Urban Design Element.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-04]*)

“In the daytime the towers themselves would be an ugly eyesore destroying the symmetry of the view of the windmills and the unbroken green stretch that ties them together. What an insult to the magnificently restored Murphy Windmill these light towers would be! Every weekend I ride my bike from the beginning of the Park at Arguello to Ocean Beach. On this intensely pleasurable ride I find myself constantly reminded of how beautiful the Park is and how important it is to me and so many. When I get to Ocean Beach I leisurely ride along the Promenade and gaze across at the unbroken green facade that forms the edge of the Park. Since I became aware of the project every time I’m down there I find myself shuddering to think how appalling, and galling, it would be to see light towers projecting above that façade. I make use of the Park in another way. I regularly play golf at the Golden Gate Park golf course, a treasure if ever there was one. From the final hole, the 9th, players look west down the hill to the ocean. Bruce Olsen, the course operator, fears that the towers would be visible and ruin the unspoiled natural view we have always had. I would be distressed and saddened if that view were marred.” (*Gary Browd, letter, December 7, 2011 [I-Browd-02]*)

“The draft discussion concludes, ‘The athletic field lighting would add new vertical elements to the project site... However this would not be expected to be so intrusive as to preclude the enjoyment of the natural features of the facility.’

I disagree -- the height of the lighting towers dominates our whole perception of this scene. It more closely resembles a scene from War of the Worlds than pastoral parkland” (*Rose Hillson, letter, December 7, 2011 [I-Hillson-02]*)

“A screened location on the old railroad trail was chosen for this simulation. But if you walk further down the trail, there are clear views under the trees to the fields. Surely, the light poles would intrude on our experience of the park here.” (*Rose Hillson, letter, December 7, 2011 [I-Hillson-04]*)

“For example, on the overhead, the criteria for judging visual impacts are arbitrary and inconsistent with my personal experience.

Their Draft discussion concludes, "The athletic field lighting would add new vertical elements to the project site. However this would not be expected to be so intrusive as to preclude the enjoyment of the natural features of the facility. I disagree.

The height of the lighting towers dominates over our whole perception of this scene. It more closely resembles a scene from War of the Worlds than pastoral parkland." (*Rose Hillson, public hearing comment [I-Hillson2-01]*)

"The Draft EIR shows a view from the railroad trail that would imply that one cannot see the fields. But if you walk further down the trail there are clear views under the trees through the field. Surely the light poles would intrude on our experience of the here." (*Rose Hillson, public hearing comment [I-Hillson2-03]*)

"In the initial description of the site as it is today, there are a few pieces of important information and some misstatements. The tree canopy (p. IY.B-1) is 30 to 40 feet in height; the light towers are slated for 60 feet in height, and will tower above the canopy. This is glossed over in this section of the DEIR, and in others. On the same page, the current visual character of the area is described as being 'structured recreational facility within a larger context of naturalistic parkland'. Actually, it is visually a parkland area with a fenced off section of grassland unavailable for public use, frequented by birds, especially geese and ducks at certain times of the year, and gulls, ravens and raptors yearround. It looks, to someone who lives here and sees it all the time, neglected and forgotten, gradually going wild. This is consistent with local experience of the money and priority SFRP has given to this side of the city, with parks neglected, neighbors not informed or consulted before big changes are enacted, and gardeners fearing reprisals if they say anything about the situation or try to protect the parks." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-13]*)

"On p. 19 it is stated that even though the project makes the athletic fields larger, the change would not be noticeable to most viewers. There is no supporting evidence, and the assertion runs contrary to logic. Many people travel through this area daily. Many use it and depend on it for needs other than soccer. These people will notice. Yet the DEIR assumes the only users of this area are soccer leagues. Why are the neighbors time and again left out of the picture for this area?" (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-25]*)

"On the same page, the comment is made that the view won't be changed by the removal/destruction of trees/shrubs. This is a very problematic statement as reducing the western wind break will substantially change the wind patterns from the ocean into the park,

necessitating either more fencing between the park and the ocean (thus altering the view) or leading to likely damaging of the remaining trees/shrubs hence increased views of the synthetic fields. The statement, failing to take into consideration our often fierce local winds and two plus months per year of sandblasting, calls into grave doubt other DEIR statements made about the area." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-26]*)

"The 60 foot lighting towers, while acknowledged as being bright are considered not aesthetically significant, because of their relatively small percentage of the greater visual field . That depends on where you are standing. I happen to live across from Sutro Heights Park., and even from there, the present view would be degraded." (*Thomas Kuhn, email, December 11, 2011 [I-Kuhn-02]*)

"The DEIR concludes, 'The athletic field lighting would add new vertical elements to the project site, which would constitute a change in its overall character. However, this would not be expected to degrade the visual character of the site because the light standards would not be so intrusive as to preclude the enjoyment of the natural features of the facility' (Page IV.B-28) Beauty is often subjective, but I personally believe that the lighting towers are among the worst visual aspects of the project. The juxtaposition of the towers and the park is quite jarring - something like looking at a landscape filled with pine trees and cactus - they just don't mix. The transformation of the pastoral fields goes beyond 'urban' to something resembling a scene out of 'War of the Worlds'." (*Greg Miller, letter, December 9, 2011 [I-GMiller-07]*)

"Several simulated views have locations and orientations which minimize the reader's impression of visual impacts. The scene in Figure IV.B-4 shows a view northward along the old railway grade trail which links the Murphy Windmill area to the Beach Chalet and Dutch Windmill. While none of the project features can be seen from this exact viewpoint, the fields can easily be seen from several other places on the same trail a bit further to the north (Photos 2, 3, and 4). The Final EIR should simulate some of these viewpoints if it wishes to fairly convey the impacts of the project." (*Greg Miller, letter, December 9, 2011 [I-GMiller-08]*)

"A similar situation exists for Figure IV.B-5. This simulation illustrates a view northward along the Ocean Beach Promenade. The orientation is such that the closest project light towers are out of view to the right of the photo. The towers which can be seen are probably 1,100 feet to 1,500 feet from the viewpoint, greatly diminishing the apparent height of the project lights. A more relevant viewpoint would be further north along the Promenade, closer to the center of the park. The view should face generally eastward. From such a position, the nearest light towers would be about 500 feet away. The Final EIR needs to illustrate such a view to properly convey the impact

the project towers on the Ocean Beach Promenade, the neighboring GGNRA beach areas and the 49-Mile Drive." (Greg Miller, letter, December 9, 2011 [I-GMiller-09])

"Views over and through the trees from the old railroad path looking south east - the light towers will be clearly visible here, both during the day and at night.

Views under the trees from the old railroad path looking south-east. This vegetation is kept trimmed up by staff from the ground level, for clear views of the path from the fields and back again. The low newly-planted vegetation are native plantings that are unlikely to grow up to screen the fields at ground level." (Greg Miller, letter, December 9, 2011 [I-GMiller-16])

"Views under the trees from the old railroad path looking south-east. This vegetation is kept trimmed up by staff from the ground level, for clear views of the path from the fields and back again. The low newly-planted vegetation are native plantings that are unlikely to grow up to screen the fields at ground level.

Views under and through the trees from the old railroad path looking east. This vegetation is kept trimmed up at the ground level, for clear views into the playing areas. The tops of the trees are wind-pruned and are unlikely to grow much higher." (Greg Miller, letter, December 9, 2011 [I-GMiller2-12])

"Same thing with the lighting poles in the fields. They say, 'Well, yes, introduces vertical elements but it doesn't distract from the perception of the natural area.' Well, when you go to Paris and you look at the skyline and you notice a very thin thing sticking up in the skyline, you notice that. That's the Eiffel Tower. It's tall, it protrudes and attracts your attention. There's no sense of reasoning in all this stuff that takes that into account.

It doesn't have --you can't apply a simple silly rule like how many percentage of the visual field it is covered by something coming from this project. It's the nature of it and the scale of it and the context of it that matters, and that's lacking in the EIR." (Greg Miller, public hearing comment [I-GMiller4-02])

"The western end also contains many lakes and meadows. The introduction of a sports complex with artificial turf and stadium lights is out of character - aesthetically, historically and culturally - with the rest of the western portion of the Park. The sight of the 60-foot-tall galvanized steel light poles would be intrusive during the day. The lighting will be very intrusive on the extended

neighborhood, as well as the beach area.” (*Yope (Johannes) Posthumus, email, December 12, 2011 [I-Posthumus-02]*)

“My brother and I frequent Golden Gate Park and enjoy the natural landscaping that the park employs. I enjoy the quiet that the Outer Sunset provides, a refuge of sorts from the bustle of downtown. I particularly enjoy the windmills near the edge of the park: I actually proposed to my wife there. I am writing to oppose the construction of a sports complex at the edge of Golden Gate park in this vicinity because a sports complex in this location does not fit into the aesthetic of this area. I see a clear disconnect when comparing what is there now versus what will be constructed: lush, varied vegetation versus homogeneous turf, windmills versus flood lights.” (*Chris Soulard, email, December 7, 2011 [I-Soulard-01]*)

“...For instance, they state that the impact on the old railway trail will be minimal because one cannot see the soccer fields from most of the trail when in fact anyone who walks that trail knows that the fields are visible for virtually the entire length of the trail. ...” (*Joyce Warriner, email, December 8, 2011 [I-Warriner-03]*)

Response AE-3

Comments I-Kuhn-02, I-Posthumus-02, and O-SPEAK4-04 state the EIR ignores or understates the impacts of the light towers and that the light towers themselves would degrade public views and would be out of place with the aesthetic fabric of the park. The prominence of these project features are demonstrated in the visual simulations provided in Figures IV.B-3 through Figures IV.B-8. As discussed on page IV.B-21, the light towers would be visible above the park’s tree canopy but would be similar in visual disturbance to other manmade features along the Great Highway, such as street lighting, the concrete sea wall, the expanse of the road, and parking areas (see Figure IV.B-5). Although the EIR concludes that these towers would constitute a less than significant visual impact, they are not ignored in the analysis.

Comments I-GMiller1-07, I-Koivisto-25, I-GMiller4-02, I-Hillson-02, I-Warriner-03, and I-Browd-02 state that light towers would destroy the views of the windmill and the green area between. Views of the windmill could include views of the light towers. However, the EIR concludes that this impact would be less than significant because the project site is located at the edge of the Golden Gate Park, where naturalistic features (i.e., the park, beach, ocean) and urbanized features (i.e., the Great Highway, Beach Chalet Restaurant, Murphy Windmill and Millwright’s Cottage) interrelate with one another and because the predominant views of the densely forested west end of the park would be largely available and intact for pedestrians, bicyclists, and motorists traveling along the Great Highway and other nearby roads.

In response to comment I-Koivisto-13, which states that light towers would be visible from above the tree canopy, the EIR recognizes this to be the case. Please see Figure IV.B-5, where the light towers are visible above the tree canopy. Also, page IV.B-21 states that “the tops of the light poles and standards would be visible in the distance above the tree canopy, whereas currently, the project site is not visible from this vantage point.” However, this does not change the conclusion that impact of the light towers would be less than significant. As stated, “although the poles and standards would be noticeable against the views of the sky, the predominant views of the densely forested west end of the park would still be available and intact for pedestrians, bicyclists, and motorists traveling along the Great Highway.”

In response to comment I-Koivisto-26, which states that damage to the remaining trees and shrubs would increase the views of the synthetic fields and that the EIR fails to take into account the damage the wind could cause, see the response BIO-2, which indicates that the existing windbreak along the western edge of Golden Gate Park would not be affected. Wind damage that results in aesthetic resources impacts would not occur as a result of the project. Some of the changes to vegetation can be seen in EIR Figure IV.B-3 on page IV.B-20 (in the background of the fields). As shown, the removal and replacement of vegetation would maintain the windbreak on the project site.

Several comments question methodology applied for developing visual simulations, including view selection. Comment I-GMiller1-09 states that the Final EIR needs to illustrate views to properly convey the impacts the project towers on the Ocean Beach Promenade, the neighboring GGNRA beach areas and the 49 Mile Drive. Comment I-GMiller1-08 states that the Final EIR should include simulations from multiple viewpoints at the same locations. In response, the conclusions reached in the EIR were based on visual simulations from multiple vantage points, along with other methods employed to assess potential visual changes that would result from the project. Visual simulation methodology is summarized in the EIR and is discussed above under Response AE-2. CEQA does not require that a specific methodology be applied when developing visual simulations. The EIR followed standard practices for viewpoint selection and preparation of visual simulations. As stated in Response AE-1, the EIR identifies viewpoints that are representative of the types of views available of the project site from public vantage points and that would best represent the worst-case impact on aesthetic resources from most locations. No further response is required.

Comment I-GMiller2-12 includes views from under the trees of the old railroad path looking south east, while comments I-Hillson-04, I-Hillson-03, I-Warriner-03 believe that the light towers would be visible from the old railroad trail. Visual simulation was not included from this location. However, it is likely that the project site would be visible from this vantage point. It is noted that views of the project area would be brief from this location and other locations along the trail as walkers and bicyclists move along the trail. Any impact to visual character or views from this location would be similar to what is already described in the EIR and does not change the analysis or conclusion presented in the EIR.

H.5 Consistency with Various Goals, Plans and Policies [AE-4]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

I-Bufferum-04

I-Ogilvie-08

I-Ray-09

"... How is the increase in artificial night lighting compatible with San Francisco's goals of decreasing light pollution?" (*Nancy Buffum, letter, December 12, 2011 [I-Bufferum-04]*)

"The lights will be seen for miles. This is in conflict with the city's commitment to reduce nighttime light pollution to protect wildlife. (See environmental impact section) Not to mention our adoption of the Green City Initiative to reduce excess power usage." (*Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-08]*)

"The lights will be seen for miles. This is in conflict with the city's commitment to reduce nighttime light pollution to protect wildlife. (See environmental impact section) Not to mention our adoption of the Green City Initiative to reduce excess power usage." (*Jamie Ray, letter, December 12, 2011 [I-Ray-09]*)

Response AE-4

In response to comments I-Bufferum-04, I-Ogilvie-08, I-Ray-09, and I-O'Leary-01, which question whether the increase in artificial night lighting is compatible with San Francisco's goals of decreasing light pollution, the project's consistency with applicable plans and policies would be determined at the time of project approval. It is noted that the commenters do not reference the specific documents that contain these goals. Regardless, the extent to which any such inconsistency would result in adverse impacts to the views or visual character, those issues have been addressed here. To reiterate, as stated in the EIR, the project would substantially increase the amount of light at the project site. This light would be visible from the areas immediately surrounding the project site. However, as indicated in the Musco Lighting study, within a very short distance of the project site's boundaries (approximately 150 feet), light measurements at heights of approximately 60, 70, 80, 90, and 100 feet above ground level would drop to zero, due to the shielding and focusing of the lights. Therefore, any light pollution that would result from the proposed project would be less than significant.

I. Cultural Resources

I.1 Overview of Comments on Cultural Resources

The comments and corresponding responses in this section cover topics in Chapter IV, Section IV.C, of the EIR. These include topics related to:

- CR-1, General Comments about Cultural Resources
- CR-2, Comments that Express Agreement with the EIR Findings about Impacts to Cultural Resources
- CR-3, Impacts to the Golden Gate Park National Historic District
- CR-4, Indirect Impacts to Adjacent Cultural Resources
- CR-5, Cumulative Impact Analysis
- CR-6, Mitigation Measures

To the extent that comments responded to in this section also discuss other topics, such as consistency with plans and policies, project description, or aesthetics, these comments are also addressed in those respective sections of the Responses to Comments document.

I.2 General Comments about Cultural Resources [CR-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Miguel-01	I-Duderstadt-03	I-Koivisto-32	I-GMiller-04
O-SFPARKS-45	I-Hansen-02	I-Mabutt-03	I-Pattillo-06
I-Duderstadt-02	I-Koivisto-31	I-GMiller-03	I-Woodruff-Long-01

“Yeah, you look at the west he said of the Park and you hear terms such as ‘sylvan,’ ‘pastoral,’ and ‘wild wooded parkland.’ But neither John Olmstead or William Hammond Hall ever designed any soccer fields. And I don’t think McLaren did either, at least to my knowledge.

What happened roughly 80 years ago, if my timeline is right, is there was a change from that pastoral wild wooded concept and they put in soccer fields and they’re there. And that’s one of the problems that we always have with historic landscapes basically is that they either do or do not accommodate change. And Golden Gate Park has accommodated change in many ways. It has done so slowly, it has done so thoughtfully, but there are soccer fields there. And they’re there for a particular reason.

You know, the Park is historic but I don’t believe it is static and I don’t believe it should be static.” (Ron Miguel, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Miguel-01])

“In regards to the statement ‘The elimination of grass turf and the introduction of replacement synthetic turf would reduce the Athletic Fields’ integrity.’ (DEIR page IV.C-21).

It is our position this statement needs to be expanded. It is our position that this is an appropriate place to mention that the playing field would be altered from an organic material that produces a substantial amount of oxygen and sequesters a substantial amount of CO2 to a synthetic inorganic field that sheds VOHs, chemical particles, etc.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-45])

“With the number of recreational users and available recreational fields in San Francisco, it is not possible to maintain natural grass surfaces in good order.

To argue that the ‘natural grass’ conditions typically found at Beach Chalet for the last 80 plus years are of historic significance is lubricous verging on criminal.” (Christopher Duderstadt, Letter, November 28, 2011 [I-Duderstadt-02])

“Of greater historic significance are the recently placed high fences that surround our natural grass facilities preventing the traditional open public use of our limited recreational facilities.

If the Beach Chalet grounds sports facility is to serve as a location for youth and adults alike to safely run and play than anything less than the proposed A. Project is spiteful to the generations of future users of this facility.” (Christopher Duderstadt, Letter, November 28, 2011 [I-Duderstadt-03])

“The stated project goals are to increase the amount of playing time for our kids in the city of San Francisco. And the turf and lights are very important components to meet those goals. The EIR documents the history of Golden Gate Park and how it has been shaped By the residents of San Francisco throughout the years to meet their needs. This includes lights.

As early as the 1920s lights were used in the Park for tennis courts. There are lights at Kezar Stadium currently. There are lights in several designated night use areas. There are lights for driving and walking paths. And these lights are used if the Park to increase the nighttime enjoyment for the SF residents and also the safety of the users.” (Eric Hansen, public hearing comment [I-Hansen-02])

“It is not true that since the early 1960’s the fields have been used almost exclusively for soccer and occasional special events. Until the field was fenced off in 1998 it was widely used by the

people who live on the western part of the city. Schools used it, people had picnics there, people walked dogs and played Frisbee and bird-watched and wrestled and recreated. The fence took that away, and was put in without public notice that anyone in the neighborhood saw, much like what almost happened with this project. The fence was a theft of the commons. The areas around the fence are still used by visitors and neighbors for multiple purposes; eliminating these areas would be another theft of the commons.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-31]*)

“On p. IV.C-15 Vegetation Features, the trees/shrubs are defined as being ‘character-defining’. This is nice, but it ignores the very real functions they serve of protecting the rest of the park from the wind off the ocean and holding the sand dunes in place. That is why frequent reforestation has to happen here; otherwise the park will revert to dunes. Ignoring this function of the vegetation ignores an important reality of the site.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-32]*)

“If you have not already done so, please consider reading ‘The Making of Golden Gate Park: The Early Years’ and ‘The Making of Golden Gate Park: The Growing Years’ by long time San Francisco resident and Golden Gate Park historian Raymond Clary. Had Michael de Young succeeded in holding the 1915 Panama Pacific International Exposition in the Park’s western end, you would likely not be considering the current Beach Chalet soccer field complex project because the entire area would already have been covered with pavement and buildings. 100 years later, I am hoping that those with the power to preserve and protect Golden Gate Park take a lesson from history.

October 14th, 2011 marked the 100th Anniversary of the ground breaking ceremony for the 1915 Panama Pacific International Exposition. President William Howard Taft tossed the first shovel of dirt at the Golden Gate Park Polo Fields with Exposition Director Michael H. de Young at his side. The Exposition was to be located on 562 acres in the western half of the Park. The plans included the construction of a breakwater, two giant amusement piers extending into the Ocean on either side of the Park, a museum, an art gallery, a modern aquarium, a new observatory on Strawberry Hill, a light tower, an open air auditorium and dozens of pavilions, towers and other ‘architectural features.’ The middle and western ends of the Park would have contained more pavement and structures than wooded, natural areas. Fortunately, due to some very influential and vocal opposition to the use of Golden Gate Park as the Exposition’s location, the 1915 Panama Pacific International Exposition was eventually moved to the Cow Hollow area in the Marina District.

It is not at all clear when or how the conservationists were able to secure what was arguably the single most significant victory in the quest to preserve and protect Golden Gate Park. They were able to overcome a presidential groundbreaking and some of the wealthiest and most powerful individuals in San Francisco. Park Superintendent John McLaren, former Superintendent William Hammond Hall and Park Commissioner W.W. Stow led the movement to relocate the Panama

Pacific Exposition. They insisted Golden Gate Park was not an appropriate location for mass commercial events. All three had witnessed firsthand the ravages left by the first World's Fair held in Golden Gate Park, the 1894 California Midwinter International Exposition.

On August 25th, 1893, the Midwinter Fair's Director, Michael H. de Young, with silver shovel in hand, broke ground at what is now the Music Concourse. Just a few months later, Concert Valley, as it was formerly known, filled with trees and recently planted flora, had been cleared and excavated to make room for what at that time included the biggest structure ever built in California. The Manufacture and Liberal Arts Building covered nearly three square acres. It was just one of five major structures surrounding the Grand Court of Honor, the heart of the Midwinter Exposition. In less than six months, more than 180 structures were built in the Park in preparation for the Fair which officially opened on January 27, 1894. Fair organizers originally told the public the Fair site would be five acres, it quickly grew to encompass more than 160 acres in the heart of Golden Gate Park. As Superintendent McLaren predicted, this mass commercial use of Golden Gate Park set a dangerous precedent for the future. The legacy of the 1894 Fair remains the driving force behind the current privatization of San Francisco's public park space. When the Fair closed in July 1894, the Fine Arts Building became the first public art museum in San Francisco. In its first year of operation, a half million people passed through the Museum doors. The Memorial Museum soon became too small for its growing collection so on April 15, 1917, on a greatly expanded site, construction began on a new museum. The new de Young Museum opened in 1921.

More than 100 years and 135 million dollars in renovations later, the Museum and the Japanese Tea Garden, the only architectural structure from the 1894 Fair that still remains in Golden Gate Park, are largely responsible for the transformation of Golden Gate Park from a woodland retreat to a carefully marketed tourist attraction. Every two months, representatives from the Recreation and Parks Department, the de Young Museum and the San Francisco Convention and Visitors Bureau meet in closed door sessions to discuss marketing strategies for Golden Gate Park. Not surprisingly, in 2011, a visit to Golden Gate Park feels much more like a trip to Disneyland than the respite from urban stresses it was originally intended to be. The Golden Gate Park Cultural Collaborative and today's Music Concourse are the culmination of everything John McLaren feared for his beloved Golden Gate Park." (*Anmarie Mabbut, email, December 12, 2011 [I-Mabbut-03]*)

"I've been visiting Golden Gate Park since I was a child in the 1950's. From the beginning, I clearly perceived the Park to be a very different, unique experience. Unlike most urban and suburban parks, Golden Gate Park offers more than a small patch of green, a grove of trees, a few picnic tables, and a collection of ball fields. It is a seemingly unending opportunity for unstructured wandering, exploration, and contemplation -- a place to watch a Great Blue Heron hunting one moment and, a bit later, a ball game played on a wide meadow in the midst of a forest. Particularly in the west end of the Park, one can pursue such activities without the fear of

turning a corner and finding a busy street or a parking lot. From its beginning, the Park has been a place that allows people to live in a big city and to forget that very fact.

The west end of the Park is filled with a network of small, often informal footpaths which wander through the forests from meadow, to ball field, to lake, and to playground. All elements work together to provide a gentle encounter between humans and the natural world.

There are a number of historical sites located near the Beach Chalet Fields, including the Beach Chalet, the Dutch Windmill, and the newly-renovated Murphy Windmill. For an ordinary person like myself, the pleasure of such sites is greatly dependent on their surroundings in a large naturalistic landscape. To enjoy the Murphy Windmill, I don't stand at the foot of the building. I encounter the windmill when I visit the fields to watch the kids playing or to observe the herons and hawks that frequent the area. I enjoy viewing the mill across the open meadow, towering over the forest canopy. The windmill contributes to my enjoyment of the Park. In turn, the surrounding meadows and forest give the windmill much of its beauty and significance. ...

Finally, the west end of the Park is strongly linked to the adjacent beach area. A walk through the Park often ends on the Ocean Beach Promenade - from there, one can contemplate the shoreline or look back at the great park with its towering windmills. On fine, golden evenings, hundreds of people will gather to watch the setting sun." (*Greg Miller, letter, December 9, 2011 [I-GMiller-03]*)

"The DEIR states, 'The history and significance of Golden Gate Park are provided in the National Register of Historic Places Registration Form' (Page IV.C-10) 'Golden Gate Park is listed on the NRHP ... as one of the pioneering examples of a large urban park in the United States and as the first naturalistic park in the west.' (Page IV,C-12)

The National Register refers to many of the characteristics I personally experience and value on a daily basis:

'As a work of landscape architecture, Golden Gate Park is a masterpiece on several levels The delight of having nature in the city (even if that nature is artificially created) is true today as ever. The pastoral landscape is perfectly suited with meadows for picnics, ball games and other group activities: forests for trails and the feeling of wilderness ... ' (NRHP, Sec 8, page 42)

'Golden Gate Park was also important for its role in advancing the art of park design ... With Golden Gate Park, we see a transition to evolving forms of active recreation. Ball fields, courts, and playgrounds were considered 'urban' intrusions that would conflict with the experience of nature that Olmsted strove to provide. In contrast, these features were skillfully added to Golden Gate Park in a way that preserved the naturalistic features of the landscape Hall's original plan reserved the western end of the park as a natural woodland, and allowed for more park and recreation development in the eastern portion of the park' (NRHP, Sec 8, page 41)

'It is important, for this nomination, to view Golden Gate Park as a whole designed landscape. Although it contains many separate elements and features that were developed over time, it was conceived, planned, and viewed as a single creation ... Golden Gate Park was created by the vision of William Hammond Hall and his protege John McLaren' (NRHP, Sec 8, page 39)

'William Hammond Hall wrote extensively about his design intent for Golden Gate Park 'A park therefore, though containing within itself the appurtenances necessary for the comfort and pleasure of great masses of people, as a whole, should be an agglomeration of hill and dale, meadow, lawn, wood and coppice presenting a series of sylvan and pastoral views calculated to banish all thought of urban objects and lead the imagination to picture space beyond as a continued succession of rural scenes and incidences' ' (Sec 8, page 43)

DEIR Analysis of Visual Impacts:

The Project's impact on the visual experience of the Park and its surroundings are both Aesthetic and Historic Resource issues. The material quoted above clearly demonstrates that what the visitor sees is very important to the design intent of the Park. The landscape design intent has survived and is the major historic resource of the Park." (Greg Miller, letter, December 9, 2011 [I-GMiller-04])

"Golden Gate Park is known world-wide for its naturalistic landscape

Golden Gate Park is an extremely significant, naturalistic landscape. Just a few years ago the city of San Francisco initiated efforts to have it listed on the National Register of Historic Places - the highest level of recognition that can be achieved by a cultural landscape.

It is interesting to note the current relevance of the design intent of the park as described in the 2004 National Register nomination. On page 41 of section 8 the author notes, 'Golden Gate Park was also important for its role in advancing the art of park design. Ballfields, courts and playgrounds were considered 'urban' intrusions that would conflict with the experience of nature that Olmsted strove to provide these features were skillfully added to Golden Gate Park in a way that preserved the naturalistic features of the landscape providing a natural escape from urban life.' The summary statement of the NRHP Registration form cites Golden Gate Park, 'as one of the pioneering examples of the large urban park in the United States it has regional significance as the first naturalistic landscape park in the west.' In this light the proposed anti-natural changes to the Beach Chalet Fields is particularly ironic.

It is also noteworthy, on page 44 of the National Register nomination that the author notes, 'Residents from all social classes are actively involved in the preservation of the park and protecting it from urban intrusions.' It seems this is a never ending endeavor - citizens and their representatives need to be steadfast in holding off the incessant push to urbanize the park.

The park's National Register designation means that it is important not only locally but also at a national level, and given the number of international visitors that come to Golden Gate Park one could argue that it has international stature. As such the city has a duty to not only protect the park for residents, but also to retain its attraction for visitors. This is a commercially smart action to take. In addition to that, San Francisco needs to protect is as an internationally known cultural resource. San Franciscans like to weigh in on issues or causes in other countries, but we often neglect to realize the value of what is right here under our noses." (*Chris Pattillo, letter, December 8, 2011 [I-Pattillo-06]*)

"As a seventh generation San Franciscan, a mom of two San Francisco kids, and the Executive Director of San Francisco Police Activities League (PAL), I am writing to urge your support of the Beach Chalet Athletic field rehabilitation project in Golden Gate park. Please approve this project to ensure that Golden Gate Park continue to evolve as a place that provides healthy activity for children and families.

The photograph above is of my Great-Grandmother and Grandfather and their baby daughter in Golden Gate Park in 1913. Fortunately, in 1913, our city leaders already dedicated the Children's Playground as an innovative space to play for our city's children and families. Since this photograph was taken, a multitude of projects have moved forward to similarly benefit families and children. These include, but are certainly not limited to, the California Academy of Science (1916), Steinhart Aquarium (1916) Kezar Stadium (1924), the Beach Chalet (1925) and Stowe Boat House (1946). Had Golden Gate Park been frozen at any point in time, our park would not be as rich or as used as it is today. My own kids, now eight generation San Franciscans, benefit because the City has been dynamic in addressing evolving and changing needs." (*Lorraine Woodruff-Long, email, November 16, 2011 [I-Woodruff-Long-01]*)

Response CR-1

These comments provide general statements about the historic significance of Golden Gate Park, personal opinion, memories, or a restatement of information contained in the EIR, but do not address the adequacy or accuracy of the analysis presented in the EIR. As such these comments are noted, however, no further response is required per CEQA.

In response to I-Pattillo-06, the comment is consistent with the EIR's conclusion that the proposed project would have significant unavoidable impacts on historical significance of this portion of Golden Gate Park. Please also see response to CR-2, below.

I.3 Comments Which Agree with the EIR Findings About Impacts to Cultural Resources [CR-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFHPC-02	O-CLF-06	O-PAR2-12	I-Edelson-02
O-CLF-01	O-CLF-07	O-SCSFBC-41	I-Learner-06
O-CLF-03	O-CLF-08	O-SPEAK3-05	I-McDevitt-06
O-CLF-04	O-CSFN-01	I-Brant-01	I-Pattillo2-01
O-CLF-05	O-GGPPA-03	I-Buhler-01	I-Schwartz-03

“The HPC agrees with the finding that the proposed project will cause a significant impact to historic resources and spatial organization of the western end of Golden Gate Park.” (*Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-02]*)

“Golden Gate Park-the first large urban park built West of the Mississippi River-is an important historic designed landscape; listed on the National Register of Historic Places under Criterion C (Design) at the national level of significance in the area of landscape architecture and under Criterion A (Event) at the regional level of significance in the area of recreation and social history.

The DEIR states:

Impact CP-1: The proposed project would cause a substantial adverse change in the significance of a historic resource as defined in CEQA Guidelines Section 15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code. (Significant and Unavoidable) (page IV.C-20)

The Beach Chalet Athletic Fields Renovation Project would materially impair in an adverse manner many of the character defining features of the Beach Chalet Athletic Fields, a contributor to the Golden Gate Park National Historic District. (page IV.C-27)

We agree with and strongly support the above statements.” (*The Cultural Landscape Foundation, letter, December 8, 2011 [O-CLF-01]*)

“The existing historic design of the park encourages passive, informal uses in this area, as suggested by the naturalistic edges and open space. Alternatives that change the character of this section of the park significantly by establishing it as a heavy use, structured sports area would

not be consistent with the historic design.” (*The Cultural Landscape Foundation, letter, December 8, 2011 [O-CLF-03]*)

“The removal of over 28,000 square feet from the existing planted area impacts the historic tree and shrub edge, significantly altering the historic naturalistic setting.” (*The Cultural Landscape Foundation, letter, December 8, 2011 [O-CLF-04]*)

“In addition to significant alterations to existing vegetation, the historic grading will also be significantly altered by the proposed project.” (*The Cultural Landscape Foundation, letter, December 8, 2011 [O-CLF-05]*)

“The proposed structures, including the entry plaza, light standards, fencing and maintenance shed, are out of scale with the existing surroundings, including the historic vegetation and would significantly compromise historic visual and spatial relationships.” (*The Cultural Landscape Foundation, letter, December 8, 2011 [O-CLF-06]*)

“The proposed new rectilinear pathways do not reflect the picturesque character of the historic curvilinear roads and pathways.” (*The Cultural Landscape Foundation, letter, December 8, 2011 [O-CLF-07]*)

“The project, as proposed, will result in a substantial adverse impact and potentially affect the significance of the Beach Chalet Athletic Fields. We ask that you seriously analyze alternatives that would not negatively affect the integrity of Golden Gate Park.” (*The Cultural Landscape Foundation, letter, December 8, 2011 [O-CLF-08]*)

“After a quick look, it seems obvious that the project values increased hours of soccer play rather than protecting the parkland. In a chapter on cultural resources, the DEIR states there will be ‘significant and unavoidable impacts.’ ” (*Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-01]*)

“According to the DEIR, the proposed project is contrary to the Secretary of the Interior Standards; we have recently experienced attacks on the Secretary of the Interior Standards. Since

there is the possibility that the Golden Gate Park Master Plan may not be upheld, it is important to recall the National Register descriptions of Golden Gate Park:

*'Golden Gate Park was conceived as a naturalistic pleasure ground park to provide a **sylvan retreat from urban pressures for all citizens, rich and poor.**' (Sec 7, Page 1)*

*'Although the park contains the individual resources listed here, **it is important to view Golden Gate Park as a whole.** Golden Gate Park was developed over many years, but it was conceived as a single creation that we now consider an historic designed landscape' (Sec 7, page 2)*

*'In an historic landscape such as Golden Gate Park, integrity should not be tied to any individual trees or even specific species. **It is the spatial relationships between evergreen forest and the open meadows that are the significant feature**' (Sec 7, page 6)*

*'Spatial Relationships ... **The western park is a natural woodland park, and the eastern park is a more finished park with gardens and other features.** The division was part of the original design as described by William Hammond Hall,*

*'Western Park Character: It was designed that the six hundred or more acres of the reservation including and lying to the west of Strawberry Hill and its connecting ridge, **should be simply treated as a woodland or forest, with all the hills and ridges more or less heavily timbered, and the valleys covered with lower-growing shrubs or grasses**' (Sec 7, page 7)*

*'The perimeter consists of solid planting that was meant to screen out the surrounding urban environment, reinforcing the park's role as **an escape from all things urban**' (Sec 7, page 7)*

*'Buildings and Structures .. With few exceptions, the buildings in Golden Gate Park support the recreational mission of the park. Buildings in the park were kept to a minimum because **they were viewed as intrusions to the naturalistic landscape.**' (Sec 7, page 11)" (Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-03])*

"...the additions of synthetic turf, the 100 foot stadium lighting and the stadium seating collectively result in an irreversible impact under CEQA to the Beach Chalet Soccer Fields no longer being considered a contributor to the Golden Gate Park National Historic Landmark District (NHLD).

Without even mentioning the adjoining water treatment, the DEIR considers the 10.9 acres of the soccer fields to be an 'acceptable loss' from the 1,017 acres of parkland. It is PAR's position that no contributor to the Golden Gate National Historic District should be arbitrarily and irreversibly removed from the historic resources for the NHLD. PAR believes such actions could establish a precedent and they should be avoided. (DEIR p. IV C-28, Exemption from Environmental Review p. 2)." (Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-12])

"Impact on Historical Resources. The Sierra Club supports historical resources in San Francisco, including those located in parks. The existing historic design of the park has traditionally had the

use as passive and informal, with naturalistic setting and open space. The proposed project would completely destroy 10 acres of this historic resource.

Page IV.C-20 of the DEIR states:

Impact CP-1: The proposed project would cause a substantial adverse change in the significance of a historic resource as defined in CEQA Guidelines Section 15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code. (Significant and Unavoidable)

The proposed project is a radical change in use from current conditions and what is in the Golden Gate Park Master Plan and the San Francisco General Plan. It is difficult to mitigate for this loss." (Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-41])

"The proposed project is the development of a new and expanded sports facility complex, not a 'Renovation'. The present Beach Chalet soccer fields are used today for soccer practice play, mainly after school. Before perimeter fencing was installed eight to ten years ago, there were afterschool soccer games and casual, unscheduled pick-up games on this meadow. The meadow was designed to be a large open grassy field, following the 'Picturesque' style which created in Golden Gate Park a series of alternating meadows, horticultural planted areas, recreation areas and forest. It should not be called a renovation. The DEIR does not study the project for what it is: an extreme makeover and major expansion which will materially affect the NRHP status. It is a new project, not a renovation and it should be studied as such. The word 'RENOVATION' should not be permitted to remain in the project title as it is biased in favor of the project and glosses over the major construction program that is being proposed." (Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-05])

"The Planning Commission has a difficult decision before it. There clearly is a shortage of usable soccer fields in the City. But that is not a reason to permanently alter the historic character of the Park, and ignore the clear intent of the Master Plan." (Michael Brant, letter, December 2, 2011 [I-Brant-01])

"...Heritage agrees with the EIR's finding and the HPC's finding that the proposed project will indeed result in significant adverse impacts on historic resources, including the Golden Gate Park Historic District, the Beach Chalet, Murphy Windmill and Millwright's Cottage." (Mike Buhler, public hearing comment [I-Buhler-01])

"I agree with the DEIR finding that the proposed project will have an *adverse impact* on the characteristic features of the Beach Chalet Athletic Fields." (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-02]*)

"IV.C-14-24: Historic Significance. In discussing historic significance and cultural resources, this section emphasizes the overriding policy of the GGPMP - to 'respect the unique design and character of the park', and 'The major design feature within which all park activities occur is its pastoral and sylvan landscape'. Design features, such as artificial turf and athletic field lighting might well be suitable at other recreation sites. However, because of Golden Gate Park's unique and historic landscape and status, the proposed project would create a significant adverse and unavoidable impact, (IV.C-27)." (*Deborah Learner, letter, November 29, 2011 [I-Learner-06]*)

"The lights- This is extremely incongruous to the historical and aesthetic fabric of Golden Gate Park. It would create a use factor at night that will certainly bring the typical urban problems that the Park is supposed to be a respite from. The Park is a naturalised horticultural jewel that was intended to be a sanctum from the urban hardscape. Coating six acres of Golden Gate Park with plastic would be a travesty historically and horticulturally. It would certainly go against our best efforts to be seen as The Greenest City." (*Terry McDevitt, email, January 1, 2012 [I-McDevitt-06]*)

"This introduction to the Beach Chalet soccer fields made me aware of the fields as a cultural resource and unique component of Golden Gate Park. While I understand the need to provide sufficient fields to accommodate the demand, I question the logic of impacting a treasured historic resource in doing so." (*Chris Pattillo, letter, November 15, 2011 [I-Pattillo2-01]*)

"This is a thoroughly bad idea. As a user of GGP I urge you strongly to reconsider this faulty idea that violates the long standing spirit of GGP and denigrates the park's standards. Thanks for listening and considering." (*Richard Schwartz, email, November 30, 2011 [I-Schwartz-03]*)

Response CR-2

These comments generally agree with, or restate, the findings in the EIR that the proposed project would have a significant impact on historic resources, but do not address the adequacy or accuracy of the analysis presented in the EIR. As such, these comments are noted, however, no further response is required per CEQA.

I.4 Impacts to the Golden Gate Park National Historic District [CR-3]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-GGPPA-04	I-Jungries2-21	I-GMiller-15	I-Pattillo3-01
O-SPEAK2-03	I-Kuhn-01	I-O'Leary-02I-	I-Posthumus-01
O-SPEAK3-03	I-GMiller-14	Pattillo-02	I-Shultz-20

“The DEIR views the Beach Chalet Athletic Fields as an isolated part of Golden Gate Park, without considering the larger picture of its place in the park’s overall design. For example, because the Beach Chalet Athletic Fields are one of ‘137 contributing resources to the District’ (DEIR p. IV-C-28), the DEIR is not overly concerned with the potential loss of the fields. The DEIR also compares the ‘6.8 acre’ fenced athletic field to Golden Gate Park’s 1,000 acres (note that the DEIR has selected the smaller, fenced area - the entire meadow is closer to 11 acres). This puts the Beach Chalet athletic fields at ‘less than 1% of the total acreage of the park.’ This figure ignores the large number of roads, buildings, utilities structures, statues and other built elements that are gradually but inexorably eating up the parkland. However, if we value Beach Chalet as a contiguous piece of parkland, we can compare Beach Chalet’s 11 acres to the ‘130 acres of meadows, fields, and open areas’ (DEIR, p. IV-E-2.). In this case, the loss of this meadow is the loss of almost 9% of the remaining open areas. Giving a sundial (1907, bronze) the same importance as a large meadow may be one technique for counting historic elements, but it ignores the over-riding value of Golden Gate Park’s parkland. **Can we really offset the loss of a large meadow with a few statues and restroom buildings and feel that we have preserved the integrity of the Park, to say nothing of its beauty and value to San Franciscans?”** (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-04]*)

“The proposed project is the development of an expanded sports facility complex at a nationally recognized site on the National Register of Historic Places (NRHP);

This project should not be called a renovation: it is an extreme makeover and major expansion which will materially affect the NRHP status;

The DEIR treats separately and does not connect the four highly visible landmarks mentioned above; the DEIR does not adequately identify and describe them as a potential historic district and does not provide a fully dimensioned map showing the location of the proposed project within the potential landmark district;” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-03]*)

“Impacts on the integrity of the National Register of Historic Places (NRHP) designation. The proposed project is the development of an expanded sports facility complex at a nationally recognized site on the National Register of Historic Places (NRHP). The DEIR does not adequately study the impact this construction of highly artificial playing fields and the introduction of night-time use will have on the NRHP status.

We request an analysis of project impacts on the integrity and quality of the National Register of Historic Places (NRHP) designation. We are concerned that there will be so much change to the character of this area that it will no longer have the integrity remaining to qualify it for the National Register. Compare the character of the area around Kezar Stadium in the extreme east end of the Park with the construction proposed here for the west end.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-03]*)

“The plan requires significant construction of permanent facilities: there is insufficient analysis regarding irreversible impact to the Golden Gate Park National Historic District.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-21]*)

“The Draft EIR refers to Beach Chalet Athletic Fields as now comprising a mere 0.7% of the 137 contributing resources of the Golden Gate National Historic District; and that their absence will not significantly impact the GGNHD. This statistic is misleading as it does give sufficient weight to this important portion of the park and the historic and aesthetic intent of its pastoral and natural design.” (*Thomas Kuhn, email, December 11, 2011 [I-Kuhn-01]*)

“Many of the 137 contributing elements to the National Register Nomination are items such as statues, rest rooms, and utility buildings (NRHP, Sec 7, pages 3-5). Only a limited number of contributing elements are of the nature or scale to have a major impact on the remaining historic design character of the Park. The Beach Chalet meadow is over 7 acres and with its surrounding grass and forest, covers over 11 acres. The Final EIR should identify the remaining areas that contain contiguous forest, meadow, and lake of a scale comparable to the Beach Chalet site. By ‘contiguous’, I mean areas not divided by roadways, utility lots, parking lots, or buildings. ‘Comparable scale’ means at least 75% the size of the Beach Chalet site - about 8 acres. How many are located in the western part of Golden Gate Park? How many are open to general visitors? (The golf course is restricted to golfers, the Arboretum is restricted to limited daylight hours to City residents and those able to pay a fee)” (*Greg Miller, letter, December 9, 2011 [I-GMiller-14]*)

“An integral part of the design concept of the Park is to ‘lead the imagination to picture space beyond as a continued succession of rural scenes and incidences’. The Final EIR needs to explain how viewing individual historic sites as isolated locales at which ‘observers of one would not simultaneously be able to see or experience another (due to existing or proposed vegetation)’ can be squared with the historic Park design.” (Greg Miller, letter, December 9, 2011 [I-GMiller-15])

“The remake of this existing field is not about creating more playing time for kids - it’s about following the money which leads directly to RPD taking advantage of another opportunity to get tax payers to pay again to ‘renovate’ a beloved play space into something that RPD can market to larger leagues to whom they can charge top dollar for the use which ultimately displaces use by smaller local low-stress play groups.

Kids don’t need mega athletic complexes that are in operation way into the night to have quality experiences, and leagues don’t need another excuse to make children’s sports more about winning and less about being a kid. RPD needs to take care of what they have and remember that they are supposed to be all about ‘recreation’ and not about making money off tax-paid public property.” (Andrea & Rick O’Leary, email, December 11, 2011 [I-O’Leary-02])

“I have reviewed the DEIR and find that it is deficient in several critical aspects. First, the DEIR fails to analyze the impacts of the proposed changes in the context of the entire park. Instead, the impacts analysis focuses exclusively on the western portion of the park. In fact, I was unable to find a single exhibit within the bound portion of the DEIR that shows the entire park. It is essential that the entire park be included in the analysis. Golden Gate Park was designed as a single unit and needs to be consistently viewed in that context. For example, imagine that a museum curator decided it would be a good idea to alter the painting of the Mono Lisa - possibly adding a bright and dazzling ring. Would such a change have a profound affect on the entire painting? I dare say yes. Similarly, by adding artificial turf and 70 new light standards to the Chalet Fields the character of the entire park would be impacted - this needs to be studied in the DEIR.” (Chris Pattillo, letter, December 8, 2011 [I-Pattillo-02])

“Golden Gate Park demonstrates who we are as Americans and what we value. It represents the forward thinking of William Hammond Hall and others who understood over 100 years ago our needs today, our need to be able to escape the intensity of urban living and be able to enjoy sylvan and pastoral views, to preserve nature within our city.

You’ll notice that I’m speaking about the Park as a whole, which the EIR failed to do. The issue before you today is not just about the fields, one small piece of the Park. Before you this evening is a proposal to profoundly and forever alter the Beach Chalet fields as we know them.

How will this affect Golden Gate Park as a whole? Imagine this. Suppose a museum curator wanted to alter to position of the hands in the painting of the Mona Lisa, possibly adding a bright and dazzling ring, would such change have a profound effect on the entire painting? Please ask yourself how will the addition of artificial turf and 70 new light standards affect Golden Gate Park as a whole, our masterpiece. Thank you." (*Chris Pattillo, public hearing comment [I-Pattillo3-01]*)

"The DEIR states that the potential loss of the Beach Chalet Athletic Fields (or about 0.7% of the total) as a contributor to the Golden Gate Park National Historic District would not constitute a significant impact to the District as a historical resource. I suggest that this 0.7% is significantly higher if weighted for the prominent location of the Fields.

The Beach Chalet Athletic Fields are part of the defining western edge of Golden Gate Park across from the Pacific Ocean. They, along with the historic Windmills and Beach Chalet, constitute the major landmarks that represent the grand entrance to the Park from the west. The other recreational areas as one proceeds west - the Polo Fields, the golf course, the archery field, the Bercut Equitation field and the 45th Avenue Playground are all natural turf with no lights." (*Yope (Johannes) Posthumus, email, December 12, 2011 [I-Posthumus-01]*)

"Additions of the synthetic turf, the 100 foot stadium lighting and the stadium seating collectively result in an irreversible impact under CEQA and the Beach Chalet Athletic Fields would no longer be a contributor to the Golden Gate Park National Historic District. The DEIR considers this to be an acceptable loss of 10.9 acres of our 1,017 acres of parkland. No contributor to the whole of the Golden Gate National Historic District should ever be removed from the resources of the District. Traveling down this road is very dangerous and should be avoided at all costs. (DEIR p. IV C-28, Exemption from Environmental review p. 2)." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-20]*)

Response CR-3

Project impacts to the Golden Gate Park National Register Historic District as a whole are addressed on EIR page IV.C-28. In summary, this section evaluates the loss of the Athletic Fields not only in terms of a percentage of the number of contributors to the District, but also in terms of overall size when compared to the size of the District as a whole. The EIR states the potential loss of one contributor out of a total 137 contributors would not constitute a significant impact to the District as a historical resource due to the comparatively small percentage (less than 1%) that it represents. In terms of size, the conversion of the 6.8-acre grass turf fields to synthetic turf, in the context of the 1,017-acre Golden Gate Park National Register Historic District, would also represent approximately less than 1% of the total acreage of the park. The EIR also notes that loss of the Athletic Fields' status as a contributor to the District could not be perceived by an individual given

the size of the District and the fact that the project site is relatively obscured from view along public roadways due to the intervening vegetation. No single identified project feature, such as the lights, synthetic turf, revisions to the circulation paths or other elements, would reduce the integrity of the site to the degree that it loses its ability to contribute to the District. Therefore, the District as a whole would remain eligible for listing in the National Register after completion of the project. Given this information, the EIR adequately and appropriately addressed the project's impact on the entire park as a historic resource. Furthermore, the EIR states on page IV.C-27 that the project's impact on historical resource per CEQA Section 15064.5 is determined to be significant.

While some contributors to the District may be perceived as more historically important than others, all contributors are assigned equal value according to the Golden Gate Park NRHP Registration Form, and according to the NRHP.¹ Requests that the EIR identify the remaining areas that contain contiguous forest, meadow, and lake of a scale comparable to the project site are noted, but are outside the scope of the EIR and would not change the EIR conclusions.

I.5 Indirect Impacts to Adjacent Historic Resources [CR-4]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-SPEAK2-01	O-SPEAK3-04	O-SPEAK4-08	I-Horton-02
O-SPEAK2-08	O-SPEAK4-01	I-Butler-01	I-Stern2-01
O-SPEAK2-09	O-SPEAK4-03	I-Butler-03	

"There are four landmark buildings within a few yards of the proposed sports complex. They are the Murphy Windmill, the nearby Millwright's Cottage, the Queen Wilhelmina Windmill and Tulip Gardens, and the Beach Chalet. All four are official City Landmarks. The proximity of these structures to each other is enhanced by a pathway which runs north-south and connects the four landmarks, parallel to the Great Highway. This pathway lies atop what may have been the historic trace of the Sutro Railroad which once connected H Street (now Lincoln Way) to the Sutro attractions at the foot of Sutro Heights, such as Playland-at-the-Beach. While this area has not yet been recognized as an historic district, if the Soccer Fields complex is approved, there will be little chance that sufficient historic connectivity and integrity will remain to qualify it as an historic district." (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-01]*)

¹ United States Department of the Interior National Park Service (NPS), National Register of Historic Places Registration Form. *Golden Gate Park*. Prepared by Douglas Nelson, October 2004.

“Approval of the project would foreclose any possibility of the West End of Golden Gate Park becoming a San Francisco historic district.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-08]*)

“The proposed project will compromise the integrity of the historic buildings and compromise the visual and functional integrity with the increase in activity and hours of operation of the proposed sports facility.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-09]*)

“Historic Context: City Landmarks. There are four landmark buildings within a few yards of the proposed sports complex. They are the Murphy Windmill, the nearby Millwright’s Cottage, the Queen Wilhelmina Windmill and Tulip Gardens, and the Beach Chalet. All four are official City Landmarks. The proximity of these structures to each other is enhanced by a pathway which runs north-south and connects the four landmarks, parallel to the Great Highway and is assumed to be the historic trace of the Sutro Railway. which once connected H Street (now Lincoln Way) to the Sutro attractions at the foot of Sutro Heights, such as Playland-at-the-Beach. The EIR must evaluate the changes that will occur to the perception and the character of these landmarks when the proposed project is constructed in their midst. The EIR should examine in what ways the proposed project will compromise the integrity of the historic buildings and compromise their visual and functional integrity with the increase in activity and hours of operation of the proposed sports facility” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-04]*)

“There are four landmark buildings within a few yards of the proposed sports complex. They are the Murphy Windmill, the nearby Millwright’s Cottage, the Queen Wilhelmina Windmill and Tulip Gardens, and the Beach Chalet. All four are official City Landmarks. The proximity of these structures to each other is enhanced by a pathway which runs north-south and connects the four landmarks, parallel to the Great Highway and is assumed to be the historic trace of the Sutro Railway which once connected H Street (now Lincoln Way) to the Sutro attractions at the foot of Sutro Heights, such as Playland-at-the-Beach. We request an analysis of the impacts on the integrity and quality of the National Register of Historic Places (NRHP) designation. We are concerned that there will be so much change to the character of this area that it will no longer have the integrity remaining to qualify it for the National Register. Compare the character of the area around Kezar Stadium in the extreme east end of the Park with the construction proposed here for the west end.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-01]*)

“The proposed project is the development of an expanded sports facility complex at a nationally recognized site on the National Register of Historic Places (NRHP). The DEIR does not adequately study the impact this construction of highly artificial playing fields and the introduction of night-time use will have on the NRHP status.

This project is the development of a new and expanded sports facility complex on the site of the former Beach Chalet soccer fields which comprised casual sports activity on a meadow in the west end of Golden Gate Park which was a large meadow, fenced in relatively recently, and thus should not be called a renovation. We believe that it has not been studied for what it is: an extreme makeover and major expansion which will materially affect the NRHP status. It is a new project, not a renovation and it should be studied as such. The word ‘**RENOVATION**’ should not be permitted to remain in the project title as it is biased in favor of the project and glosses over the major construction program that is being proposed.

The DEIR treats separately and does not connect the four highly visible landmarks mentioned above that comprise the western portion of the NRHP designation. The DEIR does not adequately identify and describe these historic structures and does not provide a fully dimensioned map or site plan showing the relationship of the proposed project within the potential landmark district. A very dark satellite (google) image is not satisfactory.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-03]*)

“Approval of the project would foreclose any possibility of the West End of Golden Gate Park becoming a San Francisco historic district.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-08]*)

“The DEIR underestimates the significant adverse effect of altering the cultural landscape which links the acknowledged historic resources at the west end of Golden Gate Park by placing windmills in the shifting sands of Ocean Beach to facilitate the transformation of dunes to a landscaped park and then, having succeeded the building of the Beach Chalet, to provide for recreational use of the beach and its adjacent existing natural grass fields.” (*Joseph Butler, public hearing comment [I-Butler-01]*)

“The architectural historic resources at the western edge of Golden Gate Park are not only consistent with the surrounding cultural landscape, they are in fact responsible for it. Adding a nine-acre toxic field will never be consistent with them.” (*Joseph Butler, public hearing comment [I-Butler-03]*)

“The proposed project will also have impacts on the historic resources which are concentrated at the western end of Golden Gate Park, the two windmills, the Beach Chalet and the Millwright’s Cottage, and their connection with each other. This is not adequately addressed in the DEIR. I am also afraid that the amount of persons attracted to the soccer games and wandering around in the area could lead to vandalism of the historic resources.” (*Inge Horton letter, December 1, 2011 [I-Horton-02]*)

“I’m a 43-year resident of San Francisco currently living with my husband in our own home in the Outer Richmond, the DEIR states that the proposed Beach Chalet soccer fields renovation project has, quote, ‘a significant and unavoidable impact on historic resources,’ end of quote. I believe this impact is even more apparent after the magnificent recent restoration of the -- completion of the restoration of the Murphy Windmill.

The western edge of Golden Gate Park now has a windmill and its north and south corners with a wonderful path between the two. Just think of the hundreds and thousands of people that are going to come and visit those windmills and stroll between those two windmills.” (*Kathleen Stern, public hearing comment [I-Stern2-01]*)

Response CR-4

Adjacent historic resources, including city landmarks, are identified on EIR page IV.C-11. As stated on this page, there are two previously recorded historic resources located outside of, but adjacent to, the project site. These include the Murphy Windmill and Millwright’s Cottage (considered one resource – Landmark #210), and the Beach Chalet (Landmark #179). EIR page IV.C-4 also identifies the Dutch Windmill (Landmark #147) in the project vicinity. Indirect effects to nearby resources were addressed on EIR page IV.C-29. The EIR states that nearby resources are partially screened from view due to existing vegetation, and are generally perceived independently. For example, the Murphy Windmill, located approximately 200 feet south of the project site, would be partially visible from the project site when rehabilitated. Similarly, the Dutch Windmill, which is located approximately 250 feet north of the project site, is almost entirely screened from view due to intervening vegetation. Only the tips of the blades and the uppermost roof dome of both windmill towers would be visible from the project site. These areas, however, are not accessible to the general public, and as such, the windmills and the project site cannot be perceived simultaneously. While some visitors to the park would want to walk from the Dutch Windmill to the renovated Murphy Windmill, or vice versa, along the existing trails which connect them, the proposed project would not deter or otherwise obstruct passage along the trail. Although the proposed project would have a significant and unavoidable impact on the Athletic Fields as a historic resource, this change to the western edge of the park would not substantially diminish the historical value of noted landmarks in the vicinity to the extent that such resources would no longer be considered landmarks.

While commenters indicate that there could potentially be a sub-district in the project vicinity, based on resources in the west end of the park, the entire park is a historic district on the NRHP, but it has not been listed as a San Francisco historic district under Article 10 of the Planning Code, nor has any sub-district of the Park been identified, listed, or analyzed as such.

I.6 Cumulative Impacts to Cultural Resources [CR-5]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

I-GMiller-12

I-GMiller-13

I-GMiller4-03

I-Mosgofian-05

“Section IV.C ‘Cultural Resources’ of the Draft tends to circumscribe the area affected by the project to a fairly small footprint: ‘The CEQA-Area of Potential Effects (C-APE) includes all areas of potential ground disturbing activity and associated staging areas and is used to define the horizontal extent of potential impacts’ and yet it immediately follows with a definition taken from federal standards, ‘ The APE is the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of the historical resources” (Page IV.C-2)

The Draft concludes, ‘After completion of the project, the Beach Chalet Athletic Fields would no longer be a contributor to Golden Gate National Historic District. ‘, but, ‘Considering there are 137 contributing resources to the District, the potential loss of one contributor or about 0.7% of the total would not constitute a significant impact to the District as a historical resource.’ (Page IV.C-2S)

Finally, despite the PUC’s plan to build a 2 - acre recycled water treatment plant just to the south of the fields, the Draft concludes the cumulative effects, ‘would not substantially alter the historical resources because the changes brought about by these projects would largely be independent of one another; that is, observers of one would not simultaneously be able to see or experience another (due to existing or proposed vegetation)’ (Page IV.C-2)

My personal impression: the Draft is literally missing the forest for the trees. At a minimum, the Final EIR needs to address the following questions:

How can building a semi-professional modernistic sports facility with lighting towers twice the height of the surrounding forest be reconciled with the notion that the major historical resource of the Park is its pioneering landscape design characteristics which emphasize the naturalistic setting of the west end and the skillful setting of playfields in a pastoral setting?” (*Greg Miller, letter, December 9, 2011 [I-GMiller-12]*)

“Taken together, the Beach Chalet Project and the adjacent PUC Recycled Water Treatment Plant will stretch across about 1/2 of the width of the Park. Why won’t the combination of these two projects greatly exacerbate the destruction of the landscape design of the western end of the Park?” (Greg Miller, letter, December 9, 2011 [I-GMiller-13])

“The EIR concludes that there are no cumulative impacts to the historical resource by this project even though PUC wants to build a two-acre water treatment plant adjacent to it between it and the Murphy Windmill. Its reasoning is based on the fact that, well, you really only see these sites individually and it will be blocked by trees. So therefore if I look at the Murphy Windmill I really can’t see the water treatment plant because there’s a hedge of bushes over here and likewise.

Problem here is, as has been explained, the Park is designed as an integral whole that works together by people moving through it and experiencing it. These kinds of arbitrarily rules basically leap to the conclusions that are very strong and dramatic but I think incorrect and need to be reconsidered very carefully. Thank you very much.” (Greg Miller, public hearing comment [I-GMiller4-03])

“What will the Planning Department write when projects for turf replacement are submitted for the Polo Fields, for Kezar, for Big Rec, the nearby golf course? The DEIR ignored these obvious next targets for synthetic turf. I believe the proposed project, in combination with present, proposed, and reasonably foreseeable future projects, will indeed have a huge, cumulative and irreversible impact on the character of Golden Gate Park. I disagree with the DEIR conclusions that it ‘would not result in cumulatively considerable impacts related to historic resources.’ “ (Denis Mosgofian, letter, December 11, 2011 [I-Mosgofian-05])

Response CR-5

The cumulative impact analysis is presented on EIR pages IV.C-28-29. In response to comment I-GMiller-12 and I-GMiller-13, the geographic context for analysis of cumulative impacts on historical resources encompasses Golden Gate Park and surrounding neighborhoods, about 0.5 miles in every direction from the project site, and not the CEQA – Area of Potential Effects (C-APE), which is restricted to the project site itself. Future cumulative projects evaluated within this geographic context include the construction of a recycled water project and a groundwater well facility just south of the project site (including various pipeline improvements); the restoration of the Murphy Windmill and Millwright’s Cottage; and bicycle network improvements pursuant to the San Francisco Bicycle Plan. The bicycle plan would improve bicycle routes along segments of Martin Luther King Jr. Drive, John F. Kennedy Drive, and the

Great Highway near the project site. Therefore, the cumulative analysis appropriately considered all projects in the immediate area which could have a cumulatively considerable impact on cultural resources.

In response to comment I-Mosgofian-05, there are currently no plans to convert any other fields in Golden Gate Park from natural to synthetic turf. As such, it would be speculative to include this in the cumulative analysis (see also Response ERP-1).

In response to comment I-GMiller4-03, the proposed SFPUC recycled water project is addressed in the cumulative analysis on page EIR IV.C-29.² The EIR analysis notes that although the proposed recycled water project and other cumulative projects together would intensify uses in this area, they would not substantially alter historical resources because the changes brought about by these projects would largely be independent of one another; that is, observers of one would not simultaneously be able to see or experience another (due to existing and proposed vegetation). The recycled water project and the groundwater well facility would be largely obscured from the project site by existing and proposed intervening vegetation, and thus the interaction of effects to historical resources would be largely attenuated. This area is also non-contributing to the Golden Gate Park National Register Historic District. Therefore, the project, in combination with the proposed recycled water project and other nearby projects, would not make a considerable contribution to cumulative cultural impacts.

I.7 Mitigation Measures [CR-6]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFHPC-08

I-Learner-14

I-Pattillo-04

“The HPC does not believe the circulation path is adequately discussed in M-CP-1 for the plaza and playground.” (*Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-08]*)

“The mitigation in ES-I under the cultural resources section mentions naturalistic surface material. If the suggested materials are not ADA acceptable, then this proposed mitigation measure would not appear to be valid.” (*Deborah Learner, letter, November 29, 2011 [I-Learner-14]*)

² On February 28, 2012, the San Francisco Public Utilities Commission announced that a new recycled water treatment plant location outside Golden Gate Park was being pursued. However, as a worst-case scenario and because the recycled water project Notice of Preparation is still on file with the Planning Department as being sited in Golden Gate Park, this EIR continues to consider the recycled water treatment plant in Golden Gate Park as a potential cumulative project.

“Second, the proposed mitigations are woefully inadequate. The DEIR clearly acknowledges on page ES-3 that ‘The proposed project would cause a substantial adverse change in the significance of a historical resource as defined in CEQA ... ‘ On page IV.C-28 the DEIR notes, ‘After completion of the project, the Beach Chalet Athletic Fields would no longer be a contributor to the Golden Gate Park National Historic District because its integrity would be substantially reduced ‘ This is an extremely significant issue. One would expect the DEIR to propose major mitigations to offset such a significant loss, but on page ES-9 the only mitigation proposed is a minor change to the layout and materials for the circulation paths. Serious consideration must be given to defining adequate mitigation measures that fully compensate for the loss of this historic resource.” (Chris Pattillo, letter, December 8, 2011 [I-Pattillo-04])

Response CR-6

Mitigation Measure M-CP-1 is addressed on EIR page IV.C-23. The measure states that the circulation paths shall be designed with a more naturalistic and compatible surface material such as decomposed granite, NaturePave (a decomposed granite product with a resin binding agent), or compacted earth in place of the proposed concrete surface materials. The paths shall also be redesigned to create a more informal path edge treatment such as a ‘soft’ planted edge. This measure is intended to ensure that the paths are more compatible with the informal and unpaved pathways that currently exist within the historic landscape. Although technologically feasible to use, the San Francisco Mayor’s Disability Commission concluded that decomposed granite and other similar soft ground materials do not provide an accessible surface for walkways because they are not always stable, firm and slip-resistant. Because of this, it may not be feasible to use such materials and meet the accessibility requirements for the proposed project. The feasibility of using alternative paving materials at the project site would be determined by the San Francisco Recreation and Parks Department (SFRPD) Commission and Mayor’s Office on Disability (MOD) during project approval.

In response to A-SFHPC-08, the circulation paths around the plaza and playground are discussed on EIR page IV.C-25–26. This section states that the asphalt pavement immediately surrounding the Restroom Building was expanded in the 1990s and is not considered a character-defining feature of the historic landscape. The proposed replacement of asphalt pavement with a new concrete plaza would not remove any character defining features of the landscape. The EIR also notes that the SFRPD incorporated a project change into the proposed project that reduced the size of the plaza area by removing seating and tables, and added landscaping to screen the face of the plaza.

In response to comment I-Pattillo-04, EIR page IV.C-27 summarizes the project impact and describes the lack of available mitigation measures to avoid or reduce the impact to a less-than-significant level. This section notes that because the installation of spectator seating, synthetic

turf, circulation paths, and field lights are crucial to the implementation of the proposed project, there are no mitigation measures for these elements that would reduce the level of impact to the less-than-significant level while continuing to meet the project objectives. Therefore, the impact is considered significant and unavoidable. Only selection of a no project alternative or an off-site alternative would fully avoid the impacts of the project on historical resources.

Regarding comment I-Learner-14 indicating that if the suggested materials are not Americans with Disabilities Act (ADA) acceptable, then this proposed mitigation measure would not appear to be valid. EIR page IV.C-23 indicates that although technologically feasible to use, decomposed granite and other similar soft ground materials do not provide an accessible surface for walkways because they are not always stable, firm and slip-resistant. EIR page IV.C-23 indicates that because of this, it may not be feasible to use such materials and meet the accessibility requirements for the proposed project. Additionally, implementation of Mitigation Measure M-CP-1 alone would not reduce the overall impact to the cultural landscape to a less-than-significant level. Thus, impacts to historic resources were determined to be significant and unavoidable.

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J. Transportation and Circulation

J.1 Overview of Comments on Transportation and Circulation

The comments and corresponding responses in this section cover topics in Chapter IV, Section IV.D, of the EIR. These include topics related to:

- TR-1, Transportation and Circulation
- TR-2, Parking Issues Due to the Project
- TR-3, Increased Traffic
- TR-4, Public Transportation

To the extent that comments responded to in this section also discuss other topics, such as consistency with plans and policies, land use, or project description, these comments are also addressed in those respective sections of the Responses to Comments document.

J.2 Transportation and Circulation [TR-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFHPC-05	I-Barish-08	I-Dennenberg-10	I-Khan-11
O-SCSFBC-40A	I-Citron-02	I-Dennenberg-14	I-Khan-15
I-Anderson-11	I-Citron-12	I-Edelson-12	I-Koivisto-38
I-Anderson-15	I-Citron-15	I-Edelson-16	I-McGrew-07

“The HPC believes the DEIR did not adequately address safety of visitors not traveling by car and” (*Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-05]*)

“The DEIR also does not account for the additional spectators in the total additional driving. There are over 1,000 seats for spectators, which translates to over 300 extra cars, arriving and departing until 10pm. If the Planning Department believes these spectators will use Muni, it does not provide for resources for extra service.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-40]*)

“Rec and Park has talked of closing the Park at night -- how will this impact traffic in this area?”

How will having large crowds in this area impact Rec and Park trying to close the Park at night?"
(*Raja Anderson, letter, December 12, 2011 [I-Anderson-11]*)

"What will be the impact on the new bicycle lane that goes by the newly enlarged parking lot entrance?" (*Raja Anderson, letter, December 12, 2011 [I-Anderson-15]*)

"The travel demand analysis was based on the assumption that the maximum number of spectators would be 5 per field on weekdays, and 36 per field on weekends. Yet the stadium seating that is planned will seat 1,046 spectators. It would appear, therefore, that the travel demand analysis should have been based on a maximum of 1,046 spectators. Incorrect assumptions lead to incorrect conclusions. It would appear, therefore, that the Impact Analyses are also incorrect." (*Jean Barish, letter, December 12, 2011 [I-Barish-08]*)

"As a resident of the Sunset district and a frequent visitor to the park, I am aghast at the idea of a sports complex disturbing the tranquility of the western edge. The traffic ... are all completely out of sync with the serene character of the surroundings. As an avid cyclist I fear for my safety if so much new traffic is introduced into the confines of the park. ..." (*Ben Citron, letter, December 11, 2011 [I-Citron-02]*)

"Rec and Park has talked of closing the Park at night -- how will this impact traffic in this area? How will having large crowds in this area impact Rec and Park trying to close the Park at night? What happens to people who take a bus to a game -- where does the public get off the bus? How far do they walk? What paths will they follow?" (*Ben Citron, letter, December 11, 2011 [I-Citron-12]*)

"What will be the impact on the new bicycle lane that goes by the newly enlarged parking lot entrance?" (*Ben Citron, letter, December 11, 2011 [I-Citron-15]*)

"Rec and Park has talked of closing the Park at night -- how will this impact traffic in this area? How will having large crowds in this area impact Rec and Park trying to close the Park at night?"
(*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-10]*)

“What will be the impact on the new bicycle lane that goes by the newly enlarged parking lot entrance?” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-14]*)

“Rec and Park has talked of closing the Park at night -- how will this impact traffic in this area? How will having large crowds in this area impact Rec and Park trying to close the Park at night?” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-12]*)

“What will be the impact on the new bicycle lane that goes by the newly enlarged parking lot entrance?” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-16]*)

“Traffic and circulation:

Rec and Park has talked of closing the Park at night –how will this impact traffic in this area?

How will having large crowds in this area impact Rec and Park trying to close the Park at night?” (*Tehmina Khan, email, December 10, 2011 [I-Khan-11]*)

“What will be the impact on the new bicycle lane that goes by the newly enlarged parking lot entrance?” (*Tehmina Khan, email, December 10, 2011 [I-Khan-15]*)

“In analyzing the traffic patterns, the DEIR failed to take into account a number of road anomalies that make certain intersections very dangerous and that confuse people not from the neighborhoods. For example, there are two places between Kirkham and Lincoln where roads (La Playa, Great Highway) blend together with no stop and blind angles in one direction. The N turnaround is confusing to most car traffic, and dangerous due to the combination of stops, tracks, double-parking, and pedestrians. The intersection at La Playa and Irving has no stop in one direction with cars whipping through at high speed around what is almost a blind comer. Crossing Lincoln anywhere in this area has become increasingly dangerous in recent years. Currently neighbors can clearly tell the difference between weekday traffic, when most of the cars are driven by locals, and weekend traffic, when most of the cars are driven by non-locals. The weekend traffic feels much more dangerous and much less predictable. And nowhere is there any mention of the situation when sections of streets or entire streets are closed for special events, such as the frequent closing down of the upper Great Highway for marathons or due to flooding or sand dune invasion. What effect will those events have on traffic in the area?” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-38]*)

“TRAFFIC: In a perfect world your traffic assumptions might work but you have not taken into account that the Gt. Highway is heavily used as a commute path from Highway 1, the Sunset area to the Richmond district and to the Golden Gate bridge. When the Gt. Highway is closed the surrounding neighborhood are used to get to Golden Gate Park.” (*Shana McGrew, email, no date [I-McGrew-07]*)

Response TR-1

In response to comment A-SFHPC-05, potentially hazardous conditions for pedestrians and bicyclists are addressed under Impact TR-3, page IV.D-11 of the EIR. As described on that page, although an increased amount of vehicle traffic at the project site’s parking lot driveway could incrementally increase the number of conflicts between drivers and pedestrians/bicyclists on the recreational path along John F. Kennedy Drive, pedestrian volumes and bicycle activity in the vicinity of the project site are generally low and low to moderate, respectively. The peak number of pedestrian trips in the immediate vicinity would likely increase under project conditions because the four fields would accommodate more people than the three fields currently in use at one time. Additionally, despite the proposed increased capacity of the on-site parking lot, more people would need to park off-site (on-street). However, the proposed project would neither substantially affect current pedestrian flow conditions, nor result in potentially hazardous pedestrian conditions beyond what exists in the area today. Also, the project would not generate a noticeable increase in bicycles in the area, nor would it affect existing bicycle conditions or facilities in the area.

In response to comments I-Anderson-11, I-Citron-12A, I-Dennenberg-10, I-Edelson-12, and I-Khan-11, project traffic would have no effect on the possibility of closing Golden Gate Park at night, and vice versa. The proposed lighting of the project site would be turned off no later than 10:00 p.m. The Park currently is closed from 10:00 p.m. to 6:00 a.m., with the exception of through traffic. There is currently no proposal to change those hours.

Regarding the new bicycle lane, and in response to comments I-Anderson-15, I-Citron-15, I-Dennenberg-14, I-Edelson-16, and I-Khan-15, the San Francisco Municipal Transportation Agency would install a new separated bikeway on John F. Kennedy Drive to the east of Transverse Drive (approximately in line with 21st Avenue). There would be no changes to the street in the western half of the park, including the stretch of John F. Kennedy Drive near the access for the project’s parking lot.

Regarding comments I-Barish-08 and O-SCSFBC-40A, the EIR’s travel demand analysis relevant to potential transportation and circulation impacts adhered to standard analysis practices. That is, it focused on the estimated net-new project-generated trips (person-trips and vehicle-trips) during the representative peak use and peak traffic periods (i.e., the weekday p.m. peak hour and weekend mid-afternoon peak hour). The maximum capacity of 1,046 seats would be occupied only during major tournaments, which because of their infrequent occurrences (up to six per

year), were not analyzed for this report. The estimated number of spectators per field during the analysis peak hours was provided by the San Francisco Recreation and Parks Department based on experience with similar facilities.

Regarding comments I-Koivisto-38 and I-McGraw-07, in the absence of specific data for the distribution of trips generated by the facilities, reasonable and conservative assumptions were made about travel patterns, including drivers' preference to use major roads (arterials) instead of local-serving roads when possible. Roadway/intersection constraints, like those identified by commenters, were taken into account to determine most likely travel paths to and from the project site.

J.3 Parking Issues Due to the Project [TR-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

I-Anderson-13	I-Edelson-14	I-Koivisto-36	I-O'Leary-11
I-Arack-08	I-GIHoward-03	I-Lampert-02	I-Ray-07
I-Browd-03	I-GIHoward-04	I-NLewis-02	I-Richman-04
I-Citron-13	I-GIHoward-05	I-McGrew-09	I-Richman-05
I-Daley-02	I-GIHoward-06	I-McGrew-11	I-Romano-03
I-Darrigrand & Claflin-06	I-Jungreis2-40	I-McGrew-13	I-Romano-06
I-Dennenberg-12	I-Khan-13	I-Ogilvie-06	I-Romano2-02

"What is the impact on the Ocean Beach parking lot of large games at the soccer complex?" (*Raja Anderson, letter, December 12, 2011 [I-Anderson-13]*)

"The traffic and parking is already a problem out here on the beach. This will just add to the congestion and gridlock along the lower great highway and the upper great highway." (*Patricia Arack, letter, December 12, 2011 [I-Arack-08]*)

"I attended the Planning Commission meeting on Dec. 1 and heard speaker after speaker present lucid, compelling arguments refuting the DEIR's conclusions. They addressed ... the congestion and parking conflicts with Dutch Windmill visitors and events ..." (*Gary Browd, letter, December 7, 2011 [I-Browd-03]*)

“What is the impact on the Ocean Beach parking lot of large games at the soccer complex?” (*Ben Citron, letter, December 11, 2011 [I-Citron-13]*)

“...also auto parking is limited at the ocean, and so many more people use the Ocean Beach for parking and night time entertainment ... !” (*Thomas Daley, letter, November 22, 2011 [I-Daley-02]*)

“We already have parking congestion at Ocean Beach on a nice day. What happens when there are drivers coming in large numbers for games?” (*Jacqueline Darrigrand and William Claflin, Letter, December 9, 2011 [I-Darrigrand & Claflin-06]*)

“What is the impact on the Ocean Beach parking lot of late games at the soccer complex?” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-12]*)

“What is the impact on the Ocean Beach parking lot of large games at the soccer complex?” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-14]*)

“The issue of parking for the fields is not addressed in the proper manner relating to the new stadium recommendations. In fact this does not include any combined effect for the fields and chalet. Standard parking codes typically require 1 vehicle space for each 4 or 5 seats or expected attendees. For stadium seating of 1,000, as stated in the DEIR, a maximum of 250 and a minimum of 200 parking spaces are required. The number to be created is far below that. In setting these standards it is assumed (rightly) that at some time all seats will be filled. There is no provision for assuming that far fewer will be present regardless of whether this is event parking, building parking or other.” (*Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-03]*)

“While nearby parking fields or garages may be used (if permitted by the master plan or zoning code, to supplement there is usually a distance limit set also - normally 500 feet or less, due to constraints for persons need to walk. The DEIR speaks of 6 to 13 minutes which is excessive, and no immediate public transit at that end of the Park. While the DEIR speaks of using the beach parking, there is only one relatively safe access point to cross a very busy 4 lane highway (and no apparent crossing light mentioned) in the middle of the field area. This still does not provide ease of access, especially because the spaces closest to the cross walk are not reserved for the soccer fields but open to all. On a busy day the field could be filled forcing long hikes in a high traffic

area to see games. See Figure 1 with cross walk marked with yellow box." (Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-04])

"In addition there must be provision for handicapped spaces that are proportioned based on the number to total spaces provided and this has to be addressed.

The current lot has 50 spaces, well below what should be there now, and the proposed lot increases that to a total of 70 spaces, 130 to 180 less than most municipal codes require as being adequate. Such an enlargement would have a large impact on the forestation in that area and would need further study." (Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-05])

"The DEIR also assumes that many just are drop-off cars, but in fact for a contest, this is not true. If the fields are used as expected then there will be a substantial shortage of parking even for the families of the players. Indeed, this lot also seems to be unrestricted and could be filled by Park visitors with no interest in soccer. Furthermore, there are only 6 handicapped spaces in the beach lot and only two near (but not immediately adjacent to) the central cross walk, a number well below what would be needed if this lot were to serve the soccer fields. In fact probably well below current zoning requirements." (Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-06])

"The DEIR states that there will be more nighttime play, which will be by adult leagues: there is insufficient analysis of parking expansion to meet increased demands posed by adult players." (Jason Jungreis, email, November 21, 2011 [I-Jungreis2-40])

"What is the impact on the Ocean Beach parking lot of large games at the soccer complex?" (Tehmina Khan, email, December 10, 2011 [I-Khan-13])

"The parking usage survey is very incomplete. There are increasing numbers of special events that severely impact transit and parking in our area; there are multiple marathons, runs, bike tours, concerts, races, polo field tournaments, and cultural events that congest the area beyond capacity. Parking after dark in the area is almost non-existent (for expert opinion, consult the valet service working at Thanh Long's). The parking survey in the DEIR is inadequate for judging the effect of increased numbers of cars on the area." (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-36])

“Here my personal experience has been on site. I have noticed that on sunny afternoons, especially on weekends, Esplanade parking is insufficient for beachgoers, who then cruise the Park looking for a parking spot. This not only takes up parking places but creates traffic jams on the Great Highway and JFK Boulevard. Also, on such good-weather days, attendance at the Windmill, the Queen Wilhelmina Garden, and Park Chalet all increase, again adding to the traffic. If there is a soccer game as well, then this also adds to the parking problem and to the traffic as well. On some days, I find it useless to take the 18 bus to get across the Park, say from my place on Balboa to the restaurants and shops on Judah. The bus simply stalls, so I walk instead - fine for me but not for those who aren't up to the walk

I understand that there is to be increased parking at the complex, but will it be enough to handle the overflow from the beach and park as well? And if there is enough parking for all, there will still be increased traffic on all nearby roads. A popular soccer match (or tournament) might draw many people to the complex, and a sunny days clearly do draws people to both Park and beach.”
(Gabriel Lampert, email, December 4, 2011 [I-Lampert-02])

“I definitely support healthy sports and better community sports fields for our kids. But by concentrating so many fields at the upper end of Golden Gate Park Living so close to the Park, I can tell you how congested, noisy and over-crowded it gets with the City ‘Out-Landers’ music festival for three days. By placing four soccer fields and keeping the site open until 10 pm everyday invites more congestion and the possibility of a new parking facility that can handle traffic created by this massive sports project.” *(Nancy Lewis, letter, December 9, 2011 [I-NLewis-02])*

“Traffic in the park would triple. Going around and around looking for a parking spot. In Table 11-4 weekly playing schedule presumes that after 1 game the players and fans would leave to let others play and watch, not going to happen,” *(Shana McGrew, email, no date [I-McGrew-09])*

“...which will spill out to the surrounding communities and take home owners parking. I wonder how far up the park drivers will go?” *(Shana McGrew, email, no date [I-McGrew-11])*

“PARKING: 174 spaces near the soccer fields for players to park. What about the ‘other people’, the archers, golfers, tulips garden and windmill viewers and nature lovers? ‘Where do they park? As the overflow goes out into the neighborhoods people ‘cut’ their own short cut path to the fields, not caring about what they trample on.

As we have seen at many functions in the park people will park wherever they wish even on grass.” *(Shana McGrew, email, no date [I-McGrew-13])*

“The proposal to increase the number of spaces in the soccer field parking lot by 8 spaces will not reduce the traffic congestion on weekends for the current primarily resident use of these fields.

Intentionally attracting Bay Area Leagues to play on these fields will increase the number of spectators by many fold.

RPD states that Ocean Beach parking lots will accommodate the need for additional parking. Ocean Beach parking lots are full on sunny weekends year round. In order to accommodate the additional need for parking that will be generated by this proposal to expand field size to professional league competition size spectators would require RPD providing a minimum of 100 additional spaces, if only 25 spectators attended games on the four fields. In actuality, there could easily be 100 spectators that attend games on each of the 4 fields.

The logistics of a soccer tournament are as follows:

11 per side plus 3 substitutes= 14 = 28 players per game. Plus 2 coaches per team plus referees and 2 linesmen. = 33 total participants every 1 1/2 hours (per game).

Spectators can be expected to be at least 30 per game, and more likely 60 spectators which gives us 93 players x 4 fields = 400 people attending each 90 minutes.

If 5 games are hosted per field on a weekend day, this = 2000 people that will all need to park their cars.

It is difficult enough to park now, and bringing in this volume of people will make it an absolute nightmare. This clearly has not been thought through intelligently” (*Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-06]*)

“Parking will be a nightmare because the proposed parking lot will not be sufficient to handle private autos and buses for long hours.” (*Andrea & Rick O’Leary, email, December 11, 2011 [I-O’Leary-11]*)

“The proposal to increase the number of spaces in the soccer field parking lot by 8 spaces will not reduce the traffic congestion on weekends for the current primarily resident use of these fields.

Intentionally attracting Bay Area Leagues to play on these fields will increase the number of spectators by many fold.

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additional need for parking that will be generated by this proposal to expand field size to professional league competition size spectators would require RPD providing a minimum of 100 additional spaces, if only 25 spectators attended games on the four fields. In actuality, there could easily be 100 spectators that attend games on each of the 4 fields.

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Spectators can be expected to be at least 30 per game, and more likely 60 spectators which gives us 93 players x 4 fields = 400 people attending each 90 minutes.

If 5 games are hosted per field on a weekend day, this = 2000 people that will all need to park their cars.

It is difficult enough to park now, and bringing in this volume of people will make it an absolute nightmare. This clearly has not been thought through intelligently" (*Jamie Ray, letter, December 12, 2011 [I-Ray-07]*)

"And while we're on the subject of the people who live in the environs of the West End, did you canvass the neighborhoods to ask our fellow citizens how they feel about the vastly increased traffic that would surely flow down their streets to and from the proposed parking lots?" (*Dan Richman, letter, no date [I-Richman-04]*)

"If we go by the sanguine prophecies of the renovation's proponents, those parking lots will never accommodate the vast hordes of soccer-players and their fans who would flock to the plastic-coated fields from all over the City and way beyond it. But they'll have to park somewhere. Surely not on the streets. A visit to the Outer Richmond and Sunset neighborhoods, especially at night, will present the Environmental Impact observer with a solid wall of the parked cars of residents. Here the rationale civilian would ask," (*Dan Richman, letter, no date [I-Richman-05]*)

"There is not enough parking for the Athletic Fields, as it is, when the three fields currently available are all in use The parking lot at the Athletic Fields can't accommodate all the vehicles and the overflow parks up both sides of JFK Drive and 47th Avenue in the Park, as well as the parking lots at Ocean Beach. An additional 20 parking spaces, as proposed, will not be sufficient to meet the demand for parking at the Athletic Fields if a fourth field is added and the hours of play extended to 10 pm every night.

The parking lot for the Beach Chalet and Park Chalet is not large enough to meet the demand for parking at peak times. Customers who can't find parking in the restaurant lot park at the Ocean Beach parking lot or on JFK Drive. They will have to compete with the overflow from the vehicles that can't find parking at the Athletic Fields.

There is not enough parking at the Golden Gate Park Golf Course to meet the demand on a summer weekend, and the parking overflows into the Park.

The archery fields are very popular all year round. 47th Ave in the Park is already often parked up and can't accommodate the extra vehicles that are looking for parking during soccer matches." *(David Romano, email, December 9, 2011 [I-Romano-03])*

"Recently, a lot of money was spent to provide ADA access to the walkway along the seawall at Ocean Beach. Ramps were installed adjacent to the staircases. If the parking lot at Ocean Beach is full it will limit access to the wheelchair ramps and limit access to Ocean Beach generally." *(David Romano, email, December 9, 2011 [I-Romano-06])*

"As it is, there is not enough parking for the Beach Chalet and the Park Chalet, and people park at Ocean Beach or in the Park.

There is not enough parking at the Golden Gate Park golf course to meet the demands on a summer weekend and the parking overflows into the Park. The archery fields are very popular all year round and 47th Avenue in the Park, just opposite the entrance to the soccer fields, is often parked up." *(David Romano, public hearing comment [I-Romano2-02])*

Response TR-2

In response to comments I-Arack-08, I-Browd-03, I-Daley-02, I-McGrew-09, I-McGrew-11, I-McGrew-13, I-Ogilvie-06, I-O'Leary-11, I-Ray-07, I-Richman-04, I-Richman-05, I-Romano-03, I-Romano-06, and I-Romano2-02 about the availability of parking spaces for project-generated demand, as described on pages IV.D-3 and IV.D-4 of the EIR, surveys were conducted of the existing parking supply and occupancy within an approximate five-minute walking distance of the project site, during both the weekday and weekend periods of peak usage of the athletic fields, and when the athletic fields are not in use. The surveys indicated that the 174 "readily-available" on-street parking spaces are essentially empty when the athletic fields are not in use. During the above-described weekday and weekend periods of peak usage of the athletic fields, people who cannot park in the on-site parking lot park their vehicles on: John F. Kennedy Drive east of 47th Avenue; as needed, on Bernice Rodgers Way; and on John F. Kennedy Drive east of Bernice Rodgers Way. As described on page IV.D-14 of the EIR, existing parking conditions in the area,

including available nearby on-street parking spaces, would accommodate the anticipated weekday project parking demand, and peak weekend parking demand would be accommodated by available on-street and off-street parking spaces, but would require use of parking spaces beyond those readily available. Nonetheless, as stated on page IV.D-12 of the EIR, the San Francisco Planning Department does not consider parking supply as part of the permanent environment in San Francisco, and therefore, does not consider changes in parking conditions to be environmental impacts as defined by CEQA.

In response to comments I-GIHoward-03 and I-GIHoward-06 regarding the proposed on-site parking supply and “standard parking codes/current zoning requirements,” as stated on page IV.D-13 of the EIR, recreational uses such as the proposed athletic fields are not listed in the San Francisco Planning Code Section 151 (off-street parking requirements). Planning Code Section 153(b) states that, “the requirements for off-street parking and loading for any use not specifically mentioned in Sections 151 and 152 shall be the same as for a use specified which is similar, as determined by the Zoning Administrator.” Therefore, the commenter’s reference to “standard parking codes” and “current zoning requirements” is not applicable to the proposed project.

In response to comment I-GIHoward-04 regarding the use of parking spaces at Ocean Beach to accommodate parking demand generated by the proposed project, the EIR identifies on page IV.D-14, the Ocean Beach Parking Lot as a possible parking location on weekends during periods of peak project parking demand, albeit requiring a longer-than-optimal walking distance from the project site. However, the expanded discussion of this parking location (on pages 2-18 and 2-19 of the Transportation Impact Study [TIS], prepared for the EIR), puts its availability in perspective. That is, the need to cross the four-lane Great Highway likely serves as a “psychological barrier” that reduces the attractiveness of these parking spaces for people using the project site, and the general availability of the closer parking spaces on John F. Kennedy Drive near the project site further reduces the potential use of the Ocean Beach parking lot for the project site.

In response to comments I-Anderson-13, I-Citron-13, I-Darrigrand & Claflin-06, I-Dennenberg-12, I-Edelson-14, I-Khan-13, I-Koivisto-36, and I-Lampert-02 about the effects of special events (e.g., Bay to Breakers, Outside Lands Festivals, Hardly Strictly Bluegrass Festival) in Golden Gate Park on the number of parking spaces available for people traveling to the project site, SFRPD’s reservation system for Beach Chalet Athletic Fields takes special events into consideration. The schedule for the Beach Chalet Athletic Fields use would be coordinated with other events to avoid cumulatively significant impacts related to traffic and parking conditions. For any special event that would require a road closure that would prevent access to the Beach Chalet Athletic Fields parking lot, such as Bay to Breakers, the SFRPD does not now, and would not in the future, issue field use permits for the timeframe of the special event. In addition, SFRPD does not issue permits for tournaments on the same weekend as special events. However, for special events that would not prevent access to the athletic field parking lot, permits are issued for non-tournament uses. SFRPD informs those requesting permits that there may be increased traffic congestion near the athletic fields as a result of the special events.

In response to comment I-NLewis-01 regarding the possibility that the size of the project could require construction of a new parking facility, as described on page IV.D-14 of the EIR, existing parking conditions in the area, including available nearby on-street parking spaces, would accommodate the anticipated weekday project parking demand, and peak weekend parking demand would be accommodated by available on-street and off-street parking spaces, but would require use of parking spaces beyond those readily available. Projected conditions would not warrant construction of a new parking facility. Should a parking facility be proposed by SFRPD to support this facility or other park areas in the future, it would be a separate project undertaken by SFRPD and would be subject to its own environmental review.

J.4 Increased Traffic [TR-3]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Antonini-08	I-AClark-10	I-Kukatla-03	I-Romano-01
A-SFPC-Miguel-03	I-AClark-13	I-Lampert-03	I-Romano-04
O-PAR2-08	I-AClark2-02	I-NLewis-02	I-Romano2-01
I-Anderson-14	I-Dennenberg-13	I-McGrew-10	I-Romano2-03
I-Bar-David-04	I-Edelson-15	I-Ogilvie-13	I-MRussell-02
I-Brant-02	I-Joyce-02	I-Ray-14	I-Schultz-01
I-Browd-03	I-Jungreis2-15	I-Ray2-01	I-Schultz-12
I-Citron-02	I-Khan-14	I-Richman-04	I-Schultz-13
I-Citron-14	I-Koivisto-50	I-Rivera-03	I-Schultz2-03

“And you know, I did hear some talk about the cumulative traffic impact and it was brought up that we'd have three times the playing time that we do now, so it is important that that traffic study properly address what the amount of traffic would be. Of course that's the maximum usage that is addressed with the three --three top times the amount of available field playing time doesn't mean you're always going to have people constantly coming in cars at all hours of the day and night as it's available.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-08]*)

“For a change this is one EIR where traffic and transportation have become relatively minor matters. The speaker that gave the number of users, the amount of traffic was interesting, but these are uses over a planned number of hours a day, not like a concert where everyone comes together at once and so you do not have the same type of traffic and transportation situations.” (*Ron Miguel, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Miguel-03]*)

“The DEIR proposes to increase playing field time by 9,582 hours by year, bringing the annual total to 14,320 hours, a 200% increase over the current annual playing field time. The only source cited in the DEIR regarding the estimated traffic in western end of the park is an assumption provided by the Recreation and Parks Department for a July 2010 EIR for a different athletic field. We urge that the final EIR recommend the Recreation and Parks Department develop a comprehensive Transportation Demand Management Plan addressing these issues for the western end of the park before this or the adjacent water treatment plant projects are implemented (DEIR Pages IV.D-7-10).” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-08]*)

“What is the cumulative impact of events such as soccer tournaments, sand castle contests, surfing contests, major runs, Bay to Breakers, or even just a sunny day -- on traffic in this area?

Expand the traffic study to include the above factors. Study all of the events over the past 2 years that took place in Golden Gate Park and the increased traffic for the soccer matches. Give totals for all events and where the parking takes place. Analyze the impact on Golden Gate Park, on Ocean Beach, and on the surrounding neighborhoods. Include increased attendance at events such as the Outside Lands Festival and the Bluegrass Festival, which have increase in attendance over the years.” (*Raja Anderson, letter, December 12, 2011 [I-Anderson-14]*)

“How will maintenance be handled with more traffic and higher use of the area? ...” (*Ilana Bar-David, letter, December 12, 2011 [I-Bar-David-04]*)

“The EIR is obviously flawed and inadequate in its minimizing of the huge construction's effects on ... traffic ... for the whole western Sunset district.” (*Michael Brant, letter, December 2, 2011 [I-Brant-02]*)

“I attended the Planning Commission meeting on Dec. 1 and heard speaker after speaker present lucid, compelling arguments refuting the DEIR's conclusions. They addressed ... the congestion and parking conflicts with Dutch Windmill visitors and events ...” (*Gary Browd, letter, December 7, 2011 [I-Browd-03]*)

“As a resident of the Sunset district and a frequent visitor to the park, I am aghast at the idea of a sports complex disturbing the tranquility of the western edge. The traffic, ... are all completely out of sync with the serene character of the surroundings. As an avid cyclist I fear for my safety if

so much new traffic is introduced into the confines of the park. ..." (Ben Citron, letter, December 11, 2011 [I-Citron-02])

"What is the cumulative impact of events such as soccer tournaments, sand castle contests, surfing contests, major runs, Bay to Breakers, or even just a sunny day -- on traffic in this area?

Expand the traffic study to include the above factors. Study all of the events over the past 2 years that took place in Golden Gate Park and the increased traffic for the soccer matches. Give totals for all events and where the parking takes place. Analyze the impact on Golden Gate Park, on Ocean Beach, and on the surrounding neighborhoods. Include increased attendance at events such as the Outside Lands Festival and the Bluegrass Festival, which have increase in attendance over the years." (Ben Citron, letter, December 11, 2011 [I-Citron-14])

"It is recommended that comprehensive, in-depth and substantive research and analyses of proposed people density and vehicle traffic on nearby beaches, neighborhoods, businesses and park areas, daily and annually, be included in the DEIR proposed plan." (Ann Clark, letter, December 12, 2011 [I-AClark-10])

"...The DEIR proposal raises serious, significant questions and problems ... traffic use on the Beach Chalet project. Golden Gate Park and surrounding areas." (Ann Clark, letter, December 12, 2011 [I-AClark-13])

"And third a vehicle count because the DEIR states there will be little use of public transit and bikes. I'm telling you this now because I think you will be as surprised as I was at the results.

Factored at 355 days, annual soccer people counts, 1,350,334 soccer people at the Beach Chalet project. There will be 337,569 vehicles going to the soccer complex, 337,569 vehicles leaving the soccer complex. That's important because of the environmental affect going and coming. And 675,168 vehicles that will need parking to accommodate the overlap of play time and league standard warmup time.

Heaviest soccer people and vehicle impact are Saturdays and Sundays which also are the heavy impact for nearby areas: neighborhoods, beaches, the zoo, businesses. Also heaviest impact day for the western area of the Park. Three additional findings 23,780 total soccer hours and no soccer playing time for kids under eight and minimal time for kids under 10 during the school year." (Ann Clark, Ph.D., public hearing comment [I-AClark2-02])

“What is the cumulative impact of events such as soccer tournaments, sand castle contests, surfing contests, major runs, Bay to Breakers, or even just a sunny day -- on traffic in this area? Expand the traffic study to include the above factors, Study all of the events over the past 2 years that took place in Golden Gate Park and the increased traffic for the soccer matches, Give totals for all events and where the parking takes place, Analyze the impact on Golden Gate Park, on Ocean Beach, and on the surrounding neighborhoods, Include increased attendance at events such as the Outside Lands Festival and the Bluegrass Festival, which have increase in attendance over the years.” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-13]*)

“What is the cumulative impact of events such as soccer tournaments, sand castle contests, surfing contests, major runs, Bay to Breakers, or even just a sunny day -- on traffic in this area? Expand the traffic study to include the above factors. Study all of the events over the past 2 years that took place in Golden Gate Park and the increased traffic for the soccer matches. Give totals for all events and where the parking takes place. Analyze the impact on Golden Gate Park, on Ocean Beach, and on the surrounding neighborhoods. Include increased attendance at events such as the Outside Lands Festival and The Bluegrass Festival, which have increase in attendance over the years.” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-15]*)

“Also considering the increased traffic ... for people like us with young kids in the area, these projects are a terrible idea.” (*Sean Joyce, email, November 29, 2011 [I-Joyce-02]*)

“The plan anticipates increases in playing time of almost 50% per year over the current playing field hours: there is insufficient analysis of the increased level of traffic.

The plan anticipates increases in playing time of almost 50% per year over the current playing field hours: there must be a formalized Transportation Demand Management Plan addressing the issue of the increased level of traffic.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-15]*)

“What is the cumulative impact of events such as soccer tournaments, sand castle contests, surfing contests, major runs, Bay to Breakers, or even just a sunny day -- on traffic in this area?

Expand the traffic study to include the above factors. Study all of the events over the past 2 years that took place in Golden Gate Park and the increased traffic for the soccer matches. Give totals for all events and where the parking takes place. Analyze the impact on Golden Gate Park, on Ocean Beach, and on the surrounding neighborhoods. Include increased attendance at events such as the Outside Lands Festival and the Bluegrass Festival, which have increase in attendance over the years.” (*Tehmina Khan, email, December 10, 2011 [I-Khan-14]*)

“Objective III, Policy M seems to have been skipped in the traffic analysis done in the prior section of the DEIR, and needs to be addressed.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-50]*)

“At present this is a low traffic area! please explain how this additional traffic along with traffic to the renovated windmill and the ongoing events at the beach affect the traffic patterns and load.” (*Rakesh Kukatla, email, December 11, 2011 [I-Kukatla-03]*)

“Can you give me some figures on how traffic jams now on good-weather weekends compare with those we should expect if the project goes through?

What steps will be required if the roads cannot handle the increase?

Will they have to be widened?” (*Gabriel Lampert, email, December 4, 2011 [I-Lampert-03]*)

“I definitely support healthy sports and better community sports fields for our kids. But by concentrating so many fields at the upper end of Golden Gate Park, you are inviting traffic jams and over use of a open accessible area for all residents. Living so close to the Park, I can tell you how congested, noisy and over-crowded it gets with the City ‘Out-Landers’ music festival for three days. By placing four soccer fields and keeping the site open until 10 pm everyday invites more congestion and the possibility of a new parking facility that can handle traffic created by this massive sports project.” (*Nancy Lewis, letter, December 9, 2011 [I-NLewis-02]*)

“players and spectators will stay, leading to more traffic searching for a place...” (*Shana McGrew, email, no date [I-McGrew-10]*)

“RPD cannot expect us to believe the results of the traffic study they paid for. Current soccer field use on weekends causes excessive traffic congestion on JFK and MLK, between Bernice Way and the Great Highway.

Weekend demand currently creates traffic hazard to pedestrians, bicyclists, skaters and motorists: Traffic backs up on JFK & MLK as cars stop to wait for a parallel parking space to be vacated. Traffic stops while a car waits for a family to load all of their gear into their car and get themselves all aboard, then pull out, which involves waiting for cars passing the stopped car to create a break in the traffic. JFK & MLK are not wide enough to allow cars to safely pass a

stopped car. This requires entering into the oncoming lane of traffic, along with skaters and bicyclists that are also passing the car that has stopped to obtain a 'soon' to be vacated parking space. Between the time someone walks toward a vehicle to vacate a parking space and the time they actually pull out and into weekend traffic on JFK & MLK, upwards of 5 minutes may elapse. During this time, other cars, bicyclists and skaters are all trying to get around the car waiting for the parking space. Multiply this scenario several times, as several cars stop to gain parking in the distance between Bernice Way and the Great Highway on both JFK & MLK.

I respectfully request that this issue be reevaluated completely with new plans to include a grass surface, no lighting, improved bathroom facilities, improved parking." (*Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-13]*)

"RPD cannot expect us to believe the results of the traffic study they paid for. Current soccer field use on weekends causes excessive traffic congestion on JFK and MLK, between Bernice Way and the Great Highway.

Weekend demand currently creates traffic hazard to pedestrians, bicyclists, skaters and motorists: Traffic backs up on JFK & MLK as cars stop to wait for a parallel parking space to be vacated. Traffic stops while a car waits for a family to load all of their gear into their car and get themselves all aboard, then pull out, which involves waiting for cars passing the stopped car to create a break in the traffic. JFK & MLK are not wide enough to allow cars to safely pass a stopped car. This requires entering into the oncoming lane of traffic, along with skaters and bicyclists that are also passing the car that has stopped to obtain a 'soon' to be vacated parking space. Between the time someone walks toward a vehicle to vacate a parking space and the time they actually pull out and into weekend traffic on JFK & MLK, upwards of 5 minutes may elapse. During this time, other cars, bicyclists and skaters are all trying to get around the car waiting for the parking space. Multiply this scenario several times, as several cars stop to gain parking in the distance between Bernice Way and the Great Highway on both JFK & MLK.

I respectfully request that this issue be reevaluated completely with new plans to include a grass surface, no lighting, improved bathroom facilities, improved parking." (*Jamie Ray, letter, December 12, 2011 [I-Ray-14]*)

"... This will increase already problematic traffic congestion on weekends in the west end of the park ..." (*Jamie Ray, letter, no date [I-Ray2-01]*)

"And while we're on the subject of the people who live in the environs of the West End, did you canvass the neighborhoods to ask our fellow citizens how they feel about the vastly increased traffic that would surely flow down their streets to and from the proposed parking lots?" (*Dan Richman, letter, no date [I-Richman-04]*)

“These projects will result in ... increased traffic.” (*Diane M. Rivera, email, November 28, 2011 [I-Rivera-03]*)

“The DEIR does not properly address the very serious issue of the increase in traffic that will result if the proposed renovation goes ahead. We are already at maximum load in that part of the Park during the soccer season. The site can not support more than the current set-up of 3 playing fields in use at anyone time.

TABLE ES-1 SUMMARY OF IMPACTS AND MITIGATION MEASURES: Impact TR-1 states, ‘The proposed project would not have a substantial significant operational impact on levels of service at local intersections.’ This is obviously not correct just on the face of it. What is the basis for this assessment?

On a summer weekend, when the Park is most visited, there is already a heavy load of traffic from people going to Ocean Beach, the Beach Chalet and Park Chalet, The Queen Wilhelmina Tulip Garden and Windmill, Golden Gate Park Golf Course, the Archery Fields, and just visiting the western end of the Park.” (*David Romano, email, December 9, 2011 [I-Romano-01]*)

“If the RPD proposed renovation goes through there will be a massive traffic jam every weekend in front of the Queen Wilhelmina Tulip Garden and Windmill. What about the weddings that take place there? People pay the City to reserve the Tulip Garden for their ceremony, but there will be no parking for the guests.” (*David Romano, email, December 9, 2011 [I-Romano-04]*)

“One flaw in the proposed renovation that not adequately addressed by the Draft environmental report is that this site cannot support more than the current setup of three playing fields in use at any one time. We are at maximum load.

On a summer weekend when the Park is most visited there is already a heavy load of traffic from people going to Ocean Beach, to the Beach Chalet to the Park Chalet, to the Queen Wilhelmina Tulip Garden and Windmill and to the Golden Gate Park golf course and the Archery Fields all located right there, and people just wanting to visit the western end of the Park.

The increase in traffic that will occur if four fields are in use will result in noise pollution, air pollution and congestion beyond the Park’s ability to absorb it. I live within a quarter mile.” (*David Romano, public hearing comment [I-Romano2-01]*)

“If this proposal goes through, there will be a massive traffic jam every weekend right in front of the Queen Wilhelmina Tulip garden. What about the weddings that take place there? People pay the city to reserve the Tulip Garden for their ceremony, but there will be no parking for the guests.” (*David Romano, public hearing comment [I-Romano2-03]*)

“Of specific concern are 1) traffic congestion in the area ...” (*Mark Russell, email, November 23, 2011 [I-MRussell-02]*)

“... Also some of the charts are nonsensical. I take particular exception to the chart on Intersection Level of Service (LOS) Weekday PM Peak-Hour and Saturday Peak-Hour Existing, Existing Plus Project, and 2035 Cumulative Conditions on page IV-D-G of the DEIR. ...CEQA further states in Section 15111:

EIRs shall be written in plain language and may use appropriate graphics so that decision makers and the public can rapidly understand the documents.

The DEIR is inadequate under both of these CEQA sections and fails to satisfy CEQA requirements regarding sufficient timing for public review and comment.” (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-01]*)

“The DEIR proposes to increase playing field hours by 9,582 per year for a total of 11,320 playing hours per year. This is a 200% increase per year over the current playing field hours. The DEIR’s study regarding the increased level of traffic to areas affected by the increased use in the park is insufficient. The DEIR now only provides an assumption given to them by the SFRPD for athletic fields similar to an athletic field EIR dated July 2010 and they provide a chart that indicates the increased level by cars that will be traveling into the Park that is unrealistic to believe. Although the project will increase the level of play by 200 percent this chart suggests that the traffic increase will be unchanged on many streets, decrease on others and only change by .1 percent on many (DEIR p. IV.D-9.) A proper study must be conducted that shows the increased number of cars that will be traveling into the Park. A comprehensive Transportation Demand Management Plan addressing these issues must be included in the DEIR before the project begins that is in plain language so that the public can quickly understand the document. (CEQA Section 151140).” (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-12]*)

“Not only does the increased traffic into the Park require further in-depth study, it is directly in conflict with the Master Plan for Golden Gate Park which states: Among the goals of the policies are the following: minimize the impact of motor vehicles on the park experience. (Golden Gate Park Master Plan, page 5-2).

13. The Master Plan of Golden Gate Park further states in Policy M -Traffic Generators (page 3-15):

Major traffic generators, within Golden Gate Park or adjacent to the park, preparing development or improvement plans or staging major activities shall be required to prepare a transportation analysis or environmental evaluation detailing possible transportation impacts to Golden Gate Park. Where appropriate, such development plans, improvement programs, or activities should provide a transportation management system that will prevent additional motor vehicle congestion, user conflicts, and all-day parking by non-recreational users within Golden Gate Park and encourage alternative modes of transportation. [Emphasis added.]” (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-13]*)

“The other thing I wanted to talk about is that the DEIR proposes to increase field playing hours to 14,320 playing hours per year. However, their small traffic study concludes that the traffic will be unchanged on many streets, decrease on others, and increased by point 1 percent on other streets.

That's just simply impossible, so I request that a further traffic study be included and that it be more readable: instead of by percentage time that it be by car per street increased into the Park and be more realistic.” (*Cheryl Schultz, public hearing comment [I-Schultz2-03]*)

Response TR-3

In response to comments A-SFPC-Antonini-08 and A-SFPC-Miguel-03, the analysis of potential transportation and circulation impacts in the EIR adhered to standard analysis practices as it focused on the effect of the net-new project-generated trips during the representative peak use and peak traffic hours on weekdays (4:30 – 5:30 p.m. peak hour) and weekend days (2:30 – 3:30 p.m. peak hour). In response to I-AClark2-02, the projected increased playing hours per year would not alter peak-hour traffic calculations or conclusions, or hazards experienced by motorists, pedestrians and bicyclists at any point in time.

In response to comments O-PAR2-08, I-Jungreis2-15, I-Schultz-12, and I-Schultz2-03 about development of a Transportation Demand Management (TDM) Plan to address project-generated traffic, as stated on page IV.D-8 of the EIR, although the proposed project would have a less-than-significant impact on traffic operating conditions, the EIR included an improvement measure that recommends that the SFRPD develop and implement a TDM program for its recreation programs. The TDM program would cover athletic field use, to further reduce vehicle trips to and from the project site by encouraging rideshare, public transit, bicycling, and walking.

In response to comments I-Anderson-14, I-Citron-14, I-Dennenberg-13, I-Edelson-15, I-Khan-14, I-Kukatla-03, and I-Lampert-03 about cumulative traffic impacts (i.e., games/practices at the project site occurring at the same time as special events such as Bay to Breakers, Outside Lands Festival,

Hardly Strictly Bluegrass Festival), SFRPD's reservation system for Beach Chalet Athletic Fields takes special events into consideration, as discussed in response TR-2.

In response to comments I-Brant-02, I-Citron-02, I-AClark-10, I-AClark-13, I-Joyce-02, I-NLewis-02, I-McGrew-10, I-Ogilvie-13, I-Ray-14, I-Ray2-01, I-Richman-04, I-Romano-01, I-Romano-04, I-Romano2-01, I-Romano2-03, I-MRussell-02, I-Browd-03, I-Bar-David-04, and I-Rivera-03 about project-generated increases in traffic volumes on Park roadways and roads in the surrounding area, EIR pages IV.D-1 to IV.D-2 describe the roadways that would be measurably affected by the proposed project, and pages IV.D-8 to IV.D-9 describe traffic operating conditions under existing and existing plus project scenarios. As stated, the proposed project would result in minor changes to the average delay per vehicle at the study intersections, and the proposed project would have a less-than-significant impact to traffic operating conditions. Pages IV.D-14 to IV.D-15 describe traffic operating conditions under the cumulative (2035) scenario, and the project's contribution to those conditions. As stated, the project's contribution to the existing and future operations would not be cumulatively considerable (less than significant). Lastly, project traffic would have less impact on intersections farther from the project site as vehicles bound for different destinations disperse.

In response to comment I-Schultz-01 regarding difficulty with Table IV.D-1 (summary of intersection level of service [LOS] conditions), in the absence of specific aspects of the table that are not understood by the commenter, no specific response can be provided. However, the TIS, prepared for the EIR, provides a full discussion of the concept of LOS and the information presented in the LOS summary table(s).

In response to comments I-Koivisto-5 and I-Shultz-01, project-generated net-new traffic would not conflict with the Golden Gate Park Master Plan. The Master Plan's goal to "minimize the impact of motor vehicles on the park experience" is not intended to mean "prohibit motor vehicles in the Park," and as stated in Chapter 5 of the Master Plan. The Plan strives to achieve balance among the following goals: (1) to reduce the impacts of motor vehicles, particularly those that are using the park as an east-west through route or for parking only; (2) to improve access by people coming to the park for recreational purposes, and to improve access by modes such as pedestrians, bicycles, and transit; and (3) to improve accessibility to park features for all, including seniors, persons with disabilities, and families with young children. As described on pages IV.D-8 to IV.D-9, and IV.D-14 to IV.D-15, the proposed project would have a less-than-significant impact to traffic operating conditions, and the project's contribution to the traffic conditions would not be cumulatively considerable. The less-than-significant effect would not conflict with the goal to minimize traffic impacts. In addition, as described on page IV.D-11 of the EIR, the proposed project would not substantially affect current pedestrian flow conditions, would not result in potentially hazardous pedestrian conditions beyond what exists in the area today, and would not adversely affect existing bicycle conditions or facilities in the area. Those less-than-significant effects would not impede transportation modes other than motor vehicles. The transportation impact study prepared for the EIR, and the above-described inclusion of an improvement measure for a TDM Plan to address project-generated traffic, is in compliance with Objective III/Policy M of the Golden Gate Park Master Plan.

J.5 Public Transportation [TR-4]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-SCSFBC-40	I-Citron-12	I-Khan-12	I-Lampert-05
O-SPEAK3-10	I-Dennenberg-11	I-Koivisto-35	I-O'Leary-12
I-Anderson-12	I-Edelson-13		

"The DEIR also does not account for the additional spectators in the total additional driving. There are over 1,000 seats for spectators, which translates to over 300 extra cars, arriving and departing until 10pm. If the Planning Department believes these spectators will use Muni, it does not provide for resources for extra service." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-40]*)

"Transportation Impacts. Being on the extreme west side of the City the proposed fields will generate mainly automobile traffic since the site is difficult to reach via public transportation.

- Automobile use will be necessary for access because the site is not well served by public transportation
- The lack of adequate public transit and its distance from the facilities will create a significant traffic impact.
- There is no map showing how people taking public transit would arrive at the proposed facilities." (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-10]*)

"What happens to people who take a bus to a game -- where does the public get off the bus? How far do they walk? What paths will they follow?" (*Raja Anderson, letter, December 12, 2011 [I-Anderson-12]*)

"Rec and Park has talked of closing the Park at night -- how will this impact traffic in this area? How will having large crowds in this area impact Rec and Park trying to close the Park at night? What happens to people who take a bus to a game -- where does the public get off the bus? How far do they walk? What paths will they follow?" (*Ben Citron, letter, December 11, 2011 [I-Citron-12]*)

“What happens to people who take a bus to a game -- where does the public get off the bus? How far do they walk? What paths will they follow?” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-11]*)

“What happens to people who take a bus to a game -- where does the public get off the bus? How far do they walk? What paths will they follow?” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-13]*)

“What happens to people who take a bus to a game --where does the public get off the bus? How far do they walk? What paths will they follow?” (*Tehmina Khan, email, December 10, 2011 [I-Khan-12]*)

“In the Transit section, p. 2, is another statement that shows little to no familiarity with the area in question. Here the DEIR says that there's plenty of MUNI capacity to the area, and bases this on capacity utilization numbers. This ignores the experiences of people who live in this area and use MUNI. The N-Judah, for instance, may be almost empty by the time it arrives at 43rd Ave, but it is packed from downtown to 19th Ave, and the frequency leaves much to be desired. People coming from the other side of the city, if they have a choice, will not take MUNI to this area as the rides are slow and long, and the trains and buses infrequent. And what percentage of field users come from SF? This information is vital in estimating increased car traffic for this project. If this project is not going to increase car traffic to the area due to MUNI ridership, a much more realistic view of the MUNI lines mentioned must be done. As it stands, the information on MUNI is both quantitative and useless, and the information on out-of-area SF park soccer field users absent.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-35]*)

“About the 18 bus, will it have to be permanently re-routed as it is for one-time events?

If so, what will be done for those riders who will be impacted?” (*Gabriel Lampert, email, December 4, 2011 [I-Lampert-05]*)

“Public transit is not sufficiently close as to make transit of multiple groups of children and equipment feasible. Private autos will clog side streets and adjacent neighborhoods.” (*Andrea & Rick O'Leary, email, December 11, 2011 [I-O'Leary-12]*)

Response TR-4

In response to comment O-SCSFBC-40 regarding the absence of proposed additional Muni service for project spectators who choose not to drive to the site, see response TR-1. It states the reason why the EIR did not include an analysis of potential impacts associated with spectators filling the maximum capacity of 1,046 seats, as referred to in this comment. As stated there, that level of spectators would occur only during major tournaments, an infrequent occurrence. It would not be appropriate or consistent to base the traffic impact analysis on an event that would occur only six times per year.

In response to comments O-SPEAK3-10, I-Anderson-12, I-Citron-12, I-Dennenberg-11, I-Edelson-13, I-Khan-12 and I-O'Leary-12 regarding a description of how people taking public transit would arrive at the project site, transit service in the project area is described on page IV.D-2 of the EIR. There is an expanded description, with a map showing transit lines and tables with nearest stop location, in the transportation impact study prepared for the EIR. Specifically, there are four Muni lines (5 Fulton, 18 46th Avenue, and 31 Balboa bus lines, and the N Judah Light Rail) with stops on Fulton, Cabrillo and Judah Streets, and the Great Highway. Generally these stops are within a six- to ten-minute walk of the project site. The N Judah is the exception, which is an approximate 13-minute walk. There are pedestrian pathways serving the project site that connect with the above-cited roadways.

In response to comment I-Koivisto-35 regarding the EIR's description of public transit in the area, the description of the capacity utilization (the number of passengers per transit vehicle as a percentage of seated and standing capacity) is presented for informational purposes only. The relevant point to the analysis, and its assumption that all person trips generated by the project would be automobile trips, is the fact that the project site is not well-served by transit (as described on page IV.D-2 of the EIR). The four Muni lines in the project area operate within 1/2 mile of the project site, with stops requiring an approximate 6- to 13-minute walk to the project site (i.e., beyond the 1/4-mile, approximate 5-minute, walking distance generally considered as reasonable by people walking to their destination).

In response to comment I-Lampert-05 regarding the possibility of permanent re-routing of the Muni 18 line, the proposed project would not create circumstances requiring re-routing of any bus lines.

In response to comments O-SPEAK3-10 and I-O'Leary-12 regarding the public transit service in the project area and its effect on the impacts of auto traffic on area roadways, the EIR's estimated trip generation assumed that all person trips generated by the project would be automobile trips. Nonetheless, as described in the EIR, the proposed project would have a less-than-significant impact to traffic operating conditions.

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K. Recreation

K.1 Overview of Comments on Recreation

The comments and corresponding responses in this section cover topics in Chapter IV, Section IV.E, of the EIR. These include topics related to:

- RE-1, Recreation

To the extent that comments responded to in this section also discuss other topics, such as consistency with plans and policies, land use, visual resources or biological resources, these comments are also addressed in those respective sections of the Responses to Comments document.

K.2 Recreation [RE-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-SFPARKS-37	I-Citron-09	I-Dennenberg-07	I-Koivisto-43
I-Anderson-07	I-Colao-04	I-Edelson-09	I-Koivisto-44
I-Ciccione-02	I-Colvin-01	I-Goggin-02	I-Schoggen-02
I-Citron-03	I-Denefeld2-03	I-Khan-08	I-Warriner-02

“Impact RE-1: The project would not increase the use of existing neighborhood parks and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated and would not result in physical degradation of recreational resources. (Less than Significant)

Research into the health risks associated with playing in tire waste and its combination of chemicals and heavy metals is in its infancy. The general public is just beginning to learn of them.

It is our position that it is reasonable to believe that as the health issues associated with synthetic fields becomes more widely known, synthetic fields will become less desirable than grass fields, in which case the project would increase the use of existing neighborhood parks and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated and would result in physical degradation of recreational resources.

The synthetic fields would prohibit many activities that grass fields can accommodate. The DEIR states, ‘Separate signage would also clarify that the following uses would not be allowed on synthetic turf fields: smoking, barbeques, alcohol, food, bikes, dogs, and metal cleats.’ (DEIR 11-24)

It is our position that Impact RE-1: should be changed to (Potentially Significant Impact).”
(SFPARKS, letter, December 12, 2011 [O-SFPARKS-37])

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design and experience of the park for visitors, if these two projects are built?” (Raja Anderson, letter, December 12, 2011 [I-Anderson-07])

“This park belongs to the people of the city and was meant to be enjoyed by all...” (Donald Ciccone, letter, November 21, 2011 [I-Ciccone-02])

“I would also add that I am the father of two young sons. There is no question that my family would enjoy some benefit from having a new soccer facility nearby. But to our minds the trade-off simply isn’t worth it. And it just doesn’t seem fair that a single interest/activity (soccer) gets elevated in importance to such a high degree over all others (biking, birding, jogging, stargazing, etc.).” (Ben Citron, letter, December 11, 2011 [I-Citron-03])

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design and experience of the park for visitors, if these two projects are built?” (Ben Citron, letter, December 11, 2011 [I-Citron-09])

“We bring children to the park to connect with nature, this project will be destructive to nature.” (Flora Colao, letter, November 23, 2011 [I-Colao-04])

“Please do not go ahead with the plans to put fake turf and bright flood lights at the western end of the park by Ocean Beach. I live out here and want to see the habitat respected for ... people enjoying the park and the beach.” (Lucy Colvin, letter, December 12, 2011 [I-Colvin-01])

“As a local citizen who regular enjoys the sighting of wildlife, especially birds, my opportunities for recreation in the western end of the Park would be unfairly and significantly impaired.” (Charles Denefeld, Letter, December 10, 2011 [I-Denefeld2-03])

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design and experience of the park for visitors, if these two projects are built?” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-07]*)

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design and experience of the park for visitors, if these two projects are built?” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-09]*)

“In addition, the dark-sky resource currently is, and has for many years been enjoyed by both serious astronomy amateurs as well as the public at large. The DEIR fails to adequately point out and describe this resource and its aesthetic, cultural, and educational value to the people of the Bay Area.” (*David E. Goggin, Letter, December 10, 2011 [I-Goggin-02]*)

“The DEIR ignores the cumulative impact of the fields and the Westside Water Treatment Plant. The two projects together form a barrier that is over 50% of the width of the Park - why does the DEIR ignore this? What is the impact on the overall design and experience of the park for visitors, if these two projects are built?” (*Tehmina Khan, email, December 10, 2011 [I-Khan-08]*)

“The information on the Murphy Windmill (p. 3) needs to be updated.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-43]*)

“ On p. 4, a single sentence is used to cover ‘passive outdoor activities, such as nature watching’ which is ‘popular in this portion of the park.’ The list of resources above this sentence is specific about particular sites and their locations relative to the proposed project; the same should be attempted for the areas for nature watching. Specifically, where does this happen in relation to and at what distance from the site?” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-44]*)

“...There is so little green space in urban areas that can be used by animals and people,” (*Leida Schoggen, letter, November 29, 2011 [I-Schoggen-02]*)

“The recreational use of the western end of the park by urban dwellers: seeking an hour or two of natural scenery, a chance to watch a red shouldered hawk hunt for gophers in the fenced-in grass soccer fields, an encounter with a raven or a red fox; or just a stroll along the old railroad trail that runs along the soccer fields is in my opinion tremendous and greatly under estimated apparently by the Dept of Rec and Parks and most certainly by the Draft EIR.

The Draft EIR virtually dismisses the potential impact on the wild and natural ambiance of the area. ... a study that would evaluate the recreational value of all of the uncounted individuals who enjoy the area; children who do not play on athletic teams, seniors, bird watchers, amateur photographers, just about anyone seeking a few moments of calm and respite, Considering the real impact of these drastic renovations on the park’s wildlife should be a key concern of the study.” (Joyce Warriner, email, December 8, 2011 [I-Warriner-02])

Response RE-1

Comment I-Koivisto-44 requests a description of locations for nature watching and the distance of those locations in relation to the proposed project. EIR page IV.E-4 notes the location of specific recreational facilities in fixed locations, such as playgrounds, picnic areas, courts, etc., as well as the location of those facilities in relation to the project area. However, active and passive outdoor activities, including nature watching, may occur throughout the entire park and are described in general terms.

Comment I-Goggin-02 indicates that use of the project vicinity for astronomy was not described in the EIR. As described on EIR page IV.E-15, the immediate project site would likely appear brighter as compared with existing conditions. However, the proposed lighting is unlikely to spill over the site’s boundaries and adversely affect the surrounding neighborhoods. Field lighting would be turned off at 10:00 p.m., so that night sky viewing from areas open to the public after this hour would not be affected. However, in response to this comment, EIR page IV.E-1, paragraph 3 has been revised as follows:

The majority of the public space and recreational resources in the project area that could be affected by the proposed project are managed by the San Francisco Recreation and Parks Department (SFRPD). The SFRPD manages over 230 parks, playgrounds, and open spaces throughout San Francisco that are open to the public. The area also contains several Golden Gate National Recreation Area (GGNRA) sites, which are designated by the U.S. Department of the Interior and administered by the National Park Service (NPS). Several of the paved recreational trails in the project vicinity are maintained and managed by the San Francisco Department of Public Works (SFDPW). Areas that are open to the public at night are informally used for astronomy observations, with Land’s End to the north particularly recommended for astronomy use by field enthusiasts (such as the San Francisco Amateur Astronomers club).

This revision does not change the analysis or conclusions presented in the EIR. It is also noted that the Beach Chalet Athletic Fields are not open to the public at night under existing conditions.

Comment I-Koivisto-43 requests that the description of the Murphy Windmill be updated. In response to this comment, EIR page IV.E-3, the fifth paragraph has been revised:

Murphy Windmill and Millwright's Cottage

The Murphy Windmill is located on Lincoln Drive, at the southwest corner of Golden Gate Park. The windmill was the largest in the world when it was built in 1908 and was able to pump 40,000 gallons of water per day to irrigate the park.⁸ Currently, the windmill is closed to the public; however, ~~there are plans to renovate~~ the windmill, is undergoing restoration activities, including which would include restoring its sails, replacing rotting wood, and earthquake proofing the structure before opening the area to Golden Gate Park visitors. Similar to the Dutch Windmill, the interior of the Murphy Windmill would not be open to public access.

This revision does not change the analysis or conclusions presented in the EIR.

Commenters I-Colao-04, I-Colvin-01, I-Denefeld2-03, and I-Warriner-02 indicated that the project would affect uses such as nature study, trail use, passive recreation, and beach use, or that the project favors one type of recreation over others. CEQA focuses on *physical* environmental impacts. As stated in CEQA Guidelines Section 15002(g), a significant effect on the environment is defined as “a substantial adverse change in the physical conditions which exist in the area affected by the proposed project.” Consistent with the standard practice of the San Francisco Planning Department, the recreational resources significance criteria used in the EIR impact analysis and listed in Section IV.E, Significance Criteria, page IV.E-13, focus on whether the project would: 1) increase the use of recreational facilities such that substantial physical deterioration would occur or be accelerated, or 2) cause physical degradation of existing recreational resources. As described in Section IV.E, Approach to Analysis, pages IV.E-13-14, the impact analysis determines the potential for project activities to cause physical effects on recreational resources. These resources include physical deterioration of facilities, acceleration of physical deterioration of facilities, or physical degradation of existing resources.

Numerous comments express concern regarding the social effects or visitor experience of recreational users who may be affected by project activities. In addition, some commenters are concerned that their recreational experience may be different under the proposed project as compared to existing conditions. While such social effects are not considered physical effects on the environment under CEQA, the EIR (pages IV.E-14-15) acknowledges that temporary disruption of the existing visitor uses would be a potential consequence of project construction activities. The CEQA impact analysis evaluates whether increases in project-related recreational uses could result in physical impacts on recreational resources. These include resources in the project vicinity that may experience increased use due to overall increases in visitors to the area

⁸ Western Neighborhoods Project website, available online at: http://www.outsidelands.org/murphy_windmill.php, accessed on April 5, 2011.

and/or due to displacement of recreation users who normally use recreational facilities in the project area. As indicated in Impact RE-1, given the wide availability of recreational facilities in the area and the temporal scope of construction activities, increased use of regional recreational facilities would not result in substantial physical deterioration of recreational resources or result in physical degradation of existing recreational resources.

There are many recreational resources in the project vicinity. The Beach Chalet Athletic Fields are primarily used for field sports, and this condition would continue with implementation of the proposed project. In addition, similar field renovations have resulted in increased requests for permits and athletic play. SFRPD anticipates a similar increase in interest and use at the project site. For these reasons, it is unlikely that the project area would become substantially less desirable under the proposed project than at present. Therefore, there would not be an increase in the use of other recreational resources resulting in their physical degradation.

In response to comments I-Anderson-07, I-Citron-09, I-Dennenberg-07, I-Edelson-09, and I-Khan-08, regarding cumulative recreational resources impacts, EIR page IV.E-16 indicates that cumulative projects would primarily result in temporary construction-related impacts on recreational resources. These impacts include potential temporary bicycle route detours, but are not expected to result in the physical degradation of any recreational facilities. The San Francisco Westside Recycled Water Project¹ and the San Francisco Groundwater Supply are located in areas not generally used by the public for recreation. Similarly, because the proposed project would continue the existing use of the Fields, the project would not contribute to substantial cumulative impacts on recreational facilities. Therefore, the other projects noted here and in the EIR, when combined with past projects and the proposed project, would not have a cumulatively considerable contribution to impacts on recreational resources.

¹ As stated in Section X.C, Environmental Review Process, the San Francisco Public Utilities Commission is pursuing a different location for the new recycled water treatment plant location outside of Golden Gate Park. However, the possibility of the plant being constructed near the project site is considered as a worst-case scenario in this document within the cumulative context.

L. Biological Resources

L.1 Overview of Comments on Biological Resources

The comments and corresponding responses in this section cover topics in Chapter IV, Section IV.F, of the EIR. These include topics related to:

- BIO-1, General Biological Resources Issues
- BIO-2, Impacts to Vegetation
- BIO-3, Impacts to Wildlife and Wildlife Habitat
- BIO-4, Impacts to Wildlife Due to Nighttime Lighting

Portions of some of the comments addressed in this section also relate to other resource topics and therefore, those portions of the comments are responded to in those sections, including discussion of aesthetic resources impacts.

L.2 General Biological Resources Issues and Environmental Setting [BIO-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-NPS-04	O-GGAS3-03	I-Dowell-02	I-Murphy-02
A-NPS-11	O-SCSFBC-07	I-Edelson2-05	I-Reid-02
A-NPS-12	O-SCSFBC-33	I-Elias-01	I-Sargent-04
O-GGAS2-04	I-Bartley-02	I-Faulkner-02	I-Schultz-15
O-GGAS2-27	I-Bartley-06	I-Kohn2-03	I-Wuerfel-02
O-GGAS2-28	I-Bartley-13	I-Kohn2-10	I-Wuerfel-03
O-GGAS2-30	I-Colvin-01	I-Murphy-01	

“Page IV.F-4: The beach and nearshore ocean ecosystems should be included in the affected habitat types.” (*Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-04]*)

“...Although Ocean Beach is one of the most important wintering and migratory shorebird areas along the outer coast of Central California, the DEIR focuses primarily on terrestrial habitat immediately adjacent to the athletic fields. As part of the affected environment, we feel the EIR should provide a more in-depth description of Ocean Beach’s importance as shorebird habitat.” (*Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-11]*)

“Please address how the Proposed Project is consistent with the Western Snowy Plover Recovery Plan (2007), which includes the following discussion on the effect of lighting on the plover:

- a) ‘When urban areas interface with natural habitat areas, the value of breeding and wintering habitat to native species may be diminished by increased levels of illumination at night (e.g., building and parking lot lights) (Kelly and Rotenberry 1996/1997).’
- b) ‘When beach development cannot be avoided, the following protections should be implemented: (4) lights for parking areas and other facilities should not shine on western snowy plover habitat, (5) sources of noise that would disturb western snowy plovers should be avoided, and (6) the establishment of predator perches and nesting sites should be avoided when designing facilities.’ “ (Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-12])

“...There is very little habitat, especially wide-open, grassy habitat, left in San Francisco. The significance of the impacts depend on the specific setting of the project, including the severity of existing environmental harm. (Communities for a Better Environment v. California Resources Agency [2002] 103 Ca1.App.4th 98 120 [‘[T]he relevant question’ ... is not how the effect of the project at issue compares to the preexisting cumulative effect, but whether ‘any additional amount’ of effect should be considered significant in the context of the existing cumulative effect. [footnote omitted] In the end, the greater the existing environmental problems are, the lower the threshold should be for treating a project’s contribution to cumulative impacts as significant. [footnote omitted]’) The DEIR makes no consideration of the existing, compromised nature of San Francisco’s environment and downplays (or is uninformative) about the impacts that removing up to 9 acres of meadow-like habitat from San Francisco’s western edge.” (Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-04])

“In any event, the DEIR identifies only seven bird species that use that site. (DEIR, at IV.F-5) Just one Golden Gate Audubon volunteer has observed more than 64 species at the site, including:

Northern Flicker	Townsend’s Warbler	
Canada Goose	Downy Woodpecker*	Yellow-rumped Warbler
Turkey Vulture	Hairy Woodpecker*	Palm Warbler x
Osprey	Hutton’s Vireo*	Northern Waterthrush x
Cooper’s Hawk	Warbling Vireo	California Towhee *
Sharp-shinned Hawk	Common Raven*	Fox Sparrow
Red-tailed Hawk *	American Crow*	White-crowned Sparrow *
Red-shouldered Hawk *	Western Scrub Jay*	Golden-crowned Sparrow
Peregrine Falcon	Steller’s Jay*	Clay-colored Sparrow x
Merlin	Barn Swallow *	Song Sparrow *
Mew Gull	Tree Swallow	Lincoln’s Sparrow
Ring-billed Gull	Violet-green Swallow	Dark-eyed Junco *
California Gull	Pygmy Nuthatch *	Black-headed Grosbeak

Western Gull	Northern Mockingbird *	Western Tanager
Glaucous-winged Gull	Gray Catbird x	House Finch *
Mourning Dove*	Ruby-crowned Kinglet	Purple Finch
Rock Pigeon	Bushtit*	American Goldfinch *
Anna's Hummingbird*	Chestnut-backed Chickadee	Lesser Goldfinch
Allen's Hummingbird*	*	Killdeer
Say's Phoebe	Cedar Waxwing	European Starling
Black Phoebe*	Hermit Thrush	Brewer's Blackbird *
Pac-slope Flycatcher	American Robin *	Red-winged Blackbird
Olive-sided Flycatcher	Orange-crowned Warbler	Brown-headed Cowbird

(* = likely breeding in or near the athletic fields; x = rare or uncommon migrant) We also refer the Planning Department to comments provided by Mr. Dan Murphy, which provide more specific information on bird use in the area. Other observers have recorded Blackbellied Plover and other shorebirds that use the athletic fields and the Beach Chalet during heavy storm events that make Ocean Beach uninhabitable. The need for these wet, grassy upland refuges may be even more pressing as climate change increases storm intensity and reduces available shoreline habitat. Unfortunately, the DEIR does not address this issue at all or even acknowledge the use of the fields as upland refuges for shorebirds and gulls.

Moreover, raptors and passerines that occur in other parts of Golden Gate Park are also extremely likely to use the Beach Chalet area. According data available on eBird, more than 120 species of passerines have been recorded in the database as using Golden Gate Park. That number does not include raptors, gulls, or shorebirds, which we also know sometimes use the Beach Chalet soccer fields as a foraging area. The DEIR would be improved if it assessed impacts on wildlife species that do occur in Golden Gate Park as a whole and, therefore, are likely to use the Beach Chalet. The DEIR should also include a comprehensive species list for all affected wildlife.

We also note that while White-crowned Sparrows remain 'common', Audubon Christmas Bird Count data indicate that they are declining in San Francisco. Moreover, the Beach Chalet area provides potential habitat for California Quail, which have been largely extirpated from San Francisco, with a small covey remaining in the Botanical Garden of the park. Further destruction of the habitat contributes to the pressures that have reduced or are reducing local bird populations for species such as the quail and White-crowned Sparrow. (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-27]*)

"By focusing only on 'special status' species, the DEIR is able to downplay impacts arising from the project to wildlife species. It provides no thorough discussion of impacts to more common species, even those that may be in decline locally, such as the White-crowned Sparrow. It also creates the misconception that since no special status species may suffer significant impacts from the project, that the project is environmentally benign or at least without significant impacts on wildlife.

The role of a discussion of impacts on common species in the DEIR is debatable. However, San Francisco holds itself out as the 'greenest city in the United States.' Its General Plan and the Golden Gate Park Master Plan prioritize the maintenance of biodiversity. Its Department of the Environment recently adopted a resolution to state that the maintenance of biodiversity was a key priority as well. Given San Francisco's purported policy to maintain biodiversity, the DEIR should do a better job of discussing all impacts, even those to species that are not provided with a special status designation." (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-28]*)

" ... the DEIR acknowledges that the migratory patterns through San Francisco is unknown. Local birders and biologists have identified the western end of Golden Gate Park as an important migratory corridor, especially for passerines. Before merely assuming no impact, the DEIR would be improved by actually studying the problem and, where information is absent, err on the side of protecting the wildlife resource rather than assuming it will endure the impact.

... the DEIR discusses several raptor species, but it virtually ignores owls. Great-homed Owl and Barn Owls have been observed in the area after sundown. Presumably, ESA's wildlife surveys were not conducted at night. Lighting can have very significant impacts on owls and their prey. Additional study of nocturnal wildlife must be conducted before a credible conclusion of no impacts can be rendered in the EIR." (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-30]*)

"There's many other examples of the inadequacies of the study, for example, ... the biological impacts that will occur once this turf has to be ripped up in eight to ten years. They provide no basis for their conclusion that it will last 10 to 15 years." (*Michael Lynes, Golden Gate Audubon Society, public hearing comment [O-GGAS3-03]*)

"Coyotes, which are known to frequent the park, as has been reported in newspapers, are not mentioned anywhere in the DEIR." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-07]*)

"Western snowy plover, a threatened species, are known to nest in the area across the street (the Great Highway) from the 'project site. ..." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-33]*)

“Having read the Draft Environmental Impact Report commissioned by the San Francisco Recreation and Parks Department I find it grossly underestimates and is negligent in addressing the impacts on biological resources within the project area in many ways:

... I specifically challenge the species inventory of the two wildlife survey’s described in Section IV.F-5 and IV.F-6 of the survey. As a participant of many nest surveys both professional and as a volunteer, while I recognize that birds nests are by design very difficult to detect, a finding of no active nests in the project impact area is almost impossible to believe. The paltry description of avian species identified strongly suggests that the wildlife survey is woefully inadequate for this area. Wildlife moves around, lies in hiding while resting and generally avoids activity when humans are and an inattentive biologist will miss much. Also a single nest survey in May will necessarily miss many species who nest before and after that month.” (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-02]*)

“In my professional opinion as an avian researcher and natural history educator the Draft EIR is negligent in addressing the extent of the significant Biological Resource environmental impacts.” (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-06]*)

“Sure, this area is not the native, now rare, California coastal dune habitat that was removed when settlers and then the park removed it to make way for what is there now. It is not the pristine wilderness it was and it is impractical to consider returning it to such. But it is a testament to the resourcefulness and resiliency of our remaining wildlife that many native species have adapted to what is available to them now. Unfortunately that will never be the case with artificial turf. Plastic fields are a barren, toxic wasteland as far as animals are concerned and these animals will go away, not to another place as is naively being suggested, but go away as in extirpated from this life forever or until the area is returned to a vegetative condition. If we subscribe to the myopic vision that only threatened or endangered species need be considered and protected, then uncommon and common species will become threatened and endangered. We only need look at the list of endangered species now to see that. Tell me again, what color green in San Francisco trying to be?” (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-13]*)

“Please do not go ahead with the plans to put fake turf and bright flood lights at the western end of the park by Ocean Beach. I live out here and want to see the habitat respected for the wildlife ...” (*Lucy Colvin, letter, December 12, 2011 [I-Colvin-01]*)

“But also the reason why I would urge you to reject the DEIR is the inadequate address of the biological ... concerns ...” (*Jessica Dowell, public hearing comment [I-Dowell-02]*)

“And I’m sure I have other things that I want to mention. Just the loss of biodiversity is really a factor and the birds and things. This is not well us.” (*Ellen Edelson, public hearing comment [I-Edelson2-05]*)

“The DEIR incorrectly asserts that the Western Snowy Plover is absent from the project area, and therefore the impact on them would be low. (p.F-12) The Snowy Plover Protection Area begins at Stairwell 21 on Ocean Beach just 1000 feet to the west of this proposed project, and extends south to Sloat Boulevard. According to the DEIR table, Snowy Plovers are listed as federally protected, and as a California species of special concern. They rest and forage on Ocean Beach, the only suitable habitat in the area, to conserve the energy needed for breeding and migration. The Plover Protection Area is designed to minimize disturbances by dogs and beachgoers.

... Ocean Beach and Crissy Field are the only sites in San Francisco that can support Snowy Plover populations. Ocean Beach is far more significant with yearly monitoring numbers between 27-30 birds, while Crissy Field has only 2 or so sightings per year.” (*Evan Elias, Letter, December 11, 2011 [I-Elias-01]*)

“Also one of the earlier speakers talked about the birds and all the rest. We are part of the Pacific flyway. Lots of birds come through Golden Gate Park. They also lay down in our various other parks. We want to maintain an environment where they can survive the Pacific flyway. Thank you very much.” (*Terrence Faulkner, public hearing comment [I-Faulkner-02]*)

“He has concluded that all adverse impacts on wildlife are de minimus.” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-03]*)

“Although the drafter of the EIR reports no nesting raptors in the western end of the Golden Gate Park, there was testimony on December 1st from a park volunteer, that there are now three pairs of nesting raptors in the western end of the park. That breeding pattern should not be discouraged, either by lights or increased noise from the proposed project.” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-10]*)

“To begin with, there are some striking problems with information provided about birds and their use of the project site. Essentially this element of the EIR is wrong.

Having studied birds in western Golden Gate Park since the early 1970's, I can state unequivocally that the treatment of birds at the project site is understated. Studies undertaken during the winter and nesting seasons of 1981 and 1982 at North Lake and the woodlot immediately to the west indicate similar plots to the project site are in fact very rich nesting habitats for birds. Combined with the San Francisco Breeding Bird Atlas, these studies completely refute conclusions based on an incomplete breeding bird survey that apparently was conducted toward the end of the peak of the season.

...In the mixed coniferous forest study plot, which was most similar to the woodlands surrounding the proposed project site, 14 nesting species were found. 64 territorial males or females were observed.

In the lake, marsh and mixed forest study plot which was somewhat richer than the proposed project site 20 nesting species were found. 103 territorial males or females were observed.

...In the mixed coniferous forest study plot, which was most similar to the woodlands surrounding the proposed project site, 14 nesting species were found. 47 territorial males or females were observed.

In the lake, marsh and mixed forest study plot which was somewhat richer than the proposed project site 12 nesting species were found. 60 territorial males or females were observed

...In the mature mixed coniferous forest which most resembles the project site there was a total of 34 species with an average of 72 birds per visit.

In the lake, marsh and mixed forest plot there was a total of 50 species with an average total of 313 birds.

...In the mature mixed coniferous forest which most resembles the project site there was a total of 33 species with an average of 126 birds per visit.

In the lake, marsh and mixed forest plot there was a total of 58 species with an average total of 290 birds." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-01]*)

"Not only is the project site a part of the greater habitat of Golden Gate Park and similar in many regards to the study plots mentioned above, the project site also shares a significant abundance of birds during fall migration. There are no studies documenting migration for western Golden Gate Park, but it is certain that it is a significant site for migratory land birds between mid August and mid November. That is a fact that cannot be dismissed in the way the authors of the EIR dismissed avian use of the woodlands near the soccer field." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-02]*)

“San Francisco, being a city with very little environmentally needed green areas, it is shocking that there is a proposal to eliminate 7 acres of it’s beautiful green and beneficial Golden Gate Park.” (*Patricia Reid, email, November 28, 2011 [I-Reid-02]*)

“I think John McLaren and all the other founders of the Park intended it to be a refuge not just for us but for all wildlife. And I think the fact that we now have herons and coyotes living in the Park is proof that it is commodious for other forms of life than ours.” (*John Sargent, public hearing comment [I-Sargent-04]*)

“It is also inconsistent with Objective 8 of the Master Plan of San Francisco.

Objective 8 of the Master Plan Flora and Fauna. Ensure the Protection of Plant and Animal Life states:

A totally manufactured environment without plants and animals would be sterile. That bit of nature, which still remains in San Francisco, is a precious asset. The ecological balance of wildlife and plant communities should be protected against further encroachments.

POLICY 8.1

Cooperate with and otherwise support the California Department of Fish and Game and its animal protection programs. The California Department of Fish and Game has overall authority to protect animals in San Francisco. The Municipal Code reinforces this control in protecting animals in public areas. The City should foster greater public awareness of these laws.

POLICY 8.2

Protect the habitats of known plant and animal species that require a relatively natural environment.

Golden Gate Park, a product of years of planning and design, provides to a certain extent the natural environment needed by wildlife and plant communities. The natural areas of Golden Gate Park should remain as they are, and any move to convert them into areas of more active recreation should be discouraged.

Other parks and undeveloped areas in San Francisco remain relatively undisturbed and provide a variety of environments for flora and fauna: beaches, sand dunes, wooded areas, open fields, grassy hills, and lakes. All these areas should be protected. The Presidio, not subject to local jurisdiction, should, nevertheless, be urged to protect animal and plant habitats within its boundaries.

POLICY 8.3

Protect rare and endangered species

A number of native plant and animal species are designated as rare or endangered. Interested individuals, and groups, together with knowledgeable public agencies, such as the Recreation and Park Department and the California Academy of Sciences.” (Cheryl Schultz, letter, December 11, 2011 [I-Schultz-15])

“The DEIR did not do long term modeling of the project effects on flora and fauna in the soccer area. The comments only included ‘construction related impacts’ of the project, not the environmental consequences over time of the existence of the proposed project or any of the alternatives.” (Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-02])

“The cumulative environmental impacts of both the soccer and the water treatment projects together on the western end of the park were inadequately studied with comments about the potential for harm noted only during construction. Long-term impacts are noted for hydrology and water quality, without any mention of the long-term biological effects. These two projects together create a potential devastation of this wild area, both occurring in the same geographic area and possibly at around the same time. The aggregate physical impacts are not described and therefore cannot be mitigated.” (Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-03])

Response BIO-1

Comments I-Bartley-13, I-Sargent-04, I-Colvin-01, I-Faulkner-02, I-Edelson2-05, I-Reid-02, I-Schultz-15, and I-Dowell-02 provide general statements about the adverse effects of the project, inconsistency with the City General Plan, and personal opinion but do not substantively address the adequacy or accuracy of the analysis presented in the EIR. As such, these comments are noted, however, no further response is required.

In response to comment I-Kohn2-03, adverse impacts on wildlife are discussed in detail on pages IV.F-23 through IV.F-32 and measures to minimize these impacts are either included in the project description or as mitigation measures. The commenter provides no substantive evidence that the conclusions reached in the EIR are invalid.

In response to comment I-Bartley-02, the nesting surveys were not presented in the EIR as being comprehensive. On page IV.F-5 the EIR states that no nests of any kind were observed in February 2011 and on page IV.F-6 that focused nest surveys in May 2011 found only three inactive nests. At this time all shrubs and trees surrounding the perimeter and within 100-150 feet of the athletic fields were carefully surveyed. While it is true that nests built later in the season would have been missed, the observation of three inactive nests in May would suggest that if more nests built earlier in the season were present, at least some of them would have been observed as well.

In response to comments, I-Wuerfel-02 and I-Wuerfel-03, all necessary surveys were conducted for the EIR to determine impacts and prescribe mitigation. CEQA does not require long-term modeling efforts in support of impacts analysis unless they are warranted. The commenter is not clear as to what, exactly, should be modeled. Consideration of long term biological effects would be speculative, a type of analysis discouraged by CEQA Guidelines § 15145, as there are many potentially confounding factors that could influence conditions that might be perceived as a direct result of the project. Nor does CEQA require that an agency perform all research or study recommended by commenters, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines § 15204 (a)).

In response to comment I-Wuerfel-03, the cumulative impacts of the athletic fields project and the San Francisco Westside Recycled Water Project were considered with respect to tree removal and loss of grassland habitat (see EIR pages IV.F-34 through IV.F-36). However, it is standard CEQA practice to assume implementation of project mitigation measures as part of the cumulative analysis, with the objective of determining if any residual impact could provide a considerable incremental contribution to a significant cumulative impact and if any additional mitigation would be required. For the Beach Chalet Athletic Fields project, the mitigation measures identified in the EIR would reduce the severity of identified impacts to a level such that the project's incremental contribution to cumulative impacts would not be cumulatively considerable and no additional mitigation would be required. This standard approach to cumulative analysis is valid and considered adequate.

In response to comment O-GGAS2-04, the EIR considers the incremental impacts from wildlife habitat removal in the context of remaining habitat in the region in several places, specifically on pages IV.F-24, IV.F-25, IV.F-35, and IV.F-36. Within this context, the amount of wildlife habitat removed is not substantial, therefore, the loss is not considered to be significant.

In response to comment I-Murphy-01, the studies cited by the commenter were not conducted in comparable habitat and therefore, the results cannot be extrapolated to the project area. Habitat at North Lake is both structurally and vegetatively diverse and ranges from open water to marsh, to mixed woodland. A site like this would be expected to support a diversity of birds based on habitat alone. The forest plot was over 20 acres in size and consisted of mixed conifers with no shrub understory. This is markedly different from the project site, where much smaller forested areas occur in fragmented patches. In addition, the studies were conducted 30 years ago, over which time conditions have changed significantly throughout Golden Gate Park. For example, park recreational use has increased substantially over the past 30 years, and, as noted on page IV.E-2 of the EIR, over 13 million people currently visit the park annually.

In response to comment I-Murphy-02, while it may indeed be true that, in general, western Golden Gate Park is important for fall migratory songbirds and the commenter provides links to data documenting the presence of such migrants collected at nearby sites, that data is 30 years old and the sites are not comparable in terms of habitat type and/or extent. The commenter provides an opinion but no substantive evidence that the habitat in and around the athletic fields is significant for migratory birds.

In response to O-GGAS2-28 and I-Bartley-06, the EIR recognizes that Golden Gate Park is important habitat for migrating and resident birds and that the park also provides habitat for other wildlife, including special-status bats. The EIR's primary responsibility is to identify sensitive wildlife (as opposed to all wildlife) because impacts on special-status species would be significant under CEQA. CEQA Guidelines Section 15065 directs lead agencies to consider other species when the effects might cause a fish or wildlife population to drop below self-sustaining levels, but that was not considered a possible outcome of proposed project.

Several commenters requested greater consideration for all wildlife species that use Golden Gate Park in general and that might use habitat in the project area. With respect to comment O-GGAS2-27, the EIR mentions bird species *observed* at the site on page IV.F-5 but never implies that these are the *only* birds that use the site. Species that occur in Golden Gate Park 'as a whole' would not be likely to occur at the athletic fields unless there was habitat for them there, so there is no need or requirement under CEQA to list or discuss all species that are known from the park. The EIR notes species expected to use the habitats afforded by the project area. The EIR makes reference to the numbers of bird species recorded from San Francisco in general and several locations within Golden Gate Park, including the Beach Chalet Athletic Fields in particular on pages IV.F-17 and IV.F-18 but does not list them, rather referring the reader to the source documents, which are on file with the Planning Department and available for review upon request and are incorporated by reference. Informal testimony and other unofficial reports do not meet the best available evidence standard of CEQA. However, the best available data at the time of EIR preparation established that 52 bird species had been observed at the site, this information was disclosed in the EIR on page IV.F-18. Of the 52 species observed at the site, three are considered special-status according to the criteria listed on pages IV.F-6 and IV.F-7 and were evaluated in detail in the EIR along with two additional bird species that have not been observed at the site.

Moreover, observation of a species does not mean that it is susceptible to impact. The EIR lists special-status wildlife, those which are considered for significance of impacts under CEQA, with potential to occur at the site in Table IV.F-2 on pages IV.F-12 through IV.F-15. The CEQA Guidelines direct that: "an EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible (CEQA Guidelines Section 15151)." Therefore, the analysis is limited to those species meeting the special-status criteria (see EIR pages IV.F-6 and IV.F-7), with the exception of migratory birds, which are also considered. Thus, for example, impacts on coyotes (O-SCSFBC-07) and other non-special-status species and common wildlife would not routinely be evaluated since common wildlife do not meet the impact significance criteria as defined in the EIR (page IV.F-22).

An additional comment noted that the EIR did not discuss owls—great horned owls reportedly nest in Golden Gate Park and barn owls have also been observed in the area (O-GGAS2-30). Owls, like hawks, are protected under California Department of Fish and Game (CDFG) Code

Section 3503.5 and, on further analysis, should be included in the impacts analysis (see text revisions below).

Several comments (A-NPS-04, A-NPS-11, A-NPS-13, I-Elias-01 and O-SCSFBC-33) are concerned with western snowy plover and other shorebirds at Ocean Beach, requesting the EIR include a discussion of habitat at Ocean Beach and its importance to shorebirds, and asserting that the EIR is incorrect in stating that the plover is absent from the project area and that snowy plover nest on Ocean Beach proximate to the project site. Golden Gate National Recreation Area staff indicate that there are no records of snowy plover nesting on Ocean Beach.¹ However, they are known to be present there for most of the non-breeding season. A Snowy Plover Protection Area has been designated by the National Park Service on Ocean Beach. The protection area begins at Stairwell 21, located across the Great Highway from the athletic fields and extends south from that point. The EIR was correct in its determination in Table IV.F-2 that snowy plover are absent from the project site and not exposed to project impacts; the species is most commonly found in and near coastal dune habitat and the protection area is over 400 feet distant from the project site at its closest and separated from the project area by a major, well lit roadway as well as a fence and a band of generally dense vegetation averaging 200 feet wide. Although monitoring results indicate snowy plover have been occasionally sighted on Ocean Beach north of Lincoln Avenue, only a few have been observed north of Stairwell 21 and the majority of sightings have occurred well south of the project area². Most plover occurrences associated with the dunes that begin approximately 700 feet to the southwest of the project site and extend south from there to Fort Funston. The beach across from the athletic fields is currently well lit by lighting along the western edge of the Great Highway.

Similarly, there are no nesting records for other shorebirds at Ocean Beach. The most common birds found there are sandelings, willets, and marbled godwits. These species primarily use Ocean Beach as a migratory stopover and non-breeding habitat³.

Lighting studies prepared for the project show that light spillover from the project would not reach Ocean Beach. See also Response BIO-4 which further addresses concerns regarding the potential for lighting impacts on snowy plover and other shorebirds and Response AE-2 which describes lighting effects west of the project area and includes a new visual simulation for areas west of the Great Highway in the project vicinity. Noise attenuates substantially over distance and prevailing winds at the project site are generally from the northwest and west. Therefore, light and noise resulting from the project are not expected to impact the snowy plover or other shorebirds at Ocean Beach. Table IV.F-2 is revised to reflect the fact that snowy plover are present at Ocean Beach (see text revisions below). However, because neither direct or indirect impacts from the project are expected, Ocean Beach is not considered part of the project affected environment. See also Response BIO-3 in regards to potential noise effects and Response BIO-4 and AE-2 in regards to potential lighting effects at Ocean Beach. Because the project would not

¹ B. Merkle, pers. com, email from B. Merkle, NPS to M. Lowe, ESA, March 20, 2012.

² NPS, unpublished data and Gulf of the Farallones National Marine Sanctuary, 2006, Beach Watch 2006 Annual Report.

³ B. Merkle, *Op. cit.* and Gulf of the Farallones National Marine Sanctuary, *ibid.*

result in direct or indirect impacts to snowy plover or its habitat and in response to comment A-NPS-12, the project is consistent with the *Western Snowy Plover Recovery Plan*, even though it does not actually apply to the project, with respect to lighting effects on snowy plover as well. The project would not increase illumination levels at Ocean Beach and the project is not expected to result in increased noise levels at the beach, nor would it increase predator perches or available nesting habitat in the vicinity of Ocean Beach.

In response to comments O-GGAS2-30, O-SCSFBC-07, O-SCSFBC-33, and I-Elias-01 EIR page IV.F-8, paragraph 3 has been revised:

Special-Status Animals

Of the special-status animals presented in **Table IV.F-2**, the only species classified as having a moderate or high potential for occurrence in the project area were considered in the impact analysis. Species addressed in detail include the following:

- Bank swallow
- American kestrel
- Cooper's hawk
- Great horned owl
- Red-tailed hawk
- Red-shouldered hawk
- Barn owl
- Western red bat

In addition, EIR pages IV.F-12 through IV.F-15 (Table IV.F-2) have been revised, as shown on the following page.

EIR page IV.F-16, has been revised to include a new third paragraph:

Great horned owl (*Bubo virginianus*). Great horned owls occur throughout North America and are found in a variety of wooded habitats. These large raptors prey on small to medium-sized mammals such as voles, rabbits, skunks, and squirrels. Great horned owls can often be seen and heard at dusk, perched in large trees. They roost and nest in large trees such as pines or eucalyptus. They often use the abandoned nests of crows, ravens, or sometimes squirrels. Great horned owls may use large eucalyptus or Monterey cypress located within or adjacent to the project area for roosting or nesting and may forage over the athletic fields for gophers and other small mammals.

EIR page IV.F-17 has been revised to include a new second paragraph:

Barn owl (*Tyto alba*). The barn owl is one of the most widespread of all terrestrial birds and can be found in a number of open habitats, including grassland and farmland. Barn owl specialize in hunting small mammals, and the majority of their food consists of small rodents, including voles, pocket gophers, shrews, mice, and rats. The species would nest in buildings as well as in tree cavities or nest boxes. This species has been observed in Golden Gate Park. The athletic fields provide foraging habitat, and potential nesting habitat is available throughout the western end of the Park in abandoned and underused buildings and mature eucalyptus and Monterey cypress.

**TABLE IV.F-2 [REVISED]
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR
WITHIN OR ADJACENT TO THE BEACH CHALET ATHLETIC FIELDS PROJECT**

Common name Scientific name	Listing Status USFWS/CDFG	Habitat	Potential to Occur ^a
Species Listed or Proposed For Listing			
Invertebrates			
San Bruno elfin butterfly <i>Callophrys mossii bayensis</i>	FE/--	Coastal scrub.	Absent; no suitable habitat present.
Bay checkerspot butterfly <i>Euphydryas editha bayensis</i>	FT/--	Serpentine grasslands.	Absent; no suitable habitat present, nearby CNDDDB occurrences on the San Francisco peninsula have been extirpated.
Mission blue butterfly <i>Plebejus icarioides missionensis</i>	FE/--	Grassland with <i>Lupinus albifrons</i> , <i>L. Formosa</i> , and <i>L. varicolor</i> .	Absent; no suitable habitat present.
Callippe silverspot butterfly <i>Speyeria callippe callippe</i>	FE/--	Found in native grasslands with <i>Viola pedunculata</i> as larval food plant.	Absent; no suitable habitat present.
Amphibians			
California red-legged frog <i>Rana draytonii</i>	FT/CSC	Freshwater ponds and slow streams with emergent vegetation for egg attachment.	Absent; While suitable habitat and recorded occurrences are present in ponds in Golden Gate Park, the nearest pond with recorded occurrences is more than 1.5 miles east of the project area. The project area does not contain aquatic habitat or undisturbed upland habitat suitable for this species.
Reptiles			
San Francisco garter snake <i>Thamnophis sirtalis tetrataenia</i>	FE/CE	Freshwater ponds and slow streams with emergent vegetation.	Absent; no suitable habitat present and this species is likely extirpated from San Francisco County.
Birds			
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT/CSC	Nests and forages on sandy beaches on marine and estuarine shores—requires sandy, gravelly, or friable soils for nesting.	Absent; no suitable habitat present <u>at the project site. Snowy plover are present on Ocean Beach, primarily to the south of the project area for most of the non-breeding season. Due to the distance from the project site (400 feet at its closest) no light or noise impacts on snowy plover are anticipated.</u>
California black rail <i>Laterallus jamaicensis coturniculus</i>	--/CT	Tidally influenced, heavily vegetated, high-elevation marshlands.	Absent; no suitable habitat present.
California brown pelican <i>Pelecanus occidentalis californicus</i>	FE/3511	Nests on coastal islands of small to moderate size that affords protection from predators.	Low; no suitable nesting habitat present, individuals foraging along the shore may fly over the project area.
California clapper rail <i>Rallus longirostris obsoletus</i>	FE/CE	Salt marsh wetlands along the SF Bay.	Absent; no suitable habitat present.

**TABLE IV.F-2 [Revised]
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR
WITHIN OR ADJACENT TO THE BEACH CHALET ATHLETIC FIELDS PROJECT**

Common name Scientific name	Listing Status USFWS/CDFG	Habitat	Potential to Occur ^a
Species Listed or Proposed For Listing (cont.)			
<i>Birds (cont.)</i>			
Bank swallow <i>Riparia riparia</i>	--/CT	Colonial nester on sandy cliffs near water, marshes, lakes, streams, the ocean. Forages in fields.	Moderate ; no suitable nesting habitat present, however, this species nests nearby at Ocean Beach and may forage over the existing Beach Chalet Athletic Fields.
California least tern <i>Sterna antillarum browni</i>	FE/CE	Colonial breeder on bare or sparsely vegetated flat substrates, including sand beaches, alkali flats, land fills, or paved areas.	Absent ; no suitable habitat present.
<i>Mammals</i>			
Salt marsh harvest mouse <i>Reithrodontomys raviventris</i>	FE/CE	Salt marshes along San Francisco Bay.	Absent ; no suitable habitat present.
Federal Species of Concern or State Species of Special Concern			
<i>Invertebrates</i>			
Incredible harvestman <i>Banksula incredula</i>	--/--	Franciscan sandstone talus slope.	Absent ; only known from San Bruno Mountain (CDFG, 2011). No suitable habitat present.
Tomales isopod <i>Caecuditea tomalensis</i>	FSC/--	Localized freshwater ponds or still streams.	Absent ; collected in 1984 from Lake Merced (CDFG, 2011). No suitable habitat present.
Sandy beach tiger beetle <i>Cicindela hirticollis gravida</i>	FSC/*	Sandy areas around water; larva live in burrows in sand along sea beaches, creeks, seepages, and lake shores.	Absent ; known population of this species near the project area has been extirpated (CDFG, 2011). No suitable habitat present.
Monarch butterfly <i>Danaus plexippus</i>	--/*	Eucalyptus groves (winter sites).	Low ; Nearest records of this species in Golden Gate Park (CDFG, 2011) are historical. There are no large trees in the project area that could support wintering colonies.
Stage's dufourine bee <i>Dufourea stagei</i>	--/--	Ground-nesting bee. Habitat otherwise unknown.	Low ; known range is south of the project area (this species is only known from San Bruno Mountain and Santa Cruz County).
Leech's skyline diving beetle <i>Hydroporus leechi</i>	FSC/--	Found in freshwater ponds, shallow water of streams marshes and lakes.	Absent ; no known populations of this species in project vicinity, and no suitable habitat in project area.
Bumblebee scarab beetle <i>Lichnanthe ursina</i>	FSC/--	Inhabits coastal sand dunes.	Low ; suitable habitat not present within the project area, and CNDDDB records of this species along Ocean Beach are historic (CDFG, 2011).
A leaf-cutter bee <i>Trachusa gummifera</i>	--/--	Habitat preferences are unknown.	Low ; no records of this species in the project area (CDFG, 2011).
Marin hesperian <i>Vespericola marinensis</i>	--/--	Moist areas in coastal brushfield and chaparral vegetation, in Marin County.	Absent ; no suitable habitat within the project area; known range is north of the proposed project area.

**TABLE IV.F-2 [Revised]
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR
WITHIN OR ADJACENT TO THE BEACH CHALET ATHLETIC FIELDS PROJECT**

Common name Scientific name	Listing Status USFWS/CDFG	Habitat	Potential to Occur ^a
Federal Species of Concern or State Species of Special Concern (cont.)			
<i>Birds</i>			
Cooper's hawk <i>Accipiter cooperi</i>	--/3503.5	Typically nests in riparian growths of deciduous trees and live oak woodlands. Becoming more common as an urban breeder.	Moderate; Large trees near the existing athletic fields could support nests for this species, and individuals could forage for birds on the existing field and in surrounding shrubs and trees.
<u>Great-horned owl</u> <u><i>Bubo virginianus</i></u>	<u>--/3503.5</u>	<u>Often uses abandoned nests of corvids, such as crows or ravens, or squirrels; nests in large oaks, conifers, eucalyptus</u>	Moderate; <u>Large trees near the existing athletic fields could support nests for this species, and individuals could forage for small mammals on the existing field.</u>
Red-tailed hawk <i>Buteo jamaicensis</i>	--/3503.5	Almost any open habitat, including grassland and urbanized areas.	Moderate; Large trees near the existing athletic fields could support nests for this species, and individuals could forage for small mammals on the existing field.
Red-shouldered hawk <i>Buteo lineatus</i>	--/3503.5	Forages along edges of marshes and grasslands; nests in mature trees in a variety of habitats.	Moderate; Large trees near the existing athletic fields could support nests for this species, and individuals could forage for small mammals on the existing field.
American kestrel <i>Falco sparverius</i>	--/3503.5	Frequents generally open grasslands, pastures, and fields; primarily a cavity nester.	Moderate; Large trees near the existing athletic fields could provide nesting cavities for this species, and individuals could forage for small mammals on the existing field.
Salt-marsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	FSC/CSC	Inhabits tidal salt and brackish marshes in winter, but breeds in freshwater brackish marshes and riparian woodlands during spring to early summer.	Low; riparian woodland and other suitable habitat is not present in the project area. Possibly present on a transient basis during migratory or dispersal periods.
Alameda song sparrow <i>Melospiza melodia pusillula</i>	--/CSC	Salt marshes of eastern and south San Francisco Bay.	Low; no suitable habitat is present for this species in the project area. Possibly present on a transient basis during migratory or dispersal periods.
San Pablo song sparrow <i>Melospiza melodia samuelis</i>	--/CSC	Salt marshes of eastern and south San Francisco Bay.	Low; no suitable habitat is present for this species in the project area. Possibly present on a transient basis during migratory or dispersal periods.
Double-crested cormorant <i>Phalacrocorax auritus</i>	--/--	Nests along coast on isolated islands or in trees along lake margins.	Low; freshwater habitats for this species are not present onsite, but individuals moving between Golden Gate Park and the Pacific Ocean may fly over the project area.

TABLE IV.F-2 [Revised]
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR
WITHIN OR ADJACENT TO THE BEACH CHALET ATHLETIC FIELDS PROJECT

Common name Scientific name	Listing Status USFWS/CDFG	Habitat	Potential to Occur ^a
Federal Species of Concern or State Species of Special Concern (cont.)			
<i>Birds (cont.)</i>			
Barn owl <i>Tyto alba</i>	--/3503.5	Found in open and partly open habitats, especially grasslands. Nests in tree cavities or buildings.	Low to moderate; potential nesting habitat is available in large diameter trees in the project area and the species may forage over the athletic fields. Reported as observed in western Golden Gate Park.
<i>Mammals</i>			
Pallid bat <i>Antrozous pallidus</i>	--/CSC	Roosts in caves, old buildings, and under bark. Forages in open lowland areas, and forms large maternity colonies in the spring.	Low; Potential roosting habitat is available in large-diameter trees in Golden Gate Park, but this species was not detected during recent surveys in the Park (Krauel, 2009). Not expected to breed here but may be present on a transient basis.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	FSC/CSC	Roosts in caves, buildings, bridges, rock crevices, and hollow trees.	Low; no buildings or hollow trees suitable for roosting are present in the project vicinity.
Western red bat <i>Lasiurus blossevillii</i>	--/CSC	Roosts in tree/shrub foliage, particularly in riparian areas.	Moderate; roosting habitat is available in tree/shrub foliage in Golden Gate Park. In recent surveys, this species was one of the most commonly encountered bat species in San Francisco (Krauel, 2009), but the lack of waterbodies in the immediate vicinity of the existing playing fields may preclude occurrence of this species.

EIR page IV.F-17 paragraph 2 has been revised:

These three hawk species have been observed in the project area and may well use the area for foraging. In addition, members of the public and organizations assert that great horned owls nest in Golden Gate Park and that barn owls have also been observed in the park, though no specific data has been provided regarding these observations. These species may also use the fields for foraging. No large stick nests and few cavities were observed in trees immediately adjacent to the project site or in large trees within line of sight of the athletic fields during ESA's 2011 reconnaissance and nesting bird surveys.

These revisions do not change the analysis or conclusions presented in the EIR.

The Beach Chalet Athletic Fields and surrounding area are not likely to provide potential habitat for California quail, as asserted in comment O-GGAS2-27. While quail were once known

throughout the Park⁴, their current distribution is highly restricted. Quail require a mosaic of low, brushy vegetation, with grass/forb openings, taller shrubs, and trees, interspersed with water⁵. Low brush, in particular, is generally absent from the project site so there is an overall lack of cover for these birds. Quail feed primarily on seeds of legumes and other broad-leaved herbaceous plants⁶, which are few in number throughout the project site. The project area therefore provides only marginally suitable habitat for quail. Finally, quail, when present, are difficult to miss due to their well known call, size, and the fact that they are not generally solitary birds. If the species was present at the time of the surveys, it would have been documented.

Contrary to the assertion made in comment I-Kohn2-10, the EIR reports on page IV.F-17 that no large stick nests, typical of raptors, were observed by ESA biologists in 2011 proximate to, or within 500 feet and line-of sight of, the project area during surveys conducted for the project. The EIR further recognizes that raptors may nest in the vicinity of the project area (e.g. the western end of Golden Gate Park) on page IV.F-16 and also finds a moderate potential to occur for several raptor species in Table IV.F-2 on pages IV.F-12 through IV.F-15. No substantive evidence that raptors are nesting within distances commonly held to be significant with respect to potential project impacts has been presented in any of the comments on biological resources.

In response to comment O-GGAS3-03, impacts to biological resources associated with eventual turf replacement would be similar to the construction impacts described for the proposed project, as described under EIR Impact BI-1.

L.3 Impacts to Vegetation [BIO-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Antonini-10	I-Edelson-05	I-Joyce-04	I-NLang-01
O-CSFN-02	I-Edelson-08	I-Jungreis2-30	I-BLewis-03
O-GGAS3-04	I-Edelson-11	I-Kaufman-02	I-Lieb-02
I-Anderson-03	I-KHoward-02	I-Khan-04	I-Mabutt-01
I-Anderson-06	I-KHoward-03	I-Khan-07	I-McGrew-15
I-Anderson-10	I-KHoward-04	I-Khan-10	I-GMiller3-02
I-Bridges-02	I-KHoward-05	I-Koivisto-02	I-Napoli-01
I-Chappell-05	I-KHoward-06	I-Koivisto-05	I-Rivera-03
I-Citron-05	I-KHoward-07	I-Koivisto-26	I-Stein-02
I-Citron-08	I-KHoward-08	I-Koivisto-54	I-Warriner-04
I-Citron-11	I-KHoward-09	I-Koivisto-60	I-Wood-01
I-Colao-02	I-KHoward-10	I-Koivisto2-05	I-Wuerfel-01
I-Darrigrand & Clafflin-03	I-KHoward-11	I-Koivisto2-06	I-Wuerfel-02
I-Dennenberg-03	I-KHoward-12	I-Kukatla-04	I-Wuerfel-03

⁴ Maillard, 1930, Birds of Golden Gate Park San Francisco, a Special Publication of the California Academy of Sciences.

⁵ California Department of Fish and Game, California Wildlife Habitat Relationships, Life History Account for California Quail. <http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=1707&inline=1>

⁶ *Ibid.*

I-Dennenberg-06
I-Dennenberg-09
I-Edelson-03

I-KHoward-13
I-KHoward-14
I-Joaquin-Wood-03

I-Lampert-04
I-ELang-01

I-Wuerfel-04

“Then the tree issue did not come up too much but there was a discussion about whether these were considered brushes or trees and what was going to be cleared out. The area between Murphy’s Windmill and Beach Chalet is an overgrown mess, in my opinion, right now and needs to be thinned out just for health reasons.

I mean, The Olympic Club and Harding Park have taken a lot of the trees out and have trimmed the other ones in a way that the turf and everything is a lot healthier because it lets sunshine in there, not the mention the safety factor. So I think it’s not the number of trees that are taken out but the way these trees are removed or perhaps thinned out is really the critical issue here. And that may need a little bit more to be addressed a little more thoroughly in the report.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-10]*)

“There are problems in calling Myoporum tress ‘shrubs.’” (*Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-02]*)

“It also fails to provide adequate mitigation measures, for example, nothing to replace the grasslands. ...” (*Michael Lynes, Golden Gate Audubon Society, public hearing comment [O-GGAS3-04]*)

“The Myoporum trees are still called ‘shrubs’ – What is the basis for this classification? Quote the arboriculture standard that substantiates this designation.” (*Raja Anderson, letter, December 12, 2011 [I-Anderson-03]*)

“This report ignores the fields as part of the larger part of GGP; What percent of the total meadows in the park is the Beach Chalet project?” (*Raja Anderson, letter, December 12, 2011 [I-Anderson-06]*)

“Explain why the DEIR ignores the cumulative loss of trees with the two projects. What is the total number that will be lost and threatened by these two projects? What will be the cumulative

impact on the western windbreak of the park?" (*Raja Anderson, letter, December 12, 2011 [I-Anderson-10]*)

"Removal of 9 acres of natural grass which provides habitat to birds, butterflies and other wildlife and there is no mitigation proposed." (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-02]*)

"The DEIR also states that the Western Shoreline Area Plan includes 'extending the reforestation program, which has been established to replace dead and dying trees at the windbreak along the ocean, throughout the park to ensure vigorous forest tree growth and maintain high visual quality; emphasizing the naturalist landscape qualities existing at the western portion of the park, and encouraging increased visitor use in the area.' (DEIR p. II-4.) However, the DEIR ignores the loss of over 55 trees in this project and the cumulative loss of hundreds more trees in conjunction with the proposed Westside Water Treatment Plant project. It ignores the impact on the windbreak of the loss of these trees. The proposal later in the DEIR to replant trees on a 1 to 1 basis ignores the fact that the new trees will not be mature enough for many years to provide either a visual screening or an impact on the strong winds that come in from the ocean, thus potentially damaging the interior of the park. ..." (*Jim Chappell, letter, December 10, 2011 [I-Chappell-05]*)

"The Myoporum trees are still called 'shrubs' - why are 30 foot trees called shrubs? What is the basis for this classification? Quote the arboriculture standard that substantiates this designation." (*Ben Citron, letter, December 11, 2011 [I-Citron-05]*)

"This report ignores the fields as part of the larger part of GGP; What percent of the total meadows in the park is the Beach Chalet project?" (*Ben Citron, letter, December 11, 2011 [I-Citron-08]*)

"Explain why the DEIR ignores the cumulative loss of trees with the two projects. What is the total number that will be lost and threatened by these two projects? What will be the cumulative impact on the western windbreak of the park?" (*Ben Citron, letter, December 11, 2011 [I-Citron-11]*)

"Artificial grass leads to nearby trees and plants being deprived of water." (*Flora Colao, letter, November 23, 2011 [I-Colao-02]*)

“Then there are the trees. We bought our condo in order to live by the trees in GGP. Just how many trees will be lost?” (*Jacqueline Darrigrand and William Claflin, Letter, December 9, 2011 [I-Darrigrand & Claflin-03]*)

“The Myoporum trees are still called ‘shrubs’ - why are 30 foot trees called shrubs? What is the basis for this classification? Quote the arboriculture standard that substantiates this designation.” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-03]*)

“This report ignores the fields as part of the larger part of GGP; What percent of the total meadows in the park is the Beach Chalet project?” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-06]*)

“Explain why the DEIR ignores the cumulative loss of trees with the two projects, What is the total number that will be lost and threatened by these two projects? What will be the cumulative impact on the western windbreak of the park?” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-09]*)

“The DEIR is deeply flawed in all other areas. It does not consider the impact to the plantings, particularly to the trees and shrubs, particularly to the west end of the area, by loss of irrigation over the area, as artificial turf requires no irrigation. To remove long-standing irrigation over such a large area will have an adverse impact on the surrounding landscape, likely causing the loss of the trees, particularly on the west end, by loss of irrigation over the area, as artificial turf requires no irrigation. To remove long-standing irrigation landscape, likely causing the loss of the trees, particularly on the west end, which the proposal depends on for screening from the elements. This finding was brought to my attention by a highly respected, licensed arborist, who lives and works in San Francisco, who actually helped to plant those very trees years ago.” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-03]*)

“The Myoporum trees are still called ‘shrubs’ - why are 30 foot trees called shrubs? What is the basis for this classification? Quote the arboriculture standard that substantiates this designation.” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-05]*)

“This report ignores the fields as part of the larger part of GGP; What percent of the total meadows in the park is the Beach Chalet project?” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-08]*)

“Explain why the DEIR ignores the cumulative loss of trees with the two projects. What is the total number that will be lost and threatened by these two projects? What will be the cumulative impact on the western windbreak of the park?” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-11]*)

“Impact on tree preservation: The DEIR states: ‘Impact 81-3: The proposed project could potentially conflict with applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Less than Significant with Mitigation).’ 2 However, the project impacts are significant and the proposed mitigations are inadequate as follows.

1. **Myoporum are trees:** The DEIR is based on the project proponent’s ‘Tree and Large Shrub Report’³. The ‘Tree and Large Shrub Report’ [Tree Report] states that *Myoporum laetum* are ‘tall shrubs’ and not trees. However, in his ‘Arborist Memorandum,’ Consulting Arborist Roy Leggitt III reviews the Tree Report and states:

- ‘Characterization of Trees and Shrubs: *Myoporum laetum* is a tree species. Trees are either single stemmed or multi-stemmed. Woody plants of 20 to 30 feet tall are certainly trees, and are recognized as such under the Article 16 of the DPW code definition of Significant Trees.’
- See Figure 1 for a photo of a few of these *Myoporum*.

On what technical criteria does the ‘Tree and Large Shrub Report’ base its conclusions that the *Myoporum laetum*, often 20 to 30 feet tall, in the project area are shrubs instead of trees? The DEIR must state the source documents and the independent experts that support this designation.” (*Katherine Howard, letter, December 11, 2011 [I-KHoward-02]*)

“Impact on Windbreak: *Myoporum laetum* are part of the windbreak that protects the western end of Golden Gate Park.

- Leggitt states: ‘The *Myoporum* perform a critical function at the extreme west end of Golden Gate Park. This species is one of only a few that can survive in the prevailing winds off the Ocean that are moist and salt-laden. The removal of the *Myoporum* will cause foliar salt to kill trees within the park that are currently protected. The 1980 study of GGP identified the significance of the *Myoporum*, and their function and importance to the park has not changed since that time. With the removal of the *Myoporum*, the very wellbeing and utility of GGP is threatened.
- Leggitt further quotes the importance of the western windbreak as documented in the ‘Golden Gate Park Forest Management Plan’.
 - ‘Three major observations have been documented by this study. First, wind is the controlling factor in tree survival in this area. Second, under these conditions, certain

- species perform better than others. Finally, the better the initial condition of a tree, the higher its chances of survival.
- 'The effect of wind was extremely pronounced, where proximity to the ocean results in heavily salt-laden winds. Highly exposed trees were covered with a visible salty residue. This combination of salt and wind was so detrimental, that wind protection was found to be imperative for tree survival. This protection is required in a continuous, more or less solid form running along the western edge, rather than individual tree protection ... the protection provided from a continuous 'wall' of brush ... was successful.
 - 'Some form of wind-protection must be provided for the trees ... can be provided by wind and salt-resistant shrubs.'
 - Leggitt concludes: ' ... a diagram for windbreak design specifies *Myoporum laetum* to be planted as the front line defense, even before fencing. The City successfully installed this windbreak, and it has served us well for about 30 years.
- The proposed project will remove 16 'trees', 43 *Myoporum*, and one *Pittosporum*. What will be the impact on the windbreak of the removal of these trees and 'tall shrubs?' Where will the replacement trees be planted to maintain the windbreak? What will be the species and size of these trees? Will they be resistant to salt air? How many years will pass before they are of a size to adequately function as a windbreak?" (*Katherine Howard, letter, December 11, 2011 [I-KHoward-03]*)

"Cumulative impacts with Westside Water Treatment Plant: The DEIR states, 'Impact C-BI: The proposed project in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would not have a cumulatively considerable impact on biological resources. (Less than Significant)' The Westside Water Treatment Plant project will remove or have an impact on over 200 trees in the area adjacent to the Beach Chalet Athletic Fields project. (Figure 2).

What will be the cumulative impact of the tree removal occasioned by these two projects on a) the character of the western end of Golden Gate Park as a landscape park 2) the overall efficacy of the windbreak for the remainder of the park in general and the trees immediately on the eastern side of these trees in particular? 3) vegetative screening of these facilities from the roads? (Figure 4) 4) vegetative screening between the two projects?" (*Katherine Howard, letter, December 11, 2011 [I-KHoward-04]*)

"Tree protection measures are inadequate: The DEIR states, 'Improvement Measure I-BI-3: ... the following measures could be implemented to provide protection for trees and shrubs to be retained onsite during construction activities for the Beach Chalet Athletic Fields Renovation Project.

- ‘Establish a Tree Protection Zone (TPZ) around any tree or group of trees to be retained. The formula typically used is defined as 1.5 times the radius of the dripline or 5 feet from the edge of any grading, whichever is greater. The TPZ may be adjusted on a case-by-case basis after consultation with a Certified Arborist.’
- ‘Prohibit construction-related activities, including grading, trenching, construction, demolition, or other work within the TPZ. No heavy equipment or machinery should be operated within the TPZ. No construction materials, equipment, machinery, or other supplies should be stored within a TPZ. No wires or signs should be attached to any tree. Any modifications should be approved and monitored by a Certified Arborist.’

These regulations may be appropriate on a large site, where the trees are a safe distance from the construction; however, many of the largest trees at Beach Chalet are at the edge of the construction and are even labeled in the Tree Report as being at the edge of the grading. ... Construction is not a neat and tidy business that takes place only within the boundaries of a line on a plan. Due to the location of the trees, the size of the trees, and their location next to an irrigated area that will attract tree roots, and the fact that grading will take place near the trees, it is probable that the project will have a major impact on the trees roots for these primary boundary trees.

The DEIR must take into account the close location of the project next to all trees, the extensive use of heavy construction equipment, and the probable location of the tree roots within the current field and surrounding grass areas, and more accurately describe the possible damage to each tree individually and the proposed mitigations for either the loss of or the damage to each tree.” (*Katherine Howard, letter, December 11, 2011 [I-KHoward-05]*)

“Removal of non-native species is not justified: Both the DEIR for this project and the plans for the Westside Water Treatment Plant 13 propose removing *Myoporum laetum*, because they are not a native species or are considered an invasive species. Invasive species have value as tough plants that can survive in areas such as the coastal area. This area of the park is not designated as part of the Natural Areas Program. Why are hundreds of trees being removed from this area for other than construction reasons?” (*Katherine Howard, letter, December 11, 2011 [I-KHoward-06]*)

“Tree replacement/mitigation measures inadequate: The Draft EIR states, ‘Mitigation Measure M-BI-3: Plant Replacement Trees. The SFRPD shall replace the trees removed within SFRPD managed lands with trees of equivalent ecological value (i.e., similar species) to the trees removed. If trees of equivalent ecological value are not feasible or available, removed trees shall be replaced at a ratio of 1 inch for 1 inch of the diameter at breast height of the removed tree.’

- The location of the replacement trees is not stated. SFRPD manages thousands of acres in San Francisco as well as Sharp Park and Camp Mather. Where will the replacement trees be planted? How can planting in another park mitigate the damage to Golden Gate Park’s habitat, windbreak, or the landscape character of Golden Gate Park? The Final EIR must show the location for the planting of the replacement trees and the impact on the windbreak.

- The DEIR defines equivalent value as ‘similar species.’ What is the definition of ‘similar species’? Why is only ecological value a criteria for replacement?
- The names of the replacement species are not listed in the DEIR. It has taken many years and trial and error for different species of plants for Golden Gate Park’s landscape to be established in what was originally sand dunes with few trees. Furthermore, some species will take much longer to grow in to replace the current trees and ‘tall shrubs.’ To know how both the character and the habitat of the park will be impacted, the EIR needs to list the species that will be used as replacements.
- All replacement trees should also support and enhance Golden Gate Park’s design as a landscape park. The DEIR must list not only the replacement trees and their locations, but also how they would support and enhance Golden Gate Park’s design as a landscape park.
- A ‘similar species’ that is only 4 feet tall and 1 inch in diameter does not have the ecological value of a mature tree. The DEIR must quantify the loss in ecological value of removing so many mature trees.
- The use of the word ‘feasible’ is a typical development term for ‘We aren’t really going to do this.’ The DEIR should explain what actions the City shall commit to performing. The word feasible should be taken out of the report.
- The use of the term ‘available’ is also subject to scrutiny. This project is planned to take place over a few years; replacement trees can be contract-grown to meet the projected needs. This process can be started at any time; surely the trees that would be attractive for this location could be used in other park locations if this project is not completed as the DEIR envisions it. The DEIR should list the proposed replacement trees and their current availability as well as plans for contract growing them If they are not currently available.
- Why are certain trees replaced at the ratio of 1 inch to 1 inch diameter and others are not? All trees removed should be replaced at the ratio of 1 inch for 1 inch of the diameter at breast height. A tree with a diameter of 1’ cannot replace either aesthetically or ecologically a Monterey Cypress that is 48’ in diameter. The DEIR must justify this mitigation measure.
- The replacement policy refers only to ‘trees.’ The report erroneously classifies the Myoporum as shrubs. If this classification is used for the replacement policy, then there will be limited vegetation replacement. According to our calculations, based on the diameters of trees to be removed as listed in the ‘Tree Report,’ a total of 831 inches of ‘tall shrubs’ and 250 inches of ‘trees’ in diameter will be lost. The loss of this amount of mature vegetation has an impact not only visually but also in terms of habitat and other ecological values.

The DEIR should list all trees and ‘tall shrubs’ to be removed and give the total amount of diameter of trees and ‘tall shrubs’ that will be lost.

The Final EIR needs to change this policy to replacing all trees and large shrubs at the ratio of inch for each one inch of diameter lost.

The Final EIR needs to show where these new trees will be planted, including the species, the size (for example, 15 gallon, 24’ box), the location and the committed maintenance budget and watering plans for these new trees. The latter are especially important, since one of the reasons

given for the project in public meetings by the project proponents has been the lack of staffing at the Recreation and Park Department.

In another section of the DEIR, it states, ' In addition, the proposed project includes replacement of each tree removed at a one-to-one or greater ratio.' Replacing a mature tree with a small tree is not an equivalent replacement. Replacements should be an equal number of trees to replicate the diameter of trees lost and to quickly replace the windbreak and fog drip characteristics of the trees being cut down." (Katherine Howard, letter, December 11, 2011 [I-KHoward-07])

"Relationship of the reforestation program to the project is missing: The DEIR does not explain the current reforestation program for the western end of Golden Gate Park and how the loss of trees and replanting of new trees will fit into that plan.

All replacement trees planted as mitigation must be in addition to trees already planned for as part of any reforestation efforts. The project should not substitute mitigation plans for reforestation efforts that are needed to maintain the forest and western windbreak of the Park." (Katherine Howard, letter, December 11, 2011 [I-KHoward-08])

"Potential for native plants in the area not accurate: The DEIR states that' ... the overall potential of the site to support special-status plant species is considered low based on the lack of native plants and native plant habitats, and on the disturbed and heavily managed condition of the area.' (DEIR p. IV.F-8) This sentence makes the area sound like a former strip mine or other environmentally devastated area. In fact, the western end of Golden Gate Park has supported a variety of vegetation and, before the park was established, did have a selection of native plants growing on the dunes. Today, there is a native plant restoration area immediately adjacent to the Beach Chalet Athletic Fields. If those plants can survive, then it is possible that other native plants could exist or will come in to the area, given the opportunity.

The EIR needs to be corrected to include this local native plant area and the potential for native plants to grow in and around the site, as do now." (Katherine Howard, letter, December 11, 2011 [I-KHoward-09])

"Screening 'tall shrubs' at Westside Water Treatment Plant Site. Most of these trees will be removed by the project. In addition, the WWTP is a Homeland Security site, with specific requirement for security and visibility that are not compatible with vegetated parkland." (Katherine Howard, letter, December 11, 2011 [I-KHoward-10])

“What will be the impact of the construction on the root system of this tree? How many branches will be lost to the construction? If this tree is removed, what species and size of tree(s) will replace it?” (*Katherine Howard, letter, December 11, 2011 [I-KHoward-11]*)

“HortScience Tree and Large Shrub Report assignment: assess tree hazard potential under new uses. This is not a measure of existing conditions nor is it an assessment of existing value and function. The assignment from R&P was slanted to meet the criteria for an approved project, not toward an objective study. The R&P Commission has cited this aspect of the study in the Exemption of Environmental Review, and this part of the study is flawed.” (*Katherine Howard, letter, December 11, 2011 [I-KHoward-12]*)

“*Myoporum laetum* is a tree species. Trees are either single stemmed or multi-stemmed. Woody plants of 20 to 30 feet tall are certainly trees, and are recognized as such under the Article 16 of DPW code definition of Significant Trees.

Flat-topped Monterey Cypress are normal for an area of prevailing winds. This is not a defect, but rather is adaptive and is an advantage. These trees are crucial in their function as a windbreak.’

‘*Myoporum* Windbreak’. The *Myoporum* perform a critical function at the extreme west end of Golden Gate Park. This species is one of only a few that can survive in the prevailing winds off the Ocean that are moist and salt-laden. The removal of the *Myoporum* will cause foliar salt to kill trees within the park that are currently protected. The 1980 study of GGP identified the significance of the *Myoporum*, and their function and importance to the park has not changed since that time. With the removal of the *Myoporum*, the very wellbeing and utility of GGP is threatened.

Golden Gate Park Forest Management Plan, State of California Department of Forestry, 1980 relates the importance of the western windbreak on pages 53 and 54:

‘Three major observations have been documented by this study. First, wind is the controlling factor in tree survival in this area. Second, under these conditions, certain species perform better than others. Finally, the better the initial condition of a tree, the higher its chances of survival.

The effect of wind was extremely pronounced, where proximity to the ocean results in heavily salt-laden winds. Highly exposed trees were covered with a visible salty residue. This combination of salt and wind was so detrimental, that wind protection was found to be imperative for tree survival. This protection is required in a continuous, more or less solid form running along the western edge, rather than individual tree protection ... the protection provided from a continuous ‘wall’ of brush ... was successful.

Some form of wind-protection must be provided for the trees ... can be provided by wind and salt-resistant shrubs.'

On page 57 of this report, a diagram for windbreak design specifies *Myoporum laetum* to be planted as the front line defense, even before fencing. The City successfully installed this windbreak, and it has served us well for about 30 years." (*Katherine Howard, letter, December 11, 2011 [I-KHoward-13]*)

" 'Root Losses From Trenching'. Impacts to tree roots from trenching for underground utilities have been omitted. Trees could be lost due to root losses that cause trees to become unsafe or fall over." (*Katherine Howard, letter, December 11, 2011 [I-KHoward-14]*)

"Another part of the overall plan calls for removal of 56 trees described as brush and shrubs so as to avoid individual review before their removal. This would degrade the necessary windbreak keeping ocean winds at bay, particularly when considered with the 176 trees to be removed when and if the adjacent water treatment facility is approved." (*Joan Joaquin-Wood, email, December 12, 2011 [I-Joaquin-Wood-03]*)

"Finally, the thought of losing over 250 trees from the park is simply not acceptable." (*Sean Joyce, email, November 29, 2011 [I-Joyce-04]*)

"The plan requires the loss of trees and shrubs: there is insufficient analysis of the loss of trees and shrubs.

The plan requires the loss of trees and shrubs: there is insufficient categorization of the trees and shrubs that will be lost." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-30]*)

"While it is true that a natural resource will be lost in Golden Gate Park as a result of the renovation, the resulting changes will be a huge boon to the city as has been the case with the renovations at Crocker Amazon, Silver Terrace, and elsewhere. The benefits far outweigh the costs. The city needs more fields that are durable. Of that, there can be no doubt." (*Noel Kaufman, email, December 6, 2011 [I-Kaufman-02]*)

“The Myoporum trees are still called ‘shrubs’ – why are 30 foot trees called shrubs? What is the basis for this classification? Quote the arboriculture standard that substantiates this designation.” (Tehmina Khan, email, December 10, 2011 [I-Khan-04])

“This report ignores the fields as part of the larger part of GGP; What percent of the total meadows in the park is the Beach Chalet project?” (Tehmina Khan, email, December 10, 2011 [I-Khan-07])

“Explain why the DEIR ignores the cumulative loss of trees with the two projects. What is the total number that will be lost and threatened by these two projects? What will be the cumulative impact on the western windbreak of the park?” (Tehmina Khan, email, December 10, 2011 [I-Khan-10])

“The first place the lack of definitions becomes important is in the Executive Summary, where the number of ‘trees’ and ‘shrubs’ to be removed is first mentioned. The lack of definition for the DEIR is a problem. Lacking, as well, is a time line and location for the promised one-to-one replacement for trees/shrubs to be destroyed by the project.” (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-02])

“Looking at TABLE ES-I Impact BI-2 and BI-3 again raises definition questions. what is ‘equivalent ecological value’ (is it only similar species, or was that presented as an example of equivalent ecological value?), and how does the destruction of trees/shrubs effect the western wind break (a question brought up in the scoping session)? The protections for trees/shrubs that remain during the construction are listed, but no consideration is given to how the project itself will affect the remaining trees/shrubs in the long-term. Specifically, what affect will the increase in hours of light and difference in light wavelengths, the run-off from the fields, and the changes in the western windbreak have on the remaining trees/shrubs? This was also asked during the scoping” (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-05])

“...the comment is made that the view won’t be changed by the removal/destruction of trees/shrubs. This is a very problematic statement as reducing the western wind break will substantially change the wind patterns from the ocean into the park, necessitating either more fencing between the park and the ocean (thus altering the view) or leading to likely damaging of the remaining trees/shrubs hence increased views of the synthetic fields. The statement, failing to take into consideration our often fierce local winds and two plus months per year of

sandblasting, calls into grave doubt other DEIR statements made about the area.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-26]*)

“The section on tree resources ignores the wind-break and dune stopping function of the trees planted, and includes a six inch diameter definition that does not say whether that six inches is in trunk or foliage.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-54]*)

“In the tree/shrub discussion, the ‘shrubs’ are described as being ‘rangy and unattractive, with unbalanced and asymmetrical form.’ These are qualities considered attractive in Japanese gardens (see the Japanese Tea Garden for examples), and these ‘shrubs’ are often used by locals for recreational sitting and low climbing due to their ranginess. Dead trees, mentioned on p. 33, are not devoid of ecological value; dead trees are highly valuable in living ecosystems, as stated in basic high school biology textbooks. Again, the replacement of removed trees (but not shrubs) is mentioned, but no location is given for the possible replacements, yet the ecological value of a tree (or shrub) includes its location. In discussing the construction process and the likelihood of damage to remaining tree roots and crowns, the point is made that there are no SFRP policies or ordinances related to construction within a tree’s dripline. No policy does not equal no damage, just as no law or legislation existing to define a situation does not equal the reality of a situation. Therefore, saying that potential tree damage would be less than significant is disingenuous and not a reflection of reality so much as a reflection of a lack of policy.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-60]*)

“Other issues I found just in quick scans of some sections are the lack of definition of a shrub. A forester at the scoping session said there’s no set definition of tree versus shrub anywhere in any of the literature and a number of the shrubs that are included for removal in the plan at the site are 30 feet tall or more.” (*Ellen Koivisto, public hearing comment [I-Koivisto2-05]*)

“The damaging of the western windbreak by the project was not really truthfully considered and, living out there, sand is an enormous issue. The location of the 1-to-1 tree-shrub replacement, some other place, some other parkland wasn’t specified. If it’s not in the western windbreak, there’s going to be issues that way.” (*Ellen Koivisto, public hearing comment [I-Koivisto2-06]*)

“Why are trees that are as tall as a three storey building called shrubs.” (*Rakesh Kukatla, email, December 11, 2011 [I-Kukatla-04]*)

“And, if so, how much vegetation will have to be taken out?” (*Gabriel Lampert, email, December 4, 2011 [I-Lampert-04]*)

“I love the freshness of the air as it blows in from the ocean and over the trees and grass and flowers.

If you go ahead with this project it will blow through plastic grass and crumbled tires.

And it will really really blow because there will be even fewer trees to act as windbreaks. ...” (*Eden Lang, email, December 12, 2011 [I-ELang-01]*)

“Over the last decade a lot of trees have been chopped, bushes cleared and trails paved from Land’s End to Golden Gate Park. The trees used to be thick enough to muffle the traffic noise from JFK Drive and the Great Highway. Now you can see headlights shining through the trees, and hear the same traffic noise you’ll hear allover the City. Chop down several dozen MORE trees and feel the wind that howls off the Pacific, especially in the spring, no longer tamed by what used to be a wall of bushes and trees at the edge of the ocean. There’s a reason why thick low growing trees were planted here in the first place, on what used to be miles of blowing sand.” (*Nathan Lang, email, December 11, 2011 [I-NLang-01]*)

“I am concerned that the City is rushing into this project without fully considering the negative impacts to the park and the environment:

Cutting down many mature trees that serve as a wind break and sacrificing a benign, bucolic grass field and covering it with an artificial, potentially toxic substance without fully considering:” (*Beth Lewis, letter, December 4, 2011 [I-BLewis-03]*)

“I am concerned that the City is rushing into this project without fully considering the negative impacts to the park and the environment: Cutting down many mature trees that serve as a wind break and sacrificing a benign, bucolic grass field and covering it with an artificial, potentially toxic substance.” (*Reddy Lieb, letter, December 5, 2011 [I-Lieb-02]*)

“I am writing today in opposition to the planned artificial turf soccer complex at the Beach Chalet soccer fields. The pastoral western end of Golden Gate Park is not an appropriate location for seven acres of artificial turf” (*Anmarie Mabbut, email, December 12, 2011 [I-Mabbut-01]*)

“TREES: Years of observation have taught me that the SFRPD does not take care of their trees. Trees in the City are difficult to grow. It took John McLaren and William Hammond Hall over 25 years to plant the ‘outlands’ trees that protect the rest of the park from sand, salt and wind. Taking down any tree and replanting with stick figure trees or trees that are only a foot tall will not protect the fragile environment that is the park. DEIR words ‘implementation of the proposed project may adversely affect protected trees’ and ‘ground-disturbing activities may injure roots’. In speaking to an arborist he states that any shrub that is 10’ tall is a tree (myoporum). Who determines what should come down? Is it the private tree removal contractors?” (*Shana McGrew, email, no date [I-McGrew-15]*)

“The project calls for the removal of 16 ‘trees’ and 44 ‘shrubs’. I am not certain that this distinction between ‘trees’ and ‘shrubs’ is either technically valid or practically useful in this context. The ‘shrubs’ are Myoporum Laetum. Many are over 30 feet tall. They are tough and salt-resistant and were deliberately planted in this area to serve as the first line of defense in shielding the rest of the park forest from stiff ocean breezes.

Mitigation Measure M-BI-3 calls for tree replacement: ‘The SFRPD shall replace the trees removed within SFRPD-managed lands with trees of equivalent ecological value (ie., similar species) to the trees removed. If trees of equivalent value are not feasible or available, removed trees shall be replaced at a ratio of 1 inch for 1 inch of the diameter at breast height of removed tree.’

Does this Mitigation apply to the 44 ‘shrubs’ as well as the 16 ‘trees’? How will SFRPD select replacements species and select planting locations in a manner that will maintain the integrity of the Park’s western windbreak?” (*Greg Miller, letter, December 11, 2011 [I-GMiller3-02]*)

“There appears to be enough health and safety issues surrounding the use of artificial turf that adding nearly seven (7) acres to a natural habitat” (*Jerome Napoli, email, December 12, 2011 [I-Napoli-01]*)

“These projects will result in the loss of trees and other wildlife habitat, in increased traffic.” (*Diane M. Rivera, email, November 28, 2011 [I-Rivera-03]*)

“What can’t be addressed is the disturbance to the habitat and light cycles to such wild animals as birds, bats, etc. ...” (*Lyn Stein, email, December 11, 2011 [I-Stein-02]*)

“There are many other glaring problems with the DEIR that you are no doubt hearing about. Why are 30-foot Myoporum trees dismissed as only shrubs? ...” (*Joyce Warriner, email, December 8, 2011 [I-Warriner-04]*)

“One of the defects in the EIR is that the trees, many of the trees are called brush or bushes. That way they won’t have to be examined one by one. It’s very important that the windbreaks are built into Golden Gate Park because you’ve got a big ocean out there that’s blowing a lot of wind in.

There are even more trees connected to the water project also, and I think it’s a misstatement about these trees being most of them being brush.” (*Joan Wood, public hearing comment [I-Wood-01]*)

“... This means that the loss of the existing windbreak provided by healthy, mature trees and shrubs that will be removed was not evaluated. The windbreak provides protection from gusts directly off the ocean that negatively affect recreational play, the integrity of the forest, and wildlife habitat. Also, the presence of shadow in the area is a requirement for some wildlife. Loss of shadow was not evaluated. Mitigation measures that could have been considered include retaining the maximum number of trees and shrubs by reducing the number of the optional amenities that require the removal of trees and shrubs.” (*Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-01]*)

“The DEIR did not do long term modeling of the project effects on flora and fauna in the soccer area. The comments only included ‘construction related impacts’ of the project, not the environmental consequences over time of the existence of the proposed project or any of the alternatives. ... What happens if lots of little trees are used to replace tall established trees and shrubs - will they even survive in the area with the extensive tree removal proposed for both the soccer project and the water treatment plant? Before an irreversible act of removing healthy trees is considered, the full consequences must be known and appropriate project modifications proposed as mitigation.” (*Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-02]*)

“The cumulative environmental impacts of both the soccer and the water treatment projects together on the western end of the park were inadequately studied with comments about the potential for harm noted only during construction. Long-term impacts are noted for hydrology and water quality, without any mention of the long-term biological effects. These two projects together create a potential devastation of this wild area, both occurring in the same geographic area and possibly at around the same time. The aggregate physical impacts are not described and therefore cannot be mitigated.” (*Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-03]*)

“The mitigations for tree removal are simplistic and unrealistic, and not likely to ensure any mitigation to the potential harm or loss of healthy mature trees. What is meant by ‘removed trees shall be replaced at a ratio of 1 inch for 1 inch of the diameter at breast height of the removed tree?’ Does this mean one 20 inch diameter tree can be replaced by 20 each 1 inch diameter trees? The requirements for tree replacement must be specific and realistic to accomplish the functional tasks of the removed trees.

The definition of ‘trees’ and ‘shrubs’ is not in the glossary. This is critical, since only trees will be replaced 1:1 not the shrubs, which can be as tall and as important to the environment as any tree. Both are habitat for wildlife and support the livability of the west end of the park for all flora and fauna. The DEIR is inconsistent in its references to ‘trees and shrubs’. On page IV.C-22, the report states that ‘replacement of significant trees and shrubs in kind and at a 1:1 ratio would be consistent with the guidance provided in the Standards.’ Yet page IV.F-33 only references trees for replacement. Which is correct?” (*Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-04]*)

Response BIO-2

A number of commenters stated that the EIR does not provide a definition for shrubs and trees, that 30-foot tall shrubs are mischaracterized and should be considered trees for the purposes of analysis and mitigation, that any shrub 10 feet in height is a tree, and that ‘woody plants of 20 to 30 feet tall are certainly trees and are recognized as such under Article 16 of the San Francisco Department of Public Works (DPW) code definition of Significant Trees (O-CSFN-02; I-Anderson-03; I-Citron-05; I-Dennenberg-03; I-Edelson-05; I-KHoward-02; I-Khan-04, I-Koivisto2-05; I-Kukatla-04; I-McGrew-15; I-Warriner-04; I-Wood-01; I-Wuerfel-04). The EIR analysis for trees was written by an International Society of Arboriculture (ISA) Certified Arborist and is based on the surveys and *Tree and Large Shrub Report* conducted and prepared by HortScience, a reputable firm providing a wide variety of horticultural, arboricultural, and urban forestry expertise. There are no unequivocal definitions or technical standards that distinguish shrubs from trees. See, for example, the definitions provided by several well known sources:

- From *Biology of Plants* (Fifth Ed.) (Raven et al. 1992):
 - Shrub – A perennial woody plant of relatively low stature, typically with several stems arising from or near the ground.
 - Tree – A perennial woody plant generally with a single stem (trunk).
- From *Arboriculture* (Fourth ed.) (Harris et al. 2004):
 - Shrub – woody plant smaller in height than a tree, often formed by a number of vertical or semi-upright branches arising close to the ground.
 - Tree – a woody perennial, usually having one dominant vertical trunk and a height greater than 15 feet.

- From The Jepson Manual (Hickman [Editor] 1993):
 - Shrub – 1. A woody plant of relatively short maximum height. 2. A woody plant much-branched from the base.
 - Tree – A woody plant of medium to tall maximum height, with generally one relatively massive trunk at the base.

Article 16 of the San Francisco (S.F.) Public Works Code defines a tree as ‘any large perennial plant having a woody trunk(s), branches, and leaves and specifically defines certain trees taller than 20 feet as *Significant Trees*, which are protected under the ordinance. There is no definition given for shrubs of any height. However, Article 16 of the San Francisco Public Works Code does not apply to trees in the project area, as these are under jurisdiction of SFRPD. Although height is a consideration, perhaps even more important is growth habit. Trees are *generally* woody plants that have one main stem, while shrubs are *generally* woody plants that produce multiple stems at ground level. Indeed, a quick web search shows that myoporum is characterized in various sources as a shrub, a large shrub to small tree, or a tree. Therefore, it is a matter of professional opinion as to what constitutes a shrub versus a tree. Because most of the myoporum at the site have multiple stems arising at or near ground level and average 15 to 20 feet tall, these were classified as shrubs in the HortScience report. The preparers of the EIR concurred with this classification.

In response to comments I-Anderson-06, I-Citron-08, I-Dennenberg-06, I-Edelson-08, and I-Khan-07, the EIR discusses the athletic fields within the greater context of Golden Gate Park on pages IV.F-2, IV.F-23, IV.F-24, and IV.F-35. The EIR clearly states on page IV.F-23 that the loss of approximately 9 acres of turfgrass represents a loss of approximately 4.5 percent of similar habitat in Golden Gate Park.

In response to comment I-Koivisto-54 EIR page IV.F-5, paragraph 2 is revised:

Tree Resources

A tree and large shrub report was prepared for the proposed project by HortScience, Inc., in March, 2010.⁷ Trees and large shrubs at the project site were surveyed in September 2009. The survey included all woody plants with a trunk(s) measuring larger than 6 inches in diameter at breast height (dbh). The survey also evaluated the health and structural condition of each plant, and rated each tree or shrub for its suitability for preservation. The suitability for preservation considered each plant’s health, age, and structural condition, as well as its potential to remain an asset to the site in the future. The details for each surveyed tree and shrub included in this report are incorporated into the EIR by reference. A total of 130 trees and large shrubs were surveyed and evaluated. All 130 plants had been installed as part of landscape development. None of the species are native to San Francisco.

This revision does not change the analysis or conclusions presented in the EIR.

⁷ HortScience, Inc., 2010, *Tree and Large Shrub Report: Golden Gate Park Soccer Fields*. This document is available for review at the Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2010.0016E.

In response to comments I-KHoward-08 and A-SFPC-Antonini-10, the EIR discusses the Golden Gate Park Forest Management Plan and the Golden Gate Park Master Plan and how they apply to trees at the project site on pages IV.F-20 and IV.F-33. Six of the trees recommended for removal in the project's Tree and Large Shrub Report are dead or dying and their removal is consistent with Objective II, Policy B of the Golden Gate Park Master Plan. The 1980 Forest Management Plan addresses tree resources throughout Golden Gate Park, recognizing that the forest is not native to the area and must be sustained through reforestation efforts. As noted on page IV.F-33 of the EIR most of the trees in Golden Gate Park are nearing or at maturity and this holds true for the trees at the project site. The Forest Management Plan recommended a 25-year reforestation rotation during which all forest stands would be replanted and applies generally to the western end of the Park. In the absence of the project, trees proposed for removal in association with the project would eventually have been removed and replaced as budget allows under the general reforestation program. The project description includes replacement of trees at a 1 to 1 ratio for all trees removed as a result of the project, in accordance with SFRPD basic practice but independent of general reforestation plans for the Park.

In response to comment I-KHoward-09, the EIR describes conditions in the various plant communities that occur at the project site on pages IV.F-2 through IV.F-4. The EIR does not intend to assert that native plants do not occur at the site, simply that the potential for special-status plants is low since suitable habitat is absent. Existing vegetative conditions do not provide suitable habitat for any of the special-status plant species with potential to occur in the vicinity and as listed in Table IV.F-1 on pages IV.F-9 through IV.F-11, particularly since the natural dune plant communities historically present at the site were converted to forest and turfgrass many decades ago. These species are therefore not expected to occur at the project site. The 'native plant' restoration area, which is mentioned on page IV.F-4 of the EIR, contains a mixture of native and non-native drought tolerant species in an area with relatively open canopy cover and as such, provides somewhat better conditions for native species. However, few, if any of the native species planted there would have been native to the original dune community and, while it is possible that native special-status herbaceous species could be reintroduced here, it is not expected that this site would naturally be recolonized by special-status plant species due to its isolation and the amount of time that has lapsed since the original sand dune habitat was converted to the habitats currently found in the Park, i.e., non-native forest and turfgrass. In response to this comment the EIR page IV.F-8, paragraph 2 has been revised:

Special-Status Plants

Table IV.F-1 presents the name, status, habitat, and potential to occur of special-status plant species known from the general project area (San Francisco North quadrangle) that includes and surrounds the project site. None of the special-status plant species are considered to have a high potential to occur in the project area, and no special-status plant species were observed during a January 2010 biological resources site assessment (May & Associates, 2010) or the February 2011 site visit. Although these site assessments were conducted outside the blooming period for most of the special-status plants in Table IV.F-1, the overall potential of the site to support special-status plant species is considered low

based on the lack of dominance by native plants and lack of intact natural communities ~~native plant habitats~~, and on the disturbed and heavily managed condition of the area.

This revision does not change the analysis or conclusions presented in the EIR.

In response to all or part of comments I-Anderson-10, I-Citron-11, I-Darrigrand & Claflin-03, I-Dennenberg-09, I-Edelson-11, I-Joaquin-Wood-03, I-Joyce-04, I-KHoward-04, I-Khan-10, I-Koivisto-05, I-Lampert-04, I-ELang-01, I-BLewis-03, I-Warriner-04, I-Wood-01, and I-Wuerfel-03, cumulative effects on trees are addressed on pages IV.F-35 and IV.F-36 of the EIR. The San Francisco Westside Recycled Water Project⁷ would be subject to the same policies regarding trees as the proposed project and tree replacement would either be included as part of the project or as a mitigation measure. The total number of trees to be removed by both projects could number approximately 56 trees. This number includes the 16 trees that would be removed for the athletic fields project and approximately 40 trees located adjacent to the recycled water project site. However, the location of proposed access roads and other recycled water treatment plant support buildings/structures are more flexible than siting of the treatment plant building and could be designed wherever possible to avoid tree removal, as discussed further below. The loss of trees and shrubs resulting from these two projects is not considered substantial or significant when compared to the number of trees and shrubs in Golden Gate Park. It is estimated that there are over 27,000 trees and approximately 600 acres of forest in Golden Gate Park⁸ thus if 56 trees were removed in association with these two projects that would represent 0.002 percent of all trees in the Park. The cumulative impact of the two projects on the western windbreak would be negligible as neither project would remove trees associated with the windbreak along the Great Highway and between 180 and 240 feet of densely planted trees and shrubs would remain between the project sites and John F. Kennedy Drive. The *Golden Gate Park Forest Management Plan* calls for 65+ feet of windbreak plantings so the windbreak would remain uncompromised and substantially in excess of the recommended width.

In response to comment I-KHoward-06, and as noted above, not all trees and shrubs recommended for removal in association with the Beach Chalet Athletic Fields and San Francisco Westside Recycled Water projects would actually be removed. Between the two projects there are 56 trees within the project area that pose a high risk for human uses that would be removed. There are 27 large shrubs (*myoporum* and *pittosporum*) that are within or adjacent to proposed access roads and other recycled water treatment plant support buildings/structures that may be removed—these project components are flexible enough that they may be designed to avoid removal of some shrubs. An additional 60 *Myoporum* were recommended for removal at the recycled water project site because the species is not only non-native but is considered invasive. Removal of these shrubs is discretionary.

In response to comments I-Colao-02 and I-Edelson-03, most trees and shrubs surrounding the athletic fields are mature and would thus be expected to have extensive and established root

⁷ On February 28, 2012, the San Francisco Public Utilities Commission announced that a new recycled water treatment plant location outside Golden Gate Park was being pursued.

⁸ San Francisco Recreation and Park Department, 2010, Assessment of Urban Forestry Operations.

systems that draw on water sources other than or in addition to any water (surface or subsurface) potentially provided by field irrigation. Younger trees and shrubs and all landscape areas surrounding the fields have irrigation installed⁹ and would therefore not be affected by loss of irrigation on the fenced portions of the field.

Several commenters (I-Jungreis2-30, I-KHoward-07, I-KHoward-12) felt that the loss of trees and shrubs at the project site was inadequately quantified and analyzed, that the ecological value of the trees removed should be quantified, and that the HortScience *Tree and Large Shrub Report* for the project was not an objective study. The EIR quantifies the loss of trees and shrubs as a result of the project in Table IV.F-3 on page IV.F-32. The point must be made that the numbers provided here refer only to the trees and shrubs that were assessed, i.e., trees and shrubs that were within or immediately adjacent to the project footprint. There are many more trees and shrubs surrounding the project area that would remain undisturbed. The loss of trees and shrubs resulting from the project is ecologically insignificant when compared to the number of trees and shrubs in Golden Gate Park. As noted above there are over 27,000 trees in Golden Gate Park¹⁰ thus the 16 trees recommended for removal in association with the athletic fields project represent 0.006 percent of all trees in the Park. With respect to comment I-KHoward-07, the ecological value of the trees and shrubs to be removed is not measured by their collective trunk diameters but, rather, by the health and condition of the plants. As stated on page IV.F-32, most of the plants to be removed are mature to over mature *myoporum*, which are in a declining state, which reduces their productivity and thus their ecological value to wildlife. For example, as also stated on page IV.F-32 of the EIR, most of the *myoporum* onsite have raised canopies, thin crowns, and extensive dieback, indicating that these shrubs are not healthy and also indicating that their value to wildlife in terms of providing cover and forage is diminished. It should also be noted that *myoporum* fruit and leaves are toxic to most animal species, although birds are able to ingest the fruit and are known to disperse the seed. As noted on EIR page IV.F-5, the HortScience *Tree and Large Shrub Report* for the project evaluated the health and structural condition of each plant, and rated each tree or shrub for its suitability for preservation. This assessment was conducted according to standards typical of the field and considered ecological benefits as well as risks. The suitability for preservation considered each plant's health, age, and structural condition, as well as its potential to remain an asset (both ecologically and in a landscape context) to the site in the future.

In response to comment I-Koivisto-05, as described on EIR pages II-14 and IV.G-25, all stormwater runoff from the artificial turf would be collected in an underdrain system. Therefore, runoff from the fields would have no impact on remaining trees and shrubs.

In response to comments I-Koivisto-60 and I-KHoward-14, even though there are no SFRPD policies related to construction within a tree's dripline, the EIR recognizes that retained trees would require protection during construction and recommends implementation of Improvement Measure I-BI-3 on page IV.F-33. The improvement measure provides for the establishment of tree

⁹ SF Planning Dept., personal communication [email] between D. Mauer and A. Moore regarding irrigation at the athletic field site. Jan. 11, 2012.

¹⁰ *Op. cit.*

protection zones (TPZs) and fencing; prohibits construction related activities, such as grading and trenching, within the TPZ; monitoring of the health and conditions of the retained trees; and other measures designed to protect retained trees and shrubs.

Several commenters [I-KHoward-03, I-Koivisto-26 and -54, I-NLang-01, I-KHoward-14, I-Wuerfel-02, and I-Lieb-02] were concerned that removal of *myoporum* and other trees in association with the project would compromise the effectiveness of the windbreak along the western edge of the park by changing wind patterns and removing protection from salt spray and encroaching sand for the trees and other vegetation located farther inland. *Myoporum* performs a critical function at the western edge of Golden Gate Park and were planted there with the express function of serving as a windbreak. Currently the dense, wind sheared foliage of *Myoporum* and Monterey cypress forms an almost unbroken windbreak extending from Fulton Street to Lincoln Way. In addition, from the Beach Chalet south, there is a slatted cyclone fence, 8-feet or more in height that serves as part of the windbreak and also functions to block drifting sand extending a good part of the distance to Lincoln Way. The *myoporum* occur in front of and behind the fence. Behind and to the east of the fence and *myoporum* are rows of Monterey cypress, also a part of the windbreak. Recognizing its importance, the windbreak has been the focus of extensive replanting efforts since the 1980 *Golden Gate Forest Management Plan* was developed. As noted on EIR page IV.B-29, the project would result in the removal of 16 trees along the northeastern side of the existing fields and approximately 44 shrubs along the southern and southeastern sides of the fields, leaving the trees and shrubs to the west of the fields that are currently serving as a windbreak untouched.

In response to comment I-Wuerfel-01, as noted above, there would be no impact to the existing windbreak as a result of the athletic fields project. While removal of 16 trees and 44 shrubs would marginally reduce the amount of shadow in the project area, tree and shrub canopy would still be prevalent in the area. Therefore, there was no need to analyze project effects on wind and shadow (see also Response ERP-3).

A number of commenters (I-KHoward-04, I-KHoward-05, I-KHoward-07, I-KHoward-11, I-Koivisto-02, I-Koivisto-60, I-Koivisto2-06, I-GMiller3-02, and I-Wuerfel-04) were concerned with the adequacy of the tree replacement and protection measures, generally calling for a greater specificity of detail in the EIR above and beyond that required in a typical CEQA analysis. Some of this information is already provided in the EIR: the project description states that “tree replacement locations would include the southern edge of the project area and other appropriate areas as determined by the SFRPD Urban Forestry Supervisor and Natural Areas Manager.” Replacement plantings would not be required to maintain the integrity of the Park’s western windbreak, since the project would not remove any trees or shrubs that make up the windbreak.

While tree replacement and general landscaping are not included in EIR page II-22, Table II-3, Anticipated Construction Activities Schedule, this sort of activity is usually completed at the end of the construction period, it is thus presumed that tree replacement would occur in month 9 or 10 of the project schedule. The EIR proposes detailed tree protection measures in Improvement Measure I-BI-3 on page IV.F-33 and cites on page IV.F-5 the project’s *Tree and Large Shrub Report*, which includes detailed information on each tree and shrub evaluated for the project and is available from

the Planning Department for review—it is not required to present this level of detail in the EIR itself. Placement of highly technical information in a CEQA document should be avoided through summary of technical data (CEQA Guidelines Section 15147) and/or incorporation by reference (CEQA Guidelines Section 15150). The data presented in the report are summarized on pages IV.F-5, IV.F-32, and IV.F-33. In response to these comments, EIR page IV.F-5, paragraph 2 has been revised (see above). This revision does not change the analysis or conclusions presented in the EIR.

In response to comments listed above regarding shrub replacement, absent listing as threatened or endangered, or otherwise considered as sensitive, shrubs in general are not protected under federal or state law, nor are they specifically protected under local plans and policies, the shrubs at the project site are non-native and, in addition, *myoporum* is considered invasive. As noted above, in terms of vegetative cover and ecological function lost, they represent an insignificant fraction of the total number of shrubs in the area, the vast majority of which would remain untouched. In addition, landscaping for the project would include shrubs and other vegetation. As such, no mitigation is necessary for the loss of shrubs at the project site.

Comment I-KHoward-07 requests details on replacement planting be included in the EIR. These are details typically provided in a revegetation plan. As noted on page IV.F-33 tree replacement would be carried out in accordance with the Golden Gate Park Forest Management Plan and the Golden Gate Park Master Plan, as well as Mitigation Measure M-BI-3. These plans provide details on replacement planting, irrigation, species to be used, monitoring, etc. In response to this comment, EIR page IV.F-20 has been revised to include a new second paragraph:

Golden Gate Park Forest Management Plan

The Golden Gate Park Forest Management Plan (Plan) was prepared in 1980 to guide the management of the Park's 600 acres of forest resources. The Plan includes a forest inventory, a history of the Park's afforestation, and reforestation requirements and guidelines. These recommendations and guidelines are applicable to the Beach Chalet Athletic Fields project and include silvicultural and arboricultural techniques for tree removal and to enhance survival of replacement trees, irrigation techniques, tree species to be used, soil amendments, disease control, equipment to be used, and nursery practices.

In addition, EIR page IV.F-33, paragraph 1 has been revised:

The 16 trees proposed for removal are under the jurisdiction of the San Francisco Recreation and Parks Department. Five of the trees were recommended for removal in the 2010 HortScience report because of their poor health or they are dead. The remaining 11 trees are within the project footprint and would need to be removed prior to construction. The Golden Gate Park Forest Management Plan^{63a} has plans for long-term care and replacement of trees within the park and includes details on tree removal techniques, replacement planting, irrigation, species to be used, and monitoring. This plan

^{63a} State of California Resources Agency. Department of Forestry. 1980. Golden Gate Park Forest Management Plan. Sacramento, CA. This document is available for review at the Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2010.0016E.

is incorporated by reference into the EIR and is available from the San Francisco Planning Department for review upon request. Many of the trees in Golden Gate Park are nearing or at maturity and are in a state of decline. Consistent with *Section 4.06—Removal of Trees, Wood, Etc.*, the SFRPD must grant approval for any trimming or removal of trees in the project area. Although the SFRPD does not have a policy or ordinance that specifically identifies tree significance or requires tree replacement, in practice SFRPD has implemented the policies summarized above relating to forest management and removal and replacement of trees, and the management of wildlife habitat as requiring replacement of trees removed from SFRPD-managed lands at a 1 to 1 ratio. As described in Chapter II, Project Description, trees removed under the proposed project would be replaced at a 1 to 1 ratio, consistent with SFRPD practice.

This revision does not change the analysis or conclusions presented in the EIR.

The project description (EIR page II-21) refers only to replacement of trees at a one-to-one ratio or greater, which is consistent with SFRPD policy. However, the proposed project also includes ornamental planting and other new landscaping throughout the plaza area and on the slope between the plaza and the athletic fields, providing an opportunity for shrub plantings even though replacement of shrubs removed is not required. These shrubs would not be considered “replacement” as they would be substantially smaller than the existing myoporum. Based on preliminary landscape plans, it is expected that landscape shrub plantings would be greater than the number of shrubs being removed. In response to this comment, EIR page III-11, paragraph 1 has been revised for consistency:

Other Park Master Plan policies that would apply to the proposed project include Objective II, Policy A, Item 1, which requires that all activities, features, and facilities in Golden Gate Park respect the unique design and character of the park, and Objective II, Policy A, Item 2, which states that the “major design feature of Golden Gate Park and the framework within which all park activities occur is its pastoral and sylvan landscape.”¹¹ The proposed project would be generally consistent with these policies because the project would be implemented entirely within the boundaries of the existing complex, the proposed turf would be consistent with the character of the use as an athletic field complex, any trees or shrubs removed would be replaced at a ratio of at least 1-to-1, and the project would not diminish or encroach upon the surrounding open space. The project would also be consistent with Policy F, Sustainable Landscape Principles, which requires efficient use of water resources; minimization of chemical fertilizers, pesticides, and herbicides; and selection of low-maintenance and ecologically appropriate construction materials. This would result from the fact that proposed synthetic turf would require less water to maintain than the existing grass turf, and would not require chemical fertilizers, pesticides, or herbicides to maintain. Furthermore, as stated in Chapter II, Project Description, of this EIR, the synthetic turf would be returned to a turf manufacturer for reuse/recycling at the end of its lifespan.

¹¹ SFRPD, *Golden Gate Park Master Plan*; p. 3-9.

In addition, EIR page IV.B-29, paragraph 2 has been revised:

In terms of changes to the surrounding vegetation, as noted in Chapter II, Project Description, the proposed project would require the removal of 16 trees (in the northeast side of the field, just outside the existing fence line) and approximately 44 shrubs (along the southern and southeastern edge of the fencing). The project would replace each tree ~~and shrub~~ removed at a one-to-one or greater replacement ratio. Tree replacement locations would include the southern edge of the project area and other appropriate areas, as determined by the SFRPD Urban Forestry supervisor and Natural Areas manager. While tree removal and replacement has the potential to alter the visual character of the project site, the number of trees ~~and shrubs~~ proposed for replacement is minor compared with the number that surround the project site and would be retained. Even if some portions of the site result in a reduced tree and shrub coverage, as compared with existing conditions, it is expected that all sides of the existing fields would continue to have abundant vegetation, which is one of the site's primary defining visual characteristics. Therefore, the removal of trees and shrubs and replacement of trees ~~and shrubs~~ would not have a significant adverse impact on the visual character or quality of the project site.

In addition, EIR page IV.C-22, paragraph 3 has been revised:

The stands of vegetation that surround the field area are character-defining features of the Beach Chalet Athletic Fields. Some of the individual trees and shrubs within these character-defining stands would be removed as part of the proposed project. Approximately 16 Monterey cypress/Monterey pine and 44 myoporum shrubs would be removed to accommodate the project. Although these character defining elements of the landscape would be removed, ~~they~~ trees would be replaced in kind at a 1:1 ratio, which would generally maintain these features upon completion of the project and over time. For informational purposes, replacement of significant trees ~~and shrubs~~ in-kind and at a 1:1 ratio would also be consistent with the guidance provided in the Standards. As such, the integrity of the Athletic Fields' trees and shrubs would be generally maintained.

This revisions do not change the analysis or conclusions presented in the EIR.

With respect to the replacement of grasslands removed by the project (O-GGAS3-04, I-Bridges-02), the "grassland" referred to by the commenter is composed of irrigated turf that is not native to the area in terms of species composition or habitat type. In addition, the fields are used recreationally. The fields thus offer only marginal to low quality habitat functions and values. This is not a "sensitive natural community" as defined on EIR page IV.F-4. Therefore, the loss of this vegetation is not considered significant under CEQA and no mitigation would be required.

Comments I-Kaufman-02, I-McGrew-15, I-Napoli-01, I-Koivisto-60, I-KHoward-10, I-Mabutt-01, I-Rivera-03, and I-Stein-02 provide general statements about the beneficial and adverse effects of the project, personal opinion, or additional information that is not considered pertinent to the biological resources analysis, but do not address the adequacy or accuracy of the analysis presented in the EIR. As such these comments are noted, however, no further response is required.

L.4 Impacts to Wildlife and Wildlife Habitat [BIO-3]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-NPS-12	I-Brown-01	I-Kessler-03	I-Murphy-09
O-GGAS2-03	I-Brown-04	I-Kohn2-09	I-Murphy-10
O-GGAS2-04	I-Ciccione-01	I-Koivisto-05	I-Napoli-01
O-GGAS2-26	I-Citron-02	I-Koivisto-42	I-O’Leary-08
O-GGAS2-29	I-Colao-06	I-Koivisto-53	I-O’Rorke-01
O-GGAS2-30	I-D’Anne2-01	I-Koivisto-55	I-Richards-03
O-GGAS2-31	I-FDavis-02	I-Koivisto-56	I-Richman-01
O-GGAS2-32	I-Denefeld2-01	I-Koivisto-57	I-Rivera-03
O-GGAS3-01	I-Donjacour-02	I-Koivisto-58	I-MRussell-05
O-GGAS3-02	I-Donjacour-03	I-Koivisto-59	I-Sargent-01
O-PAR2-09	I-Draper-02	I-Koivisto-61	I-Sargent-03
O-RCA-02	I-Elias-02	I-Koivisto-62	I-Schoggen-02
O-SCSFBC-10	I-Elias-03	I-Koivisto2-07	I-Schultz-14
O-SCSFBC2-01	I-Elias-07	I-McCowin-04	I-Schultz-16
O-SCSFBC3-02	I-Foree-Henson-02	I-McDevitt-02	I-Schwartz-02
I-Anderson-08	I-Gattuso-02	I-McGrew-14	I-Stein-02
I-Bartley-01	I-Hahn-02	I-Moss2-03	I-Warriner-02
I-Bartley-03	I-Hall-01	I-Moss2-04	I-Warriner-04
I-Bartley-04	I-Hoffman-02	I-Murphy-02	I-Warriner-05
I-Brant-02	I-Hyde-02	I-Murphy-03	I-Weeden-01
I-Bridges-02	I-Jungreis2-16	I-Murphy-07	I-Weeden-05
I-Bridges-07	I-Jungreis2-19	I-Murphy-08	I-Wuerfel-02
I-Browd-03	I-Jungreis2-28		

“Please address how the Proposed Project is consistent with the Western Snowy Plover Recovery Plan (2007), which includes the following discussion on the effect of lighting on the plover:

... sources of noise that would disturb western snowy plovers should be avoided...” (Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-12])

“What may be ‘significant’ in a rural or even suburban community is different than what is locally ‘significant’ in a dense urban metropolitan area. In San Francisco, unlit, semi-natural areas are few and far between—hemmed in from each side by houses and subject to ever-increasing demands from recreational users. It is clear that in San Francisco that parks—even designated ‘wild’ areas like the western end of Golden Gate Park—are not for wildlife, native plants, or the people that care about them. ‘Recreation’ in these places is not the quiet enjoyment of nature but, rather, the industrial-scale” (Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-03])

“The DEIR’s analysis in this regard is especially weak given the context in which the new impacts would occur. There is very little habitat, especially wide-open, grassy habitat, left in San Francisco. The significance of the impacts depend on the specific setting of the project, including the severity of existing environmental harm. (Communities for a Better Environment v. California Resources Agency [2002] 103 Ca1.App.4th 98 120 [‘[T]he relevant question’ ... is not how the effect of the project at issue compares to the preexisting cumulative effect, but whether ‘any additional amount’ of effect should be considered significant in the context of the existing cumulative effect. [footnote omitted] In the end, the greater the existing environmental problems are, the lower the threshold should be for treating a project’s contribution to cumulative impacts as significant. [footnote omitted]’) The DEIR makes no consideration of the existing, compromised nature of San Francisco’s environment and downplays (or is uninformative) about the impacts that removing up to 9 acres of meadow-like habitat from San Francisco’s western edge.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-04]*)

“The DEIR is notably incomplete in its failure to fully assess all wildlife that use the area. The public, agency personnel, and other decision makers cannot be expected to make informed decisions about impacts if the information provided about biological resources such as local wildlife species are so incomplete.

The DEIR states that multiple surveys were conducted and a total of 52 bird species were observed in the area. (DEIR, at IV.F.-18) Unfortunately, the DEIR does not provide adequate information for the reader to assess the quantity and quality of the wildlife surveys and instead refers the reader to another document on file with the, Planning Department.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-26]*)

“The DEIR’s approach to conservation of local birds is, essentially, the attitude that the birds and other wildlife that use the Beach Chalet can go ‘elsewhere’. This is the kind of disregard for wildlife that has resulted in decades of habitat loss in San Francisco and elsewhere, along with a subsequent decline in local biodiversity. We argue that the DEIR should not just look at the impacts on a regional scale, but also on a local one that focuses on the western end of Golden Gate Park, a true island of habitat surrounded by homes and other developments that can be actively hostile to birds’ survival. The DEIR reflects the attitudes of those that are satisfied to push wildlife into ever smaller and more fragmented pieces of habitat. At which point will San Francisco’s leaders take responsibility for considering wildlife and habitats in balance with active recreation?

In any event, the DEIR’s approach is also flawed at a legal level because it overstates the availability of ‘comparable’ habitat to which birds may be evicted and because it fails to address direct impacts to birds, such as noise, lights, increased levels of human disturbance, trash, and changing species dynamics.

The DEIR downplays potential impacts to sensitive or special-status species by stating that 200 acres of ‘similar’ habitat exists in Golden Gate Park, including a golf course, archery range, and the Bison Paddock. (DEIR, at IV.F-23) First, the DEIR should explain the process and criteria for ranking these areas as ‘similar’ for purposes of assign impacts. For example, the golf course has very different landscaping goals, is not closed as often as the Beach Chalet fields, and has active (and apparently successful) gopher control efforts. Second, Golden Gate Audubon finds it somewhat shocking that the DEIR would suggest that the archery range—*which presumable includes the regular activity of arrows flying through the air*—would provide suitable replacement habitat for the Beach Chalet.

The DEIR states that the loss of approximately 9 acres of habitat represents a loss of approximately 4.5% of ‘similar habitat’ or ‘0.3% of similar foraging habitat (e.g., turf grass and grasslands)’ in Golden Gate Park but, again, provides no basis for assessing the ‘similarity’ at issue. (See DEIR, at IV.F.-23, 24) The DEIR’s authors cannot in good conscience assert that the fields in the eastern end of Golden Gate Park, which are much more intensively used and occupied by humans and dogs, provide ‘similar’ habitat for raptors as the Beach Chalet.

The DEIR further downplays the loss of habitat by asserting that 7,050 acres of ‘open space’ are available within a 5-mile radius. (DEIR, at IV.F.-24, footnote 30) Golden Gate Audubon notes that the 5-mile radius includes the Golden Gate National Recreation Area, including Ocean Beach, the Presidio, and parts of the GGNRA in southern Marin County. A review of an area map (see Figure 2) demonstrates that even in these ‘open space’ areas, few large, open grass meadows are available, especially in areas that are relatively dark at night and undisturbed for much of the year.

In short, the DEIR’s lumping of all grasslands and turf into a ‘similar habitat’ category unduly minimizes the value of the grass fields at the Beach Chalet, downplays the biological impact, and constitutes a significant flaw in the DEIR. The DEIR must be revised to provide the criteria by which the ‘similarity’ of habitat was assessed so that readers and decision makers can make the assessment for themselves rather than relying on the DEIR’s unsupported conclusions.

As the image provided on page II-3 of the DEIR demonstrates, the Beach Chalet soccer fields constitute the second-largest contiguous open grass meadow in the western portion of Golden Gate Park, second only to the Polo Fields. The DEIR blithely concludes that birds will go elsewhere. However, it does not mention of the lack of open grassy habitat in this portion of the city (or in San Francisco as a whole). The loss of this much open grassy habitat should have been assessed, especially given the lack of such habitat in San Francisco as a whole. This is part of the requirement to consider impacts, especially cumulative impacts, within the context of the present, compromise environment.

Figure 1. Map of western end of Golden Gate Park, from page 11-2 of the DEIR. Note that the Polo Fields are the only contiguous open meadow habitat similar in size and structure to the Beach Chalet in Golden Gate Park.

We note that the DEIR does not provide a map of the entire 5-mile radius purportedly assessed in the DEIR. A review of Google Images demonstrates that there are very few other open meadows that are the same size as the Beach Chalet or larger in San Francisco, let alone the western side of San Francisco. ... The DEIR should not assess all 'open space' in the aggregate but, rather, similar habitat with similar characteristics (i.e., large open meadow, relatively dark at night, relatively low-levels of disturbance during many parts of the year. As written, the DEIR's analysis of purportedly similar habitat is incomplete and misleading." (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-29]*)

"The DEIR acknowledges that the installation and use of the 60-foot stadium lights 'has the potential to interfere with migratory corridors' and impede nesting birds and other wildlife in the area. (DEIR, at IV.F-26). However, the DEIR concludes, without providing any evidence, that this impact will be less than significant.

First, the DEIR acknowledges that the migratory patterns through San Francisco is unknown. Local birders and biologists have identified the western end of Golden Gate Park as an important migratory corridor, especially for passerines. Before merely assuming no impact, the DEIR would be improved by actually studying the problem and, where information is absent, err on the side of protecting the wildlife resource rather than assuming it will endure the impact.

Second, the DEIR is notable in its failure to discuss compliance with the San Francisco Standards for Bird-Safe Buildings. (DEIR, at IV.F.-27) While the DEIR acknowledges that Golden Gate Park is an Urban Bird Refuge, the DEIR does not describe the conflict between the project and the Standards requirement that there be a 'minimal use of lighting.'

...Fourth, the DEIR primarily addresses the displacement of nesting birds due to lighting (and other impacts) by stating, without providing supporting evidence, that there is 'abundant habitat available to them elsewhere within Golden Gate Park.' (DEIR, at IV.F.-29) While there are, indeed, many other trees and shrubs in the park, the DEIR should provide a scientific or factual basis for the assumption that those areas (1) are available (i.e., not already occupied), (2) provide adequate replacement habitat, and (3) that the wildlife in question can be expected to successfully move to the 'replacement' habitat and breed. The DEIR does not provide any such information.

Fifth, the DEIR discusses several raptor species, but it virtually ignores owls. Great-homed Owl and Barn Owls have been observed in the area after sundown. Presumably, ESA's wildlife surveys were not conducted at night. Lighting can have very significant impacts on owls and their prey. Additional study of nocturnal wildlife must be conducted before a credible conclusion of no impacts can be rendered in the EIR." (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-30]*)

“The DEIR acknowledges that increased noise levels at the site may have an impact on local wildlife populations. (DEIR, at IV.F-30) Ultimately, the DEIR dismisses these concerns and asserts that the noise at the site will be like ‘distance traffic noises’ to which birds will adapt (or not). (*See id.*) The DEIR concludes, without providing any supporting evidence, that the ‘proposed project is not expected to have a substantial effect over that of baseline conditions on avian reproduction in the project area.’ (Id. at IV.F-31)

Golden Gate Audubon asserts that the noise levels at the athletic fields after the project is completed will be much different than those that exist now. First, there will be more people and cars making noise in the immediate vicinity. Second, the noise levels will be more persistent throughout the year as more play is accommodated at the field each day. Third, the noise levels will extend late into the night, a wholly new impact in an area of relative calm at night. Fourth, the DEIR does not address whether reflect whether the artificial turf will reflect noise levels at a different level than natural grass (which may be better at absorbing sound).” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-31]*)

“The Biological Resources section is silent as to impacts arising from the increase in human activity at the site other than those associated with the initial construction. Clearly, the substantial increase in field usage will result in more people populating the area, resulting in more direct impacts on and interactions with wildlife. More people means more incursions into the vegetation, more food waste and other trash, and more dogs. Moreover, the DEIR does not address the ‘construction’ impacts that must arise when the turf field will be replaced, something that is wholly predictable and acknowledged in the DEIR.

The DEIR does not address impacts to wildlife arising from changes in species dynamics at the site. Species such as House Sparrow, Common Raven, and American Crow thrive around human development and activity. These species may be expected to increase in and around the playfields, especially if there is more human food waste in garbage cans or littered on the ground. These species can have significant negative impacts on other birds and wildlife. The DEIR should discuss these potential impacts and propose mitigation measures (e.g., wildlife-proof trash containers, regularly trash clean-up, etc.) to reduce their occurrence and the severity of subsequent impacts.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-32]*)

“First and foremost, it fails to assess impacts of the biological and ... For my our comments today I’ll focus primarily on birds. Our volunteers have been out there collecting data for years and they’ve detected use of the soccer fields by myriad species, including white crowned sparrows, red shoulder hawks and, during the breeding season, even a species that’s rare to breeding in Golden Gate Park, the Hutton’s vireo, right around the Park and the trees around the Park itself.

These species and others will suffer impacts because of the conversion of the area to what is the equivalent ecologically of a parking lot. There’s no doubt about it. That’s exactly what that is.

They may as well pave it over because that's what Astroturf is like, maybe worse, actually, given the water quality concerns." (*Michael Lynes, Golden Gate Audubon Society, public hearing comment [O-GGAS3-01]*)

"Part of the DEIR's inadequacies in these regards is that it continually states conclusions that support its findings of less than significant impacts without citing studies or other data. This is not allowed by CEQA and it renders the DEIR fatally flawed. I'll give you an example.

This will take just the nine acres of the fields themselves out of use. If you look at this map, this is a map in the DEIR which shows you the amount of green space that's right here. There's only two other spots in the western end of Golden Gate Park that compare to that, and if you look in a broader --within a five-mile radius, the red dots are spots within the Park that are about the size of Beach Chalet or larger.

There's not a whole lot of open grassland habitat within even that five-mile radius of the open space that's talked about in the DEIR. Instead they just lump together open space altogether." (*Michael Lynes, Golden Gate Audubon Society, public hearing comment [O-GGAS3-02]*)

"The analysis in the DEIR regarding the habitat of birds and other wildlife that would be impacted because of the proposed project are inadequate. The DEIR provides at page IV F-23: 'The loss of foraging habitat (and prey) for raptors and other birds protected under the California Fish and Game Code, as well as for special-status bats, could be considered significant; however, there are over 200 acres of similar habitat in Golden Gate Park, including the nearby golf course, archery range, and bison paddock.' At least that list of 'similar habitats' does not include the 'preferred alternative site' for the water treatment plant!

We suggest the analysis of this issue adhere to the guidelines specified in Objective 8 of the Golden Gate Park Master Plan Flora and Fauna - Ensure the Protection of Plant and Animal Life." (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-09]*)

"The impact on wildlife habitat will be deleterious. Owls that sleep during the day will be perplexed and the impact on the environment cannot be good. Birds migrating will vary their course and stay away from their customary path." (*Richmond Community Association, letter, December 12, 2011 [O-RCA-02]*)

"The DEIR accurately states that the 'current parking lot is paved and provides little habitat for wildlife' (Page IV.F-4). But the DEIR does not recognize that replacing a meadow with synthetic

turf is the equivalent of paving 9 acres of habitat. The topsoil is removed, replaced with foot of gravel and a plastic surface. As with a paved surface, temperatures above the synthetic turf surface can rise to much higher levels than habitat. Within this 9- acrea area there no longer are plants to support insects, or insects to support birds and ground life.

The removal of trees and tall (30-foot) shrubs, and the construction of related facilities and expansion of the parking lot bring the loss if habitat to over ten acres.

For example, page IV.F-23 states:

The loss of foraging habitat (and prey) for raptors and other birds protected under the California Fish and Game Code, as well as for special-status bats, could be considered significant; however, there are over 200 acres of similar habitat in Golden Gate Park, including the nearby golf course, archery range, and bison paddock.

There are several problems with this statement. As mentioned before, the project site is centrally located between open space in Golden Gate National Recreation Area, the cliff areas of the Balboa Natural Area and Sutro Heights Park and the Pacific Ocean. Removing the project site habitat would create a donut hole. Also, The bison paddock is not a meadow, but is most compacted soil with little-to-no plantlife, and should not be counted as foraging habitat.

Some species known to inhabit Golden Gate Park and surrounding parkland, including California quail and coyote, are simply not mentioned in the DEIR, and the impact of the project is not discussed." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-10]*)

"The Sierra Club is still researching some of issues of a complex nature related to the adequacy of the DEIR, such as the absence of an analysis of the biological impact of the removal of several acres of meadow to be replaced with what is essentially pavement. This includes the effects of removing a large area of habitat that would essentially form it barrier between the GGNRA from the greater area of western Golden Gate Park." (*Sierra Club San Francisco Bay Chapter, letter, no date [O-SCSFBC2-01]*)

"We're looking into the issue of what would the impact of ten acres of essentially paving this area in the middle of this open habitat area next --connecting the national park land." (*Sierra Club San Francisco Bay Chapter, public hearing comment [O-SCSFBC3-02]*)

"What is the impact on wildlife should such a barrier be created?" (*Raja Anderson, letter, December 12, 2011 [I-Anderson-08]*)

“Last Friday I, along with two colleagues, met with reporter Lisa Carmack of the Bay Guardian to tour and discuss the artificial turf issue at the Beach Chalet. During our 30 minute walk I identified 27 species of birds by sight and sound, well over 100 individual birds who were using the grass soccer fields and immediate surroundings to feed on a variety of vegetation, insects. Also included were a bonded pair of adult Red-shouldered Hawks who were hunting Botta’s Pocket Gophers along the perimeter. That was only a 30 minute survey on a drizzly day in November. Over the course of a year many more species and thousands of birds can be documented. As I’m sure you are aware birds in general, raptors and owls in particular, are the most effective natural pest control agents there are.” (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-01]*)

“Regardless of the survey team’s inability to find active nests however, the planned removal of over seven acres of grassland and woodland habitat will be a death sentence for the wildlife that use this area today. These animals cannot, as the report implies, simply move to another area. Other areas are already in use by other animals surviving in remaining open space areas. Other areas are at their biological limits already and are fully subscribed. This is the simple biological fact that the producers of the Draft EIR appear to be in denial of. This particular pair of Red-shouldered Hawks (that one group I organize, the SF Bay Area Raptor Nest Study has been monitoring since 2007) is a long established pair that uses this area as their primary diner. If this verdant habitat is plasticized and lit up these birds will try to move on but will only run into another territorial pair, conflict will ensue, the result being the removal of this biological resource along with an amount equal to all of the other wildlife that is now using this area including birds, mammals and insects.” (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-03]*)

“Add on top of that the effective removal of the perimeter habitat that will be lit up until 10:00 PM most nights of the year. These areas cannot be used for nocturnal animals that use it to feed or diurnal animals that need it to rest from the high demands of surviving in a near-urban environment. The large increase in traffic from humans will also have a major negative effect on these animals.” (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-04]*)

“The EIR is obviously flawed and inadequate in its minimizing of the huge construction’s effects on wildlife ... for the whole western Sunset district.” (*Michael Brant, letter, December 2, 2011 [I-Brant-02]*)

“Removal of 9 acres of natural grass which provides habitat to birds, butterflies and other wildlife and there is no mitigation proposed.” (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-02]*)

“The SF Recreation and Parks Dept. is proposing to replace 9 acres of open, naturally-growing grass in Golden Gate Park with synthetic turf and to install several 60-foot tall lights that will illuminate the western end of Golden Gate Park for the first time. This project will remove important wildlife habitat, increase disturbances to ...wildlife...” (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-07]*)

“I attended the Planning Commission meeting on Dec. 1 and heard speaker after speaker present lucid, compelling arguments refuting the DEIR’s conclusions. They addressed the destruction of wildlife habitat, ... the cutting down of more than 50 trees,” (*Gary Browd, letter, December 7, 2011 [I-Browd-03]*)

“I want to express my concern and dismay at the proposed soccer field. This project will seriously affect local wildlife as well as removing yet more natural space.” (*Jessica Brown, letter, November 30, 2011 [I-Brown-01]*)

“I also feel that the millions of dollars this will require could be better spent fixing the area up for more environmental usage.” (*Jessica Brown, letter, November 30, 2011 [I-Brown-04]*)

“The area around the field and even the field itself has become a haven for wildlife. I have seen many ravens and some blue heron there.” (*Donald Ciccone, letter, November 21, 2011 [I-Ciccone-01]*)

“As a resident of the Sunset district and a frequent visitor to the park, I am aghast at the idea of a sports complex disturbing the tranquility of the western edge. . As a lover of nature I worry that animal habitats will be adversely affected and litter will increase.” (*Ben Citron, letter, December 11, 2011 [I-Citron-02]*)

“Artificial ‘grass’ removes the microbiology necessary for the sustainability of our native fauna.” (*Flora Colao, letter, November 23, 2011 [I-Colao-06]*)

“I am opposed to the draft EIR for the Beach Chalet Athletic Fields. Much of the previous testimony before your committee has outlined some of the inadequacies of this EIR.

My concern is for the long-term effect on the ecology of the proposed site for this untested design for a soccer field. This soccer field is proposed for a very sensitive area along the beachfront. What effects on animal habits. ... (*Denise D'Anne, Letter, December 7, 2011 [I-D'Anne2-01]*)

"The very idea of turning an 11 acre meadow into a formal 'Astroturf'-paved 'night baseball-lit' sports arena is an obscenity and contrary to everything Golden Gate Park should be! ...what of the myriads of creatures that live in and use the area? Who has the right to pave over the flowers and the bugs and the birds, and even the gophers, who live there? ... (*Fred W. Davis, Letter, July 15, 2011 [I-FDavis-02]*)

"The artificial turf, lights, and significant structural additions to the area would severely damage the habitat for many local populations of wildlife. For example, raptors rely on rodents and other species that are supported by an environment of natural grass." (*Charles Denefeld, Letter, December 10, 2011 [I-Denefeld2-01]*)

"The report appears to underestimate the number of birds' nests that would be affected, compared to the Audubon Society's count as reported at the hearing. The DEIR does not make much mention of mammals being affected by the lights and the noise. I have personal experience of the introduction of increased lighting at Crissy Fields by the opening of Planet Granite. Before Planet Granite and its lights (and also increased traffic, both human and automobile) I often saw various larger mammals, coyotes, raccoons, skunks at Crissy Field at night. These sightings dwindled to nothing after Planet Granite's opening. The argument that the animals and birds will go elsewhere in the city ignores the fact that we are pushing on animal habitats from all directions. Every intrusion is an erosion of animal habitat. We have a responsibility to all of the living creatures of the city of St. Francis." (*Annemarie A. Donjacour, Letter, December 8, 2011 [I-Donjacour-02]*)

"The removal of natural grass removes a significant food source for animals like rabbits and gophers, that are an important part of the food chain in the wilder west end of Golden Gate park. Robins cannot pull earthworms through Astroturf." (*Annemarie A. Donjacour, Letter, December 8, 2011 [I-Donjacour-03]*)

"The conservation of nature in the park- cutting down trees and brush, removing many acres of living turf, installing lights that interfere with the owls, coyotes, skunks and other nocturnal animals in Our park is not good for San Francisco. we should be doing everything possible to PRESERVE what we have left! especially the precious few owls and coyotes we have living in

Our park who will be drastically affected by lights that will prevent them from being able to see and to keep from being seen, thus causing them to move on or die due to lights wrecking their hunting grounds. we have a whole city in which we can install a soccer complex with nighttime stadium lights- lets not pick one of the only places in the city that has owls and coyotes living in it as the place to put these lights and artificial turf (which these animals prey need as a food source and living quarters!). coyotes and owls are amazing to not have disappeared completely from our city- it is a miracle that they exist at all in golden gate park, that miracle was very graciously bestowed upon us. let's not s*&% on that miracle, ok?" (*Andrea Draper, Letter, December 12, 2011 [I-Draper-02]*)

"The DEIR states clearly that the project will be disruptive to three bird species that are protected under California law. The red-tailed hawk, the red-shouldered hawk, and the Cooper's hawk all use the large tree and open field habitat at the proposed site for nesting and foraging; and all are threatened due to loss very type of habitat. The Golden Gate Audubon Society reconnaissance survey found five active nests within a five mile area of the soccer fields. Two of these nests are Great-Horned Owl nests, another federally protected species, endangered in California. This proposed project will destroy some of the large tree habitat that supports all these species." (*Evan Elias, Letter, December 11, 2011 [I-Elias-02]*)

"The DEIR states that the proposed soccer fields will significantly disrupt these threatened bird species in that part of the park, but that this disruption is not important because there is other similar habitat available in other parts of Golden Gate Park. This argument conveniently ignores the reality that dwindling habitat is a key factor the decline of these species. Forcing more birds into a smaller range may cause intraspecies competition, and increase stresses that could cause a further decline in the local raptor population." (*Evan Elias, Letter, December 11, 2011 [I-Elias-03]*)

"This project does not belong in Golden Gate Park. The DEIRs proposed mitigations do not make up for the amount of wild bird habitat loss and degradation that it would cause." (*Evan Elias, Letter, December 11, 2011 [I-Elias-07]*)

"We have owned our house here on the GH since 1986. We started seeing 5 years ago a return of hawks/kites to the large trees along the GH. What happens to the small birds which use trees for nesting and protection if the large trees around the West Sunset playground?" (*Elizabeth Foree and Ralph Henson, Letter, December 9, 2011 [I-Foree-Henson-02]*)

“These chemicals will disrupt the well-being of the species habitat and bio accumulate within the organisms that live in the area.” (*Courtney Gattuso, public hearing comment [I-Gattuso-02]*)

“That the City is rushing into this project without fully considering the negative impacts to the park and the environment: Cutting down many mature trees that serve as a wind break and sacrificing a benign, bucolic grass field and covering it with an artificial, potentially toxic substance without fully considering:” (*Thomas Hahn, letter, December 9, 2011 [I-Hahn-02]*)

“Removal of 9 acres of natural grass which provides habitat to birds, butterflies and other wildlife and there is no mitigation proposed.” (*Robert Hall, letter, November 29, 2011 [I-Hall-01]*)

“The west end of the Park is rich with wildlife, possum, skunks, racoons, fox, birds, now coyotes and on and on and on. They have a tough time in the city and the west end of Golden Gate Park is their habitat of safety. It’s their refuge. And they add to the richness of humanity and certainly to the planet.” (*Martha Hoffman, public hearing comment [I-Hoffman-02]*)

“GG Park is an icon and it already plagued by too many people and events. It should be left as natural as possible, artificial turf is dangerous to children and it recues the space for the wildlife in GGP.” (*Katherine Hyde, email, December 11, 2011 [I-Hyde-02]*)

“The plan requires an increase in the amount of development of this sylvan space: there is insufficient analysis of the direct and indirect development impact upon the habitat of birds, raptors, and special-status bats (the Beach Chalet Soccer Fields are located within an Urban Bird Refugee as defined by the City’s Bird-Safe Guidelines).” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-16]*)

“The plan requires significant construction: there is insufficient analysis of the construction schedule and potential conflict with the bird nesting season (January 15th through August 15th).” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-19]*)

“The plan requires the construction of a large athletic complex: there is insufficient analysis of the volume and duration of noise coming from the large athletic complex and its impact upon ... local wildlife, and migratory wildlife.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-28]*)

“One of my primary concerns is for the wildlife in the area. I am a wildlife photographer and spend two to four hours a day in the wild parts of our parks. The animals need these areas left alone. If you cover the land and build on it, take down more trees, and bring in more people, you will be disrupting the haven that exists there now: birds, raccoons, hawks, bats, coyotes. The few wild parts of our parks which remain need to be preserved for the wildlife which now lives there. We are supposed to be sharing the earth with them, but a plastic soccer field and a water treatment plant would take over this area for single use purposes.” (*Janet Kessler, email, December 8, 2011 [I-Kessler-03]*)

“One of the most specious conclusions that appear repeatedly through the draft EIR concerns the availability of other wildlife habitat in the park and throughout San Francisco. The DEIR’s analysis runs as follows:

Birds that may be deterred from nesting near the Beach Chalet Athletic fields ‘have abundant habitat available to them elsewhere in Golden Gate Park, additional San Francisco parks and natural areas and the Presidio.’ (DEIR, page IV.F-29.)

Yet this argument runs directly contrary to the provisions of California Fish and Game Code § 3503.5. That Code section recognizes that raptors, having lost much of their habitat to development, their populations are substantially more vulnerable to further loss of habitat. (See footnote 11, page IV-F of the DEIR.) Therefore, further loss of habitat is unjustifiable. In other words, there already inadequate extent of habitat available for raptors in San Francisco is, by statutory definition, not adequate to justify further loss of habitat, such as nine acres in the west of Golden Gate Park and the surrounding areas.” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-09]*)

“Looking at TABLE ES-I Impact BI-2 and BI-3 again raises definition questions. ... what is ‘equivalent ecological value’ (is it only similar species, or was that presented as an example of equivalent ecological value?), ...” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-05]*)

“Fields out of use for neighborhood humans are not out of use for neighboring animals. Unlike the prior areas that have been stripped and laid with synthetic turf, this area of Golden Gate park

is an ecosystem. Ignoring the consequences to the animals who live in and use this area doesn't make such consequences nonexistent." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-42]*)

"...other omissions specific to this section of the DEIR are troubling. On p. 4, the current ecosystem of this site is dismissed as irrigated turf and non-native forest, ignoring its use by various migratory communities and local non-native species." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-53]*)

"The wildlife surveys are totally inadequate, apparently composed of one visit in February and another in May. There are no consultations with experts possessing decades of experience in the wildlife populations of this area, experts such as local amateur enthusiasts to the Audubon Society to the California Academy of Sciences. There is no mention of prior storms that may have knocked down old nests, though a point is made about finding no old nests, and no mention is made of the sighting methodology used, the number of spotters looking, their credentials and expertise, daylight conditions, hours (coyotes in the area drive most of the birds away temporarily), or any of the myriad issues relevant to evaluating the worth of the collected data. This area is full of raptors, for instance, and is part of their migratory corridor across the Golden Gate. Given the everyday presence of birds in this area as observed by local residents, the data collected in these two visits for the DEIR is inadequate." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-55]*)

"Noteworthy, also, is a brief comment on p. 5 stating that the trees/shrubs largely attenuate the noise from the nearby roads. This observation calls into question statements made elsewhere about the effects of increased noise at the site both on local wildlife and, after the trees/shrubs are cut down, on the neighbors." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-56]*)

"This is why it is difficult to see how a determination of susceptibility could be made based on two visits with questionable data collection, as listed on p.7 Species Assessed in Detail #1. The same difficulty occurs with point #3 on the same page: the habitat is determined to be present within the project area or vicinity with no definition of 'vicinity' given and determined by whom and when? This point seems to indicate that these observers who came twice had to have seen species in habitat and recognized the habitat as such in order for the determination to matter, and that longitudinal observations with vastly larger data sets cannot be used in this determination. Is that accurate? If so, why?

Problems occur in this context again on p.8 where in two visits the observers saw no bank swallows within 200 meters of the site. The dates of the visits and the time of day of the visits

could have skewed the observations. Certainly the apartment windows across from Safeway and the cliffs right behind the bus terminal to the north could provide appropriate habitat and are within 200 meters of the proposed project. Was anyone who bird watches in these areas consulted?

In fact, it is not clear to me how the special-status animals to be looked for were selected. I have seen pelicans on these fields before, and the Western snowy plover is at Ocean Beach, easily within the 200-meter distance indicated. I am unclear, in Table IV.17-2, what 'moderate potential' means in regards to the hawks. Hawks are in these trees and feed in and around these fields. People observe this all the time, and I'm sure there's video of hawks making kills in this area on YouTube if you look for them. Based on neighborhood observations, conducted informally over many days, months, and years, these birds use the trees and feed in the fie.- changing grass to plastic with crumb - rubber would seem to be more than a moderate disruption for the 52 bird species sited on p. 18 that have been observed in this area." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-57]*)

"On p. 22 in the discussion of significance criteria, it seems clear that the proposed project would interfere substantially with fish, birds, insects, and other wildlife species using the area for migration, as well as with natives. Testimony as to the effect the lights would have on fish and birds was presented at the 12/1/11 meeting, and the effects of light pollution, noise, synthetic turf, and increased car traffic on coyotes, skunks, raccoons, opossum, and foxes (all resident in this area) are easily found in the literature. The conclusion of a less than significant impact with mitigation, then, seems unsupported. The recommended mitigation for nesting is inadequate, and the elimination of a major hunting ground an enormous problem that is not addressed at all. ... The noise issue is given up on entirely with the statement on p. 16 that noise will increase and it might have significant impacts. There is no mention of insects.

...The soccer fields are located within an Urban Bird Refuge; carpeting over the natural turf and lighting up the night will destroy this area as an Urban Bird Refuge, but this aspect of the project is not addressed in the DEIR. The statement on p. 29 that 'the breeding bird population in the immediate area .. is apparently quite small' seems to be based on conjecture in place of substantial observational data.

...I'm not sure why migratory corridors in the vicinity of the site are considered to be unknown; what information sources were consulted for migratory information in this area? But the effect on bird populations is clearly considered to be a major problem, as detailed by the DEIR. ...

...Stadium light pollution in this very dark area, especially in conjunction with the synthetic turf and increased noise, can be considered akin to creating an aquatic dead zone in a once fertile marine environment. The elimination of this specific area as a potential habitat for wildlife cannot offset by the existence of other green spaces elsewhere in the park; subtraction of resources is subtraction. There is no evidence presented as to the impacts of other synthetic turf projects on wildlife because no EIRs were done on the other projects. The Dooling and Popper study cited on

p. 30 doesn't list the species that apparently prefer traffic noises, and the statement that birds have less sensitive hearing is no longer considered true, especially after recent studies done on the speed of bird song production and pitch ranges." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-58]*)

"San Francisco is a city full of microclimates and related microhabitats. The soccer fields and surrounding paths and trees/shrubs are an existing microhabitat, different from park land in any direction around it, frequented by specific animal inhabitants, yet little of the research presented deals specifically with the realities of this site. For example, the study on noise pollution was done by the Albany Unified School District for the Albany High School field, a vastly different environment in every way. The statement, on p. 31, that 'the highest levels of noise and activity at the fields already occur during the avian breeding season' is presented without any proof at all." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-59]*)

"In the Cumulative Impacts section, it becomes clear that the many stated small impacts are added together in such a way that they are not considered cumulative at all; this is contrary to the reality of ecosystem degradation where small impacts add up or multiply. While federal, state, and local regulations are mentioned on p. 34, many that were brought up in the scoping session were not adequately considered in the evaluation of the impacts. For example, the effects of the lights on fish in the ocean just across the street are not considered. While the trees/shrubs were apparently scanned for nests, nothing is said in the report about 'potential foraging opportunities, cover, and roosting', though these are mentioned on p. 35. There is nothing in the report about contamination of food, reduction of food sources, reduction of water sources, or contamination of water for the bird population. In fact, the paragraph beginning 'Past projects' on p. 35 seems to be saying that because this area is not original habitat, that it is OK to destroy this new habitat and severely impact the animals who live here." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-61]*)

"The proposed project is consistently referred to on the last page of this section as being small given the area, and being a drop in the bucket compared to other projects planned for the park (such as the waste water treatment plant). This is faulty logic. Any destruction of habitat is big when there is so little natural habitat left and animal corridors are few and far between. The park provides one of the only refuges and extant large animal corridors in the area. I'm unclear as to why the DEIR on the Beach Chalet fields then veers into examining the site proposed for the wastewater treatment plant, but even this description is inaccurate and slightly deceptive. Foraging happens in many habitats, not only in grassland, and there is more in that area (piles of composting vegetative matter, heaps of soil, huge fungus patches) than listed. Landscaping, as a proposed part of the project, does not replace habitat; destroying habitat to create landscaping is biologically wasteful and creates resource poor areas where rich ecosystems once existed. The claim that the grassland habitat loss equals 0.03 % is unsupported by any math I could find in the document." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-62]*)

“There were only two visits for bird surveys and one of those two days of visits was done in February. There are tons of people would have more adequate, more thorough bird survey information available from the area and I didn’t see any of that in there.” (*Ellen Koivisto, public hearing comment [I-Koivisto2-07]*)

“Also, we am fearful for the fragile shore and other wildlife if floodlights are used. We love our little snowy plovers, and they are barely hanging on as it is.” (*Kathleen McCowin, email, December 8, 2011 [I-McCowin-04]*)

“...bird feeding- As a gardener/groundskeeper on athletic fields for thirty -five years I’ve witnessed the daily use of natural grass fields as feeding stations for a broad variety of birds. Not only do they consume grass and weeds, they also feast on the various bugs and worms. Many of the birds are of a migratory type and rely on such sites as the Beach Chalet fields for a feeding stop. Once again there was no reference to this in the report.” (*Terry McDevitt, email, January 1, 2012 [I-McDevitt-02]*)

“BIRDS: Many experts will be writing but I want to state a few observations. Quoting from the DEIR document ‘The Beach Chalet Athletic fields are located within an Urban Bird Refuge’ and ‘artificial nighttime lighting’ and ‘can be especially problematic for migrating songbirds’. I can state that at So. Sunset playground there are NO more birds. Canadian Geese used to land there on their journeys, as they still do at the natural fields at the Beach Chalet. As I walk every day in the park I have noticed that birds define their own space, ‘birds of a feather’ and want to stay in their fields and do not migrate to other places.” (*Shana McGrew, email, no date [I-McGrew-14]*)

“For example, the section on biological resources concludes, ‘The proposed project in combination with past, present and reasonably foreseeable future projects in the site vicinity would not have cumulative considerable impact on biological resources (less than significant).’

Yet five special status species would or could be affected, 52 different bird species have been observed in the project area the report says, and the introduction of nighttime lighting has the potential to interfere with migratory corridors and impede use of wildlife nursery sites. Also, says the report, it can be assumed that numerous birds pass overhead or in the vicinity.

So does all this support the conclusion and not just for this proposed project, for others past, present and in reasonably foreseeable future?” (*Rasa Moss, public hearing comment [I-Moss2-03]*)

“According to the EIR, the loss of habitat would be insignificant because there’s lots more in the Park. But the Park has been shrunk. Its habitat has been shrunk even as human use grows. A little bit from a smaller whole becomes a lot, and this is not considered.” (*Rasa Moss, public hearing comment [I-Moss2-04]*)

“Not only is the project site a part of the greater habitat of Golden Gate Park and similar in many regards to the study plots mentioned above, the project site also shares a significant abundance of birds during fall migration. There are no studies documenting migration for western Golden Gate Park, but it is certain that it is a significant site for migratory land birds between mid August and mid November. That is a fact that cannot be dismissed in the way the authors of the EIR dismissed avian use of the woodlands near the soccer field.” (*Dan Murphy, letter, December 12, 2011 [I-Murphy-02]*)

“There are a number of facts about bird migration that should be mentioned in the EIR:

1. Fall migration peaks between mid August and mid November in San Francisco.
2. Spring migration takes place between early February and the end of May.
3. Migrating birds in both spring and fall tend to fly at night.
4. Birds migrate along the coast in much greater numbers in fall than spring.
5. In addition to birds considered regular migrants along the Pacific Flyway, there are significant numbers of others that are out of range. San Francisco County has a list of about 400 species. Of those some are listed as endangered, rare, threatened or species of concern. Research could easily come up with specific species, but among those that are likely to use the project site one must start with Tri-colored Blackbird, San Francisco Common Yellowthroat, Yellow Warbler, Willow Flycatcher and the list goes on.
6. Night migrating birds are most active in the hours immediately following sunset and the hours prior to sunrise.
7. Studies indicate migrating birds are attracted to bright lights when they are taking flight and deciding where to land.
8. Migrating birds are attracted to bright lights and the attraction is intensified during foggy conditions.
9. The project site is often fog shrouded during August, September and early October.

Conclusion: Bird use of the woodlands, and for that matter the field itself, is far more significant than what is suggested in the EIR. The fact that bird use of the area is all but dismissed in the EIR is incorrect. Birds depend on this area in considerable numbers. This should be corrected in the

EIR and the EIR should be reissued for comment based on accurate data about birds." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-03]*)

"The use of black fencing should be reconsidered. Fencing that is visible to birds in the proposed lighting conditions should be identified and used." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-07]*)

"It is likely there will be impacts on nesting birds. Given the data presented in the EIR completely misstates the use of the area by nesting birds, the impact on nesting birds should be reassessed. It is likely there will be considerable impacts on birds from the use of night lighting." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-08]*)

"There will be a loss of several acres of open grass as a food resource for birds throughout the year. The major impacts will be on feeding American Robins, Killdeer, White-crowned Sparrow, Golden-crowned Sparrow, Brewer's Blackbird, and Red-winged Blackbird. There are other species that would be impacted as well. Secondary impacts would be to resident raptors, particularly Red-tailed Hawk, Red-shouldered Hawk and Cooper's Hawk, and to Great Homed Owls and perhaps Bam Owls. All those species would utilize the open grass soccer field for feeding and that resource would no longer be available. Given conditions in San Francisco, it is apparent that the impacted birds would not just move over to the next field, because that field is already occupied by other birds. They would lose their habitat and eventually their lives." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-09]*)

"The loss of trees necessary for this project will impact birds. The most likely would be nesting species that use the area. We can assume there are significant numbers of cavity nesting birds that would be most impacted. They include Pygmy Nuthatch, Brown Creeper, Chestnut-backed Chickadee, Downy Woodpecker and Tree Swallow. What are the mitigation measures to off-set this habitat loss? It is also likely at least one or two pairs of raptors, a pair of Common Ravens, a pair of Black Phoebes, a pair of Olivesided Flycatchers, a few Brewer's Blackbirds and several House Finches to mention some likely candidates. What mitigation measures will be taken to off-set this habitat loss?" (*Dan Murphy, letter, December 12, 2011 [I-Murphy-10]*)

"There appears to be enough health and safety issues surrounding the use of artificial turf that adding nearly seven (7) acres to a natural habitat..." (*Jerome Napoli, email, December 12, 2011 [I-Napoli-01]*)

“The quality of human experience in nature will not be the only living creatures adversely affected by this monstrosity. Birds will have an extension of their feeding grounds removed worms in soil and grass, and be distracted from a natural inclination to roost on tree branches that are either now removed or so flooded with light and inundated with noise and car exhaust as to seek other, cleaner, safer, quieter foliage elsewhere.

Opportunistic birds will linger seeking crumbs tossed out by humans that cannot now biodegrade into the soil. Defecation from unsuited birds also will not biodegrade resulting in smelly litter onto every surface and requiring hours of power washing with thousands of gallons of water.” (*Andrea & Rick O’Leary, email, December 11, 2011 [I-O’Leary-08]*)

“I do not believe that the impact of this proposed artificial lighting on wildlife and residents is adequately addressed in the DEIR.” (*Dennis O’Rourke, email, December 2, 2011 [I-O’Rourke-01]*)

“Environmentally, removal of 9 acres of natural grass will destroy necessary habitat to birds, butterflies and other wildlife, and no mitigation is proposed.” (*Renee Richards, email, December 8, 2011 [I-Richards-03]*)

“How can killing more than eleven acres of open grassland and woods in a semi-wild setting with a plastic blanket and concrete, especially in an area directly in the flyway of thousands of migratory birds and used by them as a resting place be ‘less than significant’ (IV. F-36) as regards wildlife? ...

Also, an open field surrounded by trees is a ‘hot-spot’ for wildlife. The open field invites grazing and pecking and burrowing, and the trees invite the predators who feed upon the others. The existing soccer field is “hot”. Ask anyone who has walked there at night and watched a Great Horned Owl drop from a branch to snatch a rodent off the ground. Or in the daylight watched a mass of migratory birds feeding off the insects and snails in the grasses. Would this work with plastic? ...” (*Dan Richman, letter, no date [I-Richman-01]*)

“These projects will result in the loss of trees and other wildlife habitat, in increased traffic.” (*Diane M. Rivera, email, November 28, 2011 [I-Rivera-03]*)

“Of special concern are impacts on wildlife.” (*Mark Russell, email, November 23, 2011 [I-MRussell-05]*)

"I think one thing that's interesting we should make note of is it was the implementation of Scotch oak grass or Scotch oat grass that enabled the creation of Golden Gate Park in the first place. Prior to that there was a serious problem with keeping the sand out of the Park. And I think it would be really ironic at the present time for us to take something --grass --and replace it with a synthetic alternative.

John McLaren, the father of the Park cared as much and ecosystems as he did about useful space. And I just want to say that I am in agreement with every speaker previous to me. We need to think about what the field does when we're not there. It is actually habitat and the presence of birds and other wildlife indicates that this is more than just a useable space for us." (*John Sargent, public hearing comment [I-Sargent-01]*)

"And I was on the phone with my sister, and she was rather depressed. And I said, 'Jill, you won't believe it. There are 200 robins feeding on the grass.' And you will never have that possibility with AstroTurf. You cannot yield habitat to expedience. We have to think about what the Park is, not just for us, but for all the other forms of life that enjoy it." (*John Sargent, public hearing comment [I-Sargent-03]*)

"there is no conflict about the value of real grass and trees to birds and other animals which populate our parks. There is so little green space in urban areas that can be used by animals and people," (*Leida Schoggen, letter, November 29, 2011 [I-Schoggen-02]*)

"The study and analysis in the DEIR regarding the habitat of the protected and non-protected birds, endangered species, other species, etc. that would be displaced because of the proposed project is inadequate. It is not productive to suggest that the birds, raptors and special-status bats protected under the California Fish and Game Code will move to another portion of the Park simply due to the fact that there are 200 similar acres of habitat for them. [DEIR page IV F-23.]" (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-14]*)

"This is also contrary to the Master Plan of Golden Gate Park which states in Policy C, Wildlife and Habitat at page 3-10 and 11 that:

Golden Gate Park provides important habitat for wildlife within San Francisco. Habitat values should be preserved and enhanced throughout the park. Designate and manage areas or zones within the park that are identified as having high natural resource values.

- 1 Manage, protect, and enhance the park's landscape for wildlife habitat and other natural values. Managing the landscape for these values should include preserving and

enhancing food sources, nesting sites, and roosting sites thinning and providing openings in the forest canopy, and maintaining understory vegetation

3. Preserve selected dead and aging trees for habitat value....
5. Designate areas within the park that have special resources or habitat values as natural resource areas. Natural resource areas should be managed to preserve and enhance the natural resource values. Control park uses in and near natural resource areas to preserve natural values." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-16]*)

"It is a horrible president to install artificial grass and it takes away important habitat for animals." (*Richard Schwartz, email, November 30, 2011 [I-Schwartz-02]*)

"What can't be addressed is the disturbance to the habitat and light cycles to such wild animals as birds, bats, etc." (*Lyn Stein, email, December 11, 2011 [I-Stein-02]*)

"The recreational use of the western end of the park by urban dwellers: seeking an hour or two of natural scenery, a chance to watch a red shouldered hawk hunt for gophers in the fenced-in grass soccer fields, an encounter with a raven or a red fox; ...

The Draft EIR virtually dismisses the potential impact on the wild and natural ambiance of the area. ... Considering the real impact of these drastic renovations on the park's wildlife should be a key concern of the study." (*Joyce Warriner, email, December 8, 2011 [I-Warriner-02]*)

"There are many other glaring problems with the DEIR that you are no doubt hearing about. ... I find it heartbreaking that our city and our appointed commissioners of the Dept of Recreation and Parks are not taking into consideration, the wildlife that lives in the park and their value to the citizens of San Francisco." (*Joyce Warriner, email, December 8, 2011 [I-Warriner-04]*)

"As I mentioned, I have been finding joy and recreation in the park, especially the west end area for thirty years. I have spent countless hours there bicycling along the old railroad trail, stopping to watch the hawks and the ravens, enjoying the various species of birds that migrate through or winter in the park like the Allen's hummingbirds. I often go there in the late afternoon just to catch a glimpse of a red fox, the introduced species that has taken up residence in the park and now apparently only survives there on the western edge of it. This year I frequented the park even more than I normally might as I got caught up in watching a pair of Great Horned Owls that produced a small crop of owlets this spring. Watching them grow, thrive, learning to fly and

hunt was enchanting and became as addictive as a daytime soap opera might be. I shudder to think how 60-foot banks of high-wattage lighting would have impacted their evening hunting forays.

I fear that all of these animals will be adversely affected by the planned soccer field renovations. There is little doubt that night lights, plastic turf and elimination of habitat will at the very least, not be good for them. And it is not just the creatures that live there now, it is the loss of future wildlife there as well. Habitat destruction has a long term impact. When it's gone, it's gone." (Joyce Warriner, email, December 8, 2011 [I-Warriner-05])

"The project calls for removal of 9 acres of natural grass which provides habitat to birds, butterflies and other wildlife and there is no mitigation proposed. The report states that birds and other wildlife can go to other places. There are no other places in San Francisco. The few grassy fields in San Francisco are already established territories for hawks and other wildlife." (Noreen Weeden, email, November 29, 2011 [I-Weeden-01])

"See <http://www.cell.com/current-biology/retrieve/pii/S0960982210010183> Brightly lit plastic grass covered with crumbled tires does not provide habitat for anything." (Noreen Weeden, email, November 29, 2011 [I-Weeden-05])

"The DEIR did not do long term modeling of the project effects on flora and fauna in the soccer area. The comments only included 'construction related impacts' of the project, not the environmental consequences over time of the existence of the proposed project or any of the alternatives. What happens to the environment if the raptors leave? ..." (Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-02])

Response BIO-3

Comments O-GGAS2-29, O-GGAS-32, I-Bartley-04, I-Brant-02, I-Citron-02, and I-O'Rorke-01 state that several types of direct impacts on birds resulting from the project are not adequately addressed. Waste collection facilities described on page II-17 of the project description as "trash/recycling receptacles adjacent to the multiple entrance points to the field area" and trash and recycling collection at a new maintenance shed would reduce any direct impacts on birds from trash. Additionally, barbeques, alcohol, food, and dogs would not be permitted on the fields. Dogs present in the spectator areas of the new fields would be required to stay on-leash per San Francisco's Recreation and Parks Department's *Final Dog Policy*, and would not be permitted in vegetation surrounding the project area. Human incursions into vegetation already

occur at the project area, and several official trails already in use by pedestrians and dogs intentionally lead people through vegetated habitats. Currently, people leave the trails and enter vegetated areas, as expected in an urban park setting. The project may increase the frequency of these incursions, but wildlife present within vegetation surrounding the project has habituated to human disturbance to some degree, and impacts from human presence would not be significantly greater than at present.

In response to comment O-GGAS-32, turf replacement would not create any additional impacts to biological resources that have not already been discussed in the EIR, as the field area where turf would be replaced would not be considered a substantial loss of wildlife habitat, and turf replacement would not impact surrounding facilities or vegetation.

Comments O-RCA-2, O-SCSFBC-10, I-Donjacour-02, I-Hahn-02, I-Jungreis2-16, I-Koivisto-42, I-Koivisto-58, and I-Richman-01 suggest that impacts to a broader range of wildlife species be considered. The EIR recognizes that the west end of Golden Gate Park is important habitat for wildlife. The EIR's primary responsibility is to identify sensitive wildlife (as opposed to all wildlife) because impacts on these would be significant under CEQA. CEQA Guidelines Section 15065 directs lead agencies to consider other species when the effects might cause a fish or wildlife population to drop below self-sustaining levels, but that was not considered a possible outcome of the project on any species of fish or wildlife. Impact BI-2 on EIR pages IV.F-25 through IV.F-32 describe how the project would not significantly impact native wildlife movement corridors, which includes native wildlife not designated as special-status species.

In response to comment I-Wuerful-02, impacts on native resident wildlife species, migratory wildlife corridors, or use of native wildlife nursery sites from increased noise and lighting during operation of the athletic fields are addressed under Impact BI-2, beginning on EIR page IV.F-25. What the commenter describes as "long-term monitoring" outside of the existing discussion of operational impacts is not completely clear, but it does not appear that monitoring is warranted given the species present at the site. As described in Impact BI-2, impacts on native resident wildlife species, migratory wildlife corridors, or use of native wildlife nursery sites and it is expected that raptors and other wildlife species would continue to use the area.

In response to comments I-Hahn-02, I-Jungreis2-16, and I-Koivisto-42, negative direct and indirect impacts to species considered "special-status" have been considered at sufficient levels according to significance criteria described on EIR page IV.F-22, including potential impacts to nesting birds and special-status bat species. Seasonal surveys for both nesting birds and special-status bats would prevent impacts from noise during project construction. While impacts to non-special-status wildlife species are not considered significant, discussion of lighting and noise impacts beginning on EIR page IV.F-25 states that "...it is not expected that substantial impacts on wildlife from either the proposed changes in night lighting or athletic field use would occur."

Comments I-Koivisto-58 and I-Richman-01 question whether impacts to resting migratory birds have been mitigated to less-than-significant levels in the EIR, and I-Murphy-02 comments that western Golden Gate Park is a significant site for migratory land birds between mid-August and

November. EIR page IV.F-6 acknowledges that Golden Gate Park provides important stopover habitat for migratory birds. Removal of turfgrass, trees, and shrubs during implementation of the project would not substantially alter the character of this habitat as a migratory corridor. Turfgrass habitat similar in character to that at the Beach Chalet Athletic Fields would still be present in several areas of the project site, as described in EIR pages IV.F-23 and IV.F-24, and areas of non-native forest in western Golden Gate Park would still provide high-quality non-native woodland habitat after tree and shrub removal in support of the project. While partial removal of stopover habitat for migratory birds would occur, the project would not significantly impede the use of migratory corridors, and the overall character of habitat supporting migratory birds would remain.

In response to comments I-Koivisto-53 and I-McDevitt-02, EIR pages IV.F-5 and IV.F-6 describe native and non-native wildlife observed or presumed present at the project area, as well as the habitat quality and potential for stopover of migratory birds within Golden Gate Park. A complete list of all species using the project area is beyond the scope or intent of an EIR, as provided by CEQA Guidelines Section 15151, which states that "An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible." The EIR focuses its analysis on special-status species, which may be considered those most likely to experience effects that breach levels of significance described on EIR pages IV.F-6 and IV.F-7.

Regarding comments I-Gattuso-02 and I-Napoli-01, leachate from synthetic turf is unlikely to affect groundwater or species' habitat. This issue was specifically addressed in EIR Section IV.G, *Hydrology and Water Quality*, page IV.G-24; while some studies have shown heavy metals leaching from rubber components of the synthetic turf fields, San Francisco's Synthetic Turf Standards would limit concentration of heavy metals in the turf product. In addition, the project design includes a catchment system that would capture all runoff from the turf fields and direct it to the combined sewer system. Leachate would only be allowed to infiltrate into groundwater if it is deemed acceptable by SFPUC after testing by SFRPD.

Comment I-Murphy-07 suggests that use of black fencing may not be visible in the proposed lighting conditions, and a different color visible to birds should be used. The commenter does not explain why he thinks black fencing would not be visible to birds and provides no evidence that black vinyl fencing would be any more difficult for birds to see when the fields are lit at night than any other kind of fencing. In addition, no available literature suggests that this would be the case. The site is currently fully fenced with an 8-foot metal chain link fence so the change to 3.5-foot black vinyl fencing would not be considered a substantive change from existing conditions.

Comments regarding wildlife displaced by the project facing competition from other animals with established territories were presented by I-Bartley-03, I-Elias-03, and I-Weeden-01. It is true that intraspecific and interspecific competition for foraging resources is a factor in animal habitat use and population ecology. Theoretically, a raptor species could reach carrying capacity in an area (i.e. in balance with available resources) and in this ideal situation, the arrival of additional birds could adversely affect both the new arrivals and residents. However, the key indicator that

this is happening would be a decline in the prey species. The fact that gophers are present in abundance throughout Golden Gate Park suggests that the habitats surrounding the fields are not already saturated with raptors. A second point to note is that “competition” sometimes is dealt with by the adaptive behavior of the animals themselves. Springer and Kirkley¹² observed habitat partitioning between red-tailed hawks and great horned owls in Ohio. They reported that, although the diet of these two raptors do overlap in some prey selected, direct competition for these resources was minimized by the temporal segregation of their breeding chronologies and their daily activity patterns.

In response to comment O-GGAS-32, as mentioned above, waste collection facilities are described on page II-17 of the project description as “trash/recycling receptacles adjacent to the multiple entrance points to the field area”, as well as a trash and recycling collection area at a new maintenance shed. Additionally, barbecues, alcohol, and food would not be permitted on the fields. These facilities included as part of the project would prevent additional trash at the project area from attracting common ravens, American crows, and gulls. While spectator areas surrounding the fields could attract a greater proportion of foraging house sparrows, the amount of potential nesting habitat in buildings associated with the project area would not increase, and nesting cavities are not present within the myoporum shrubs or pittosporum trees directly surrounding the fields. In response to comment O-SCSFBC-10 claiming that habitat loss as a result of the project would total more than 10 acres, it appears that the commenter is adding the existing paved parking lot to the acreage associated with the proposed project. The proposed project would not result in a habitat loss associated with the existing parking lot because that is an existing condition. Page IV.F-23 of the EIR states that the project would result in 9 acres of mowed turfgrass with synthetic turf (approximately 7.2 acres) and other surfaces or structures, including new pathways and spectator seating, as well as the addition of play structures and a picnic area (approximately 1.8 acres). This is the extent of habitat loss that would result from the proposed project.

Comments I-Bridges-02, I-Brown-04, I-Hall-01, I-Richards-03, I-Warriner-02, and I-Weeden-01 note the lack of mitigation for removed wildlife habitat. The EIR’s primary responsibility is to identify sensitive wildlife and their habitats (as opposed to all wildlife) because impacts on these species would be significant under CEQA. The EIR determined that mowed turfgrass and surrounding non-native forest supported only foraging raptors and special-status bats, but no other special-status species. Other special-status birds and butterflies known to occur on the San Francisco Peninsula, and other special-status species wildlife were considered in Table IV.F-1, beginning on EIR page IV.F-9, but excluded from the analysis based of the lack of habitat present in the project area. As stated on page IV.F-23, this loss of foraging habitat would not be considered significant, based on the availability of other turfgrass habitats available within a five-mile radius of the project area. Additionally, while the EIR described impacts from removal of foraging habitat for raptors as less than significant, replacement of foraging habitat for raptors is not required under California Fish and Game Code Section 3503.5. Section 3503.5 “prohibits the

¹² Springer, M.A. and J.S. Kirkley, *Inter and Intraspecific Interaction between Red-Tailed Hawks and Great Horned Owls in Central Ohio*, Ohio Journal of Science 78(6): 323, 1978.

take, possession, or killing of raptors and owls, their nests, and their eggs". In response to these comments, EIR page IV.F-23, paragraph 5 (continuing on page IV.F-24) has been revised:

The proposed project would result in the replacement of approximately 9 acres of mowed turfgrass with synthetic turf (approximately 7.2 acres, based on the project site plan, as shown in Figure II-6, and based on modern athletic field size standards) and other surfaces or structures, including new pathways and spectator seating, as well as the addition of play structures and a picnic area (approximately 1.8 acres, based on the project site plan, as shown in Figure II-6). This would remove approximately 9 acres of habitat for rodents, such as gophers and voles, and a variety of insects and other invertebrates, which are typical prey for both special-status and common wildlife, including hawks and other birds, bats, and other mammals found in Golden Gate Park, such as raccoons and opossum. The loss of foraging habitat (and prey) for raptors and other birds protected under the California Fish and Game Code, as well as for special-status bats, could be considered significant; however, there are over 200 acres of similar habitat in Golden Gate Park, including the nearby golf course, archery range, and bison paddock. These habitats are considered similar based on presence of open, short grassy habitat, periods of reduced human disturbance, and at least small populations of raptor prey. Additional open-space areas are available to wildlife throughout San Francisco, including Lake Merced, Stern Grove/Pine Lakes Park, McCoppin Square, Sutro Heights Park, and Lincoln Park, as well as at Fort Funston, the Presidio, and nearby Golden Gate National Recreation Area lands. The loss of approximately 9 acres of turfgrass represents a loss of approximately 4.5 percent of similar habitat in Golden Gate Park²⁹ and 0.3 percent of similar available foraging habitat (e.g. turf grass and grasslands) for raptors and special-status bats in the project region.³⁰ Furthermore, section 3503.5 of the CDFG Code does not extend protection to raptor foraging habitat, and no legal requirement to compensate for removal of such foraging habitat exists. Therefore, this loss is not considered substantial in either the local or regional context, ~~and~~ is not expected to affect raptors and special-status bats in any significant way, ~~and~~ does not require compensatory mitigation.

This revision does not change the analysis or conclusions presented in the EIR.

A frequent comment indicates that the project would destroy native wildlife habitat through grassland and tree removal, and in turn, directly impact native wildlife. Additionally, I-Draper-02 mentioned specifically that coyotes and owls would lose foraging habitat, I-Elias-07 and I-Stein-02 considered project mitigation insufficient for habitat loss and degradation, and O-GGAS3-01, O-SCSFBC-10, O-SCSFBC2-01, O-SCSFBC3-02, O-Bridges-07, and I-Colao-06 stated that the project would remove insects and create additional heat. I-Murphy-09 listed ten common species of wildlife, some of which are special-status raptor species, which could lose foraging

²⁹ May and Associates (2010) estimated approximately 200 acres of similar "grassy" habitat in Golden Gate Park.

³⁰ The amount of potential foraging habitat in the project vicinity was determined by reviewing aerial photographs and calculating a rough acreage for each significant area of open space within a five-mile radius of the project area. The total amount of open space within a five-mile radius, inclusive of the Project area, is roughly 7,050 acres. The amount of grassland habitat within the same area, including turfgrass and open space grasslands, is approximately 2,650 acres.

habitat. On page IV.F-23, the EIR acknowledges that the project would remove habitat for common wildlife and foraging habitat for special-status raptors and bats. This would include presence of most insects and other habitat characteristics that provide prey for wildlife. In regards to common wildlife species, the EIR's primary responsibility is to identify and mitigate impacts to sensitive wildlife and their habitats (as opposed to all wildlife), because impacts on these species would be significant under CEQA. Removal of this habitat would not impede the use of a wildlife corridor, so removal of habitat for common species is not considered significant. Neither the Migratory Bird Treaty Act (MTBA) or Section 3503.5 of the CDFG Code require protection or compensation of nesting or foraging habitat for native bird species they protect, and designation of bats as special-status in the CDFG Special Animals List does not contain protections for potential foraging or roosting habitat either. Any raptors or special-status bats foraging at the athletic fields would be displaced by installation of synthetic turf, but relative to additional grasslands within Golden Gate Park, this would result in removal of less than 5% of foraging habitat. This incremental habitat loss is considered less than significant. Any increases in heat from synthetic turf would not impact transitory wildlife, as additional routes within non-native forest surrounding the fields are available for wildlife to travel through.

In response to comment I-Warriner-05, the EIR can only reasonably assess impacts from the project under conditions present during establishment of the baseline. CEQA does not require analysis of natural resources which *could* be present on site, only those documented by an acceptable level of effort or presumed present because of highly suitable habitat. As CEQA Guidelines Section 15125 states, the description of the environment is "as it exists before the commencement of the project," not in some hypothetical future state.

In response to comment I-Murphy-10, no measures are required under CEQA to offset loss of bird nesting habitat. Bird protections under the MTBA or CDFG Code section 3503.5 for nesting birds do not include nesting and foraging habitat protections. Preconstruction bird surveys included as part of the project and described on page IV.F-24 would prevent any direct impacts on nesting birds or bird nests, as these are protected under the MTBA and CDFG Code. Finally, while not completely conclusive, a survey of the project area in May 2011 did not discover any stick nests potentially supporting raptors.

In response to comments A-NPS-12, I-D'Anne2-02 and I-McCowin-04, wildlife habitat along Ocean Beach would not be significantly impacted by the project. Trees and shrubs along the western edge of the athletic fields, along with the Beach Chalet Restaurant and walls lining the beach, would screen construction noise and ongoing noise from the beachfront. Based on noise estimates during events at the project area and properties of sound that cause it to lose intensity over the distance it travels (also referred to as attenuation), noise levels would be no greater than 66 A-weighted decibels (dBA) at 325 feet from the project area. These noise levels are considered lower than a busy city street, and would not create a substantial noise increase when compared with noise from the Great Highway. Finally, the prevailing winds blow towards the east away from Ocean Beach, further attenuating noise emanating from the project area. Comment A-NPS-12 quotes the *Western Snowy Plover Recovery Plan*, stating that beach development should avoid noise sources that could impact snowy plover. As noted here and in Response BIO-1, noise from

the project is not expected to contribute significantly to existing noise levels on the beach, therefore the project is consistent with the Recovery Plan in this regard, even though the Recovery Plan does not apply to the project. Impacts to Ocean Beach from project lighting are addressed in BIO-4, below.

In regards to comments O-GGAS2-29, I-Donjacour-02, and I-Schultz-14, the EIR recognizes the importance of habitats within Golden Gate Park, and western Golden Gate Park, in the context of habitat removal from the project area. However, assessing similar habitats that wildlife could move to at a regional scale is not appropriate, considering that the analysis of habitat impacts is limited to special-status species raptors and bats. Raptors have considerably larger territories than songbirds and passerines, and many species are capable of long-distance migrations. Raptor species considered in this assessment that are present in Golden Gate Park are accustomed to flying over urban areas when migrating or making typical daily movements, so it is conceivable that they are capable of moving to foraging and nesting habitats within 5 miles of the project area. The Mexican free-tailed bat, the special-status bat species most likely to forage over the Beach Chalet fields, migrates yearly to the southwest, and can travel more than 50 kilometers (km) (31 miles) to forage.¹³ Based on the extensive movements these species are capable of, a regional analysis of other potential habitats is warranted. In response to comment O-GGAS2-29, EIR page IV.F-23, paragraph 5 has been revised (see above).

Habitat for foraging raptors is not required to be equivalent to habitat at the Beach Chalet in these characteristics, as there is no legal basis for habitat compensation for raptors protected under Section 3503.5 of the CDFG Code or the MTBA. Comments O-GGAS2-29 and O-GGAS3-02 dismiss habitats with greater human disturbance, golf courses, and the archery range as not similar to the Beach Chalet and therefore not suitable replacement habitats; however, because these areas have at least some potential to support foraging and nesting raptors, they are considered in this assessment. Human activities at all these areas, including active practice at the archery range, would be limited for sufficient periods of time to support raptors in some capacity. While the potential prey base varies among other grassland habitats, even the golf course contains some areas where pest control is not completely successful and small mammal prey exists. Thorough assessments of other foraging habitats for raptors within Golden Gate Park or other parts of San Francisco would not be considered reasonably feasible, based on: a) the lack of regulatory support for the significance of the impact and b) the extensive amount of fieldwork such surveys would require.

The EIR recognizes that the Beach Chalet Athletic Fields support foraging and potential nesting for raptors, and have likely supported raptor nesting in the past, as stated in comment I-Elias-02. While the project would remove 16 Monterey cypress and Monterey pine trees potentially capable of supporting raptor nests, this is considered a very small proportion of habitat removal relative to large trees still available within 5 miles of the project area. Additionally, several of these trees are dead and would provide limited nesting habitat value to raptors.

¹³ Western Bat Working Group, Species Account for the Mexican Free-tailed Bat (*Tadarida brasiliensis mexicana*), available online at: http://www.wbwg.org/speciesinfo/species_accounts/molossidae/tabr.pdf, last updated in 2005.

Comments I-Anderson-08 and I-Warriner-04 request clarification on wildlife impacts from this project in conjunction with the San Francisco Westside Recycled Water project. While it is true that these two projects together would create a developed area more than 50% the width of Golden Gate Park, this is not expected to substantially hinder wildlife movement in the area, as discussed on page IV.F-36 of the EIR. Both projects are located at the west end of Golden Gate Park, and no terrestrial species in the Park require a direct habitat corridor to move to Ocean Beach during their normal activities. Additionally, the Great Highway is directly west of the project area, which is not impassable but would present a substantial barrier for any terrestrial wildlife movement. Habitat removal would not prevent birds from unimpeded flight over both project areas. For these reasons, these projects together would not impede any migratory corridors.

Comments O-GGAS2-30 and I-Koivisto-58 request a more thorough scientific or factual process to ensure that habitat is present throughout Golden Gate Park for displaced nesting birds. Based on the removal of 16 trees at the project area, the EIR concludes that other nesting habitats for raptors are abundant within Golden Gate Park. In a CEQA document, analysis of environmental effects need not be exhaustive, but is judged in the light of what is reasonably feasible (CEQA Guidelines Section 15151). The level of effort required to monitor breeding success of raptors throughout Golden Gate Park based on tree removal from the proposed project would not be considered reasonably feasible or required, especially considering that neither Section 3503.5 of the CDFG code nor the MTBA require compensatory mitigation for removal of nesting habitat for raptors. Additionally, CEQA does not require that an agency perform all research or study recommended by commenters, as long as a good faith effort at full disclosure is made in the EIR (Guidelines § 15204 [a]).

In response to comments O-SCSFBC-10 and O-SCSFBC2-01, the EIR recognizes that habitat for common and special-status species would be removed as part of the project. The commenter states that this would create a “donut hole” between open space areas of the GGNRA, Balboa Natural Area, Sutro Heights Park, and the Pacific Ocean. When aggregated, these areas form a wildlife network of open space habitats, but only for species that are capable of moving through the dense urban development of western San Francisco. Habitat removal from the proposed project represents a small fraction of this open space network. While fractional or incremental habitat removal can be considered as contributing to a significant cumulative impact under CEQA, this applies to sensitive natural communities or species habitat protected by federal or state Endangered Species Acts; habitat at the project area does not meet these criteria.

In response to comment O-SCSFBC-10, while soil at the Bison Paddock is compacted, grasses and vegetation are still present in recent aerial photographs. Additionally, the presence of bison or compacted soil does not necessarily rule out the presence of small mammals. The Bison Paddock contains sufficient habitat characteristics to support foraging raptors, and should be considered in the EIR analysis of raptor foraging habitat.

In response to comments I-Koivisto-62, I-Moss 2-03, and I-Moss2-04, EIR page IV.F-36 states that the project would add a “minor, incremental contribution” to the existing cumulative impact of

habitat loss in the region. The EIR recognizes that natural habitats, including areas with less lighting than urban centers, within San Francisco have been extensively impacted and a cumulative impact exists in this regard. However, the removal of 7 acres of unlit mowed turfgrass habitat at the project area amounts to a loss of 0.03 percent of similar turfgrass habitat in the region, based on an estimate of 2,650 acres of such similar habitat within a five-mile radius (pg. IV.F-24). This estimate was made using aerial photos of the San Francisco Peninsula. Even though little natural turfgrass habitat is present within the region, this reduction of 0.03 percent is considered minor.

In further response to comment I-Koivisto-62, the EIR discusses the proposed San Francisco Westside Recycled Water project because the impacts of all projects within the geographic context for potential cumulative impacts on biological resources must be considered in the cumulative analysis. The recycled water project site is directly adjacent to the Beach Chalet site, and impacts from both projects must be considered together. In response to this comment, EIR IV.F-36, paragraph 3 has been revised:

The current impact analysis has shown that the project, after mitigation, would result in relatively minor and less-than-significant impacts on biological resources within and in the vicinity of the project site. When considered relative to the existing state of biological resources in the project area, the project would add only a minor, incremental contribution. In terms of habitat loss, the project would result in the loss of approximately 9 acres of turfgrass, as well as less than an acre of trees and shrubs within the project area. With the exception of trees around the perimeter of the site, the proposed recycled water treatment project area to the south of the athletic fields is regularly disturbed and consists of bare ground, refuse piles, composting vegetative matter, soil piles, and existing structures. While this area may support low levels of raptor foraging (much like other disturbed areas of the park), it is not considered substantial foraging habitat because of constant disturbance of soil and lack of vegetation; therefore, ~~so~~ the combined projects would not result in a cumulative loss of ~~grassland~~ raptor foraging habitat beyond that described for the project. In addition, new landscaping, including tree planting, is proposed as part of the project. As noted previously in this document, the amount of similar grassland habitat (including turfgrass, golf courses, and open space grasslands) within a 5-mile radius of the project site, is approximately 2,650 acres. The project's incremental contribution to grassland habitat loss in the cumulative geographic context amounts to 0.03 percent of available similar habitat, an amount that is not considered cumulatively considerable.

This revision does not change the analysis or conclusions presented in the EIR.

Comment I-Koivisto-62 states that destroying habitat to create landscaping is biologically wasteful and cannot replace habitat. While landscaped trees and shrubs cannot immediately replace the habitat values of removed natural habitat, they are sufficient to support many wildlife species, especially those habituated to vegetation within an urban setting. Many of the trees and shrubs composing the more "natural" habitats surrounding both the project area and the recycled water project site were originally planted as landscaped vegetation and subsequently grew into

denser stands of non-native forest. Replacement of any of these existing non-native woodlands with landscape vegetation would be sufficient to retain habitat values, especially as this vegetation matures, develops a denser canopy, and supports understory growth.

In response to comments O-GGAS2-26, I-Koivisto-55, and I-Koivisto2-7, wildlife surveys conducted in support of the project are described on EIR page IV.F-5 and IV.F-6. These surveys conducted for the EIR were deemed sufficient to determine impacts to special-status species and prescribe mitigations; they do not need to be exhaustive, but rather characterize special-status species at the project area. This also applies to comment I-Koivisto-57 in regard to bank swallows. The purpose of the surveys was not to detect all special-status species that could use the project area, but rather characterize the habitat and determine a potential for species to occur there, based on the factors listed on EIR pages IV.F-7 and IV.F-8. Sources for this determination include location data from CDFG's California Natural Diversity Database, which contains a fairly comprehensive database of data submitted by wildlife biologists. Bank swallows are colonial nesters requiring burrows, and would not be expected along apartment windows or in exposed urban areas without having been previously observed. Additionally, pre-construction surveys for nesting birds and special-status bat species would be required prior to project construction, to prevent the loss of protected wildlife which may have moved into the area prior to the actual start of construction.

In further regard to comment I-Koivisto-57, determination of special-status species originally considered in the assessment and listed in Table IV.F-1 is described on pages IV.F-6 and IV.F-7 of the EIR; longitudinal data sets from CDFG, California Native Plant Society (CNPS), and United States Fish and Wildlife Service (USFWS) were used to create Table IV.F-1. Determination of special-status species that were assessed in detail as described on EIR pages IV.F-7 and IV.F-8. Common species not designated as special-status were excluded from this assessment, and impacts to such species are not considered significant under CEQA.

In response to comment I-Koivisto-55, the nesting surveys were not presented in the EIR as being comprehensive. EIR page IV.F-5 states that no nests of any kind were observed in February 2011 and page IV.F-6 states that during focused nest surveys in May 2011, the biologist found three inactive nests. At this time, all shrubs and trees surrounding the perimeter and within 100-150 feet of the athletic fields were carefully surveyed. While it is true that nests knocked down in storms may have been missed, the observation of three inactive nests in May would suggest that at least some nests built in the previous nesting season would be present, and that nests could be present during project construction.

In response to comments O-GGAS2-31 and I-Jungreis2-28, the presence of people and lighting does not, in itself, constitute a significant impact. Alcatraz Island for example, supports healthy breeding colonies of seabirds, which coexist with 1.1 million visitors each year. In an urban environment, the significance of changes in the degree of human disturbance should not be compared with a pristine site but rather to the existing environment where ambient disturbance is part of the baseline. Please note also that most nighttime hours would be dark. Lights would operate from sunset to 10:00 p.m. Assessing the impacts of reflection of sound from synthetic turf

would be speculative, which is discouraged by CEQA Guidelines Section 15145 which states, "If, after thorough investigation, a Lead Agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact."

In response to comment I-Koivisto-56, EIR page II-21 describes that the majority of tree and shrub removal would occur along the northeast side of the field and long the south and southeastern edge of the field, respectively. Along the northeast side of the field, all trees removed would be replaced at a ratio of one tree replacing each tree removed (1:1); therefore, any noise screening attributable to existing vegetation from John F. Kennedy Drive would not be reduced. One dead tree and no shrubs would be removed on the western side of the project site so noise levels emanating from the Great Highway would not change with respect to existing conditions.

Comment I-Koivisto-58 states that noise impacts are "given up on entirely" on page 16, but an extensive discussion of potential noise impacts is provided on EIR pages IV.F-30 and IV.F-31. The EIR recognizes that microhabitat at the project area is, to some degree, unique and cannot be fully described by studies in other areas. However, in response to comment I-Koivisto-59, the noise study conducted at Albany High School accurately describes potential noise generated by crowds after project completion. The higher noise levels described at "smaller events" on EIR page IV.F-31 were events with approximately 1,000 spectators measured at Albany High School. The maximum number of spectators supported at the project site would be 1,000. Noise from this study is not specific to habitats in Albany, but rather event size, so this information is relevant to noise analysis for the project.

In response to comment I-Koivisto-59, EIR page II-10 and Table II-1 of the project description describe existing field use during spring, which is the highest-use period.

In response to comment I-Koivisto-58, while Dooling and Popper (2007) do not list the species that prefer traffic noises, a study is cited as an example of this phenomenon (Awbry et. al., 1995). A comprehensive list of these species is not required by the EIR, and the study provides sufficient evidence to include this point in the analysis. The title of the cited study is *Acoustical Responses of California Gnatcatchers to Traffic Noise*.

The commenter also states that "the statement that birds have less sensitive hearing is no longer considered true", and cites recent studies on the speed of bird song production and pitch range. While Dooling and Popper (2007) recognize that the bird ear supports "very fine auditory discrimination and perception which, in some cases, can exceed the acuity of many mammals", substantial evidence is presented that birds in general have reduced hearing at both low and high frequencies, as compared to mammals. Based on how recently the Dooling and Popper study has been published, as well as the lack of supporting evidence provided by the commenter, the information provided in the EIR is considered accurate.

Comment I-Donjacour-02 states that the EIR underestimates the number of bird nests that would be affected by the project, citing counts done by the Audubon Society. Wildlife surveys conducted in support of the project are described on EIR page IV.F-5 and IV.F-6, and included a survey for bird nests and nesting birds, as well as for use of the area by bats. While these surveys

were not comprehensive, they are considered reasonably feasible as required by CEQA and adequate to characterize nesting habitat around the project area. Additionally, informal testimony and other unofficial reports do not meet the best available evidence standard of CEQA. With the implementation of pre-construction bird surveys and avoidance buffers proposed as part of the project, the EIR concludes that no bird nests would be significantly impacted by project construction. Any birds that nest in the vicinity of the project area after completion of the project have habituated to active use of the fields to some degree, and would not be impacted by ongoing field activities.

In response to comment I-Kohn-09, Section 3503.5 of the CDFG Code makes no reference to habitat loss for raptors, and does not provide legal protection of raptor nesting or foraging habitat. The complete text of Section 3503.5 states:

“It is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto.”

Comment I-Jungreis2-19 states that there is insufficient analysis of the construction schedule, which could conflict with the nesting bird season. Comments I-Koivisto-58 and I-Murphy-08 describe impacts and nesting mitigation as inadequate. No specific construction schedule has been determined in the project description, so construction could potentially occur within the nesting bird season. However, preconstruction nesting bird surveys and avoidance buffers would be required by the project if construction occurs within the nesting bird season; these requirements would prevent significant impacts on nesting birds. The noise analysis presented on EIR pages IV.F-30 and IV.F-31 describes noise levels expected during events, and how impacts to birds already breeding in the area and accustomed to noise from field activities would be considered less than significant. This analysis is considered sufficient, based on what CEQA considers reasonably feasible.

In response to comment I-Schultz-16, it should be noted that the current Beach Chalet Athletic Fields Facility is primarily a venue for sports. The Beach Chalet Athletic Fields were built more than 75 years ago, have been used as a ground sports facility since then, and were last renovated in 1998 to include an 8-foot-high chain-link fence around the play fields and improvements to the lawn and irrigation system. Although wildlife are apt to be using the fields on a transient basis, and raptor foraging is acknowledged in the EIR, the project area would not be classified as wildlife habitat, that designation being reserved for lands in a more natural condition, providing food, shelter and cover. With recreation intended as the primary use, the intent of the Master Plan was not to preserve playing fields for their wildlife habitat value. Trees and shrubs that would be removed adjacent to the fields – 16 trees and 44 shrubs – provide nesting habitat. However, trees would be replanted for no net loss, and newly landscaped areas would reduce habitat loss from shrub removal.

In response to comment I-Koivisto-61, project elements described in Section IV.G *Hydrology and Water Quality* would prevent significant and cumulative impacts from contamination of wildlife habitat. Turf materials would need to comply with San Francisco’s Synthetic Turf Standards,

which limits concentration of metals in the turf product to Environmental Screening Levels established by the Regional Water Quality Control Board. Additionally, the project design includes a catchment system that would capture all runoff from the turf fields and direct it to the combined sewer system. Leachate would only be allowed to infiltrate into groundwater if it is deemed acceptable by the SFPUC after testing by the San Francisco Recreation and Parks Department. These measures would be sufficient to prevent significant project-level and cumulative impacts from contamination of wildlife habitats.

In response to comment I-Koivisto-57, special-status species were selected for analysis based on criteria described on EIR pages IV.F-6 and IV.F-7. Both brown pelican and western snowy plover were included in Table IV.F-1, but were not considered for further analysis due to lack of suitable habitat in and around the project area. Lighting from the project would not illuminate snowy plover habitat at Ocean Beach, and the Beach Chalet Athletic Fields is not considered habitat for brown pelican.

In response to comment I-Koivisto-57, determination of potential to occur is described on EIR pages IV.F-7 and IV.F-8. Potential to occur takes into account not only whether habitat for the species is present, but the potential for adverse impacts from the project and the susceptibility of the species to those impacts. For hawks, this would include impacts to hawk nests present around the site. Based on potential for impacts to hawks and hawk nests (based on protections in CDFG Code 3503.5) determined from site visits and habitat characterization, there is a moderate potential for hawks to nest within 500 feet of the project area. The designation of “moderate” does not refer to moderate disruption to the species.

In response to comment I-Koivisto-05, EIR page IV.F-33, paragraph 3 has been revised:

Mitigation Measure M-BI-3: Plant Replacement Trees. The SFRPD shall replace the trees removed within SFRPD-managed lands with trees of equivalent ecological value (i.e., similar species providing the same general microhabitat characteristics for wildlife species) to the trees removed. If trees of equivalent ecological value are not feasible or available, removed trees shall be replaced at a ratio of 1 inch for 1 inch of the diameter at breast height of the removed tree. SFRPD shall monitor tree replacement plantings annually for a minimum of three years after completion of construction to ensure establishment of the plantings and, if necessary, shall replant to ensure the success of the replacement plantings.

This revision does not change the analysis or conclusions presented in the EIR, as the revision is a clarification to an existing mitigation measure and is not a new mitigation measure.

In response to comment I-Koivisto-57, “vicinity” is considered the “habitats of the project area, including the existing athletic fields and surrounding habitats”, described as the study area. This is determined by the farthest distance of indirect impacts (i.e. noise, light) generated by the project.

Several comments provided additional information regarding species present in the project area, including I-Cicccone-01, I-Hoffman-02, I-Richman-1, I-Bartley-01, and I-McGrew-14. While we

appreciate the commenter's concern for other birds, informal testimony and other unofficial reports do not meet the best available evidence standard of CEQA. Moreover, simple observation does not mean that the species is susceptible to impact. These comments did not identify any special-status species or impacts not already considered in the EIR assessment.

Comment I-Koivisto-55 states that the area is a migratory corridor for raptors. EIR Page IV.F-6 describes wildlife movement corridors in the region, and is consistent with the commenter's statement. In response to comment I-Jungreis2-16, EIR page IV.F-27 recognizes Golden Gate Park's designation as an Urban Bird Refuge.

Comments O-PAR2-9, I-Kessler-03, I-Schoggen-02, I-Sargent-01, and I-Sargent-03 provide general statements about the management of Golden Gate Park and personal opinions, or additional information that is not considered pertinent to the biological resources analysis, but do not address the adequacy or accuracy of the analysis presented in the EIR. As such these comments are noted, however, no further response is required.

It is unclear what aspects of the proposed project or the EIR comment I-Foree-Henson-2 is referring to by stating: "What happens to the small birds which use trees for nesting and protection if the large trees around the West Sunset Playground?"

Comments I-Browd-03, I-Brown-01, I-Citron-02, I-FDavis-02, I-Denefeld2-01, I-Donjacour-03, I-Draper-02, I-Hyde-02, I-Kessler-03, I-Murphy-09, I-Rivera-03, I-MRussell-05, I-Schwartz-02, I-Warriner-05, I-Weeden-5 provide general statements about the adverse effects of the project with respect to destruction of native wildlife habitat, direct impacts on wildlife, and the effects of tree removal on wildlife; personal opinion; information that is already presented in the EIR; or additional information that is not considered pertinent to the biological resources analysis; but do not address the adequacy or accuracy of the analysis presented in the EIR. As such these comments are noted, however, no further response is required.

L.5 Impacts to Wildlife Due to Nighttime Lighting [BIO-4]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-NPS-11	I-Bridges-03	I-Horton-01	I-Murphy-04
A-NPS-12	I-Bridges-07	I-Hyde-01	I-Murphy-05
A-NPS-13	I-Browd-03	I-Jungreis2-17	I-Murphy-06
A-SFPC-Antonini-06	I-Buffum-04	I-Jungreis2-18	I-Murphy2-01
O-CSFN-04	I-Citron-07	I-Khan-06	I-O'Dell-01
O-GGAS2-30	I-D'Angelo-02	I-Kohn2-08	I-O'Rorke-01
O-GGAS3-04	I-de Forest-04	I-Koivisto-05	I-Pfister-04
O-PAR2-10	I-DeLisle-01	I-Koivisto-29	I-Posthumus2-03
O-SCSFBC-27	I-Denefeld2-02	I-Koivisto-30	I-Ray4-02
O-SCSFBC-30	I-Dennenberg-05	I-Koivisto-45	I-Ray4-03
O-SCSFBC-31		I-Koivisto-58	I-Ray6-02

O-SCSFBC-33	I-Donjacour-02	I-Koivisto-61	I-Richards-05
O-SCSFBC-34	I-Draper-02	I-BLewis-08	I-Richman-01
I-Arack-05	I-Elias-01	I-Lieb-03	I-Schultz-17
I-Arack2-03	I-Elias-05	I-McCowin-04	I-Weeden-02
I-Bartley-04	I-Goggin-05	I-Moss2-05	I-Weeden-04
I-Bartley-05	I-Goggin2-02	I-Murphy-03	I-Wuerfel-02
I-Brant-02	I-Hahn-05		
	I-Hall-02		

“The negative effect of fugitive light on the Western Snowy Plover, a federally threatened species, and shorebirds at Ocean Beach may be of concern if the project increases light intrusion into their foraging habitat. ...” (*Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-11]*)

“Please address how the Proposed Project is consistent with the Western Snowy Plover Recovery Plan (2007), which includes the following discussion on the effect of lighting on the plover:

- a) ‘When urban areas interface with natural habitat areas, the value of breeding and wintering habitat to native species may be diminished by increased levels of illumination at night (e.g., building and parking lot lights) (Kelly and Rotenberry 1996/1997).’
- b) ‘When beach development cannot be avoided, the following protections should be implemented: (4) lights for parking areas and other facilities should not shine on western snowy plover habitat, ... ’ (*Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-12]*)

“Page IV.F-28-29: Shorebirds and seabirds, which migrate and forage in the vicinity of Ocean Beach, are known to be sensitive to artificial light, which can affect their behavior. Birds resting or foraging on the beach could be affected by the lights at the athletic fields. Please address and provide impact analysis of the Proposed Project for shorebirds.” (*Frank Dean, General Superintendent, National Park Service, letter, February 1, 2012 [A-NPS-13]*)

“In fact they did analyze --there was talk about the birds and there was analysis in that report and I know most have you have read the report already that talked about if it’s not seen as a source of light, it isn’t as attractive to the birds as it is if it’s, you know, just seen as a lighted area below their flight path. So I think that by modifying these lights a lot of the adverse effects that were mentioned can be modified.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-06]*)

“With so many lights being installed, what is the cumulative impacts on wildlife?” (*Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-04]*)

“The DEIR acknowledges that the installation and use of the 60-foot stadium lights ‘has the potential to interfere with migratory corridors’ and impede nesting birds and other wildlife in the area. (DEIR, at IV.F-26). However, the DEIR concludes, without providing any evidence, that this impact will be less than significant.

First, the DEIR acknowledges that the migratory patterns through San Francisco is unknown. Local birders and biologists have identified the western end of Golden Gate Park as an important migratory corridor, especially for passerines. Before merely assuming no impact, the DEIR would be improved by actually studying the problem and, where information is absent, err on the side of protecting the wildlife resource rather than assuming it will endure the impact.

Second, the DEIR is notable in its failure to discuss compliance with the San Francisco Standards for Bird-Safe Buildings. (DEIR, at IV.F.-27) While the DEIR acknowledges that Golden Gate Park is an Urban Bird Refuge, the DEIR does not describe the conflict between the project and the Standards requirement that there be a ‘minimal use of lighting.’

Third, the DEIR assumes, without providing evidence, that the new lighting would not appear as a point source from above. The synthetic turf material and bleachers are likely to be much more reflective than natural grass or the woods in the area that exist now. Fog may play a role in amplifying the light as well. There is simply no information provided in the DEIR to assess the veracity or credibility of this assumption.

Fourth, the DEIR primarily addresses the displacement of nesting birds due to lighting (and other impacts) by stating, without providing supporting evidence, that there is ‘abundant habitat available to them elsewhere within Golden Gate Park.’ (DEIR, at IV.F.-29) While there are, indeed, many other trees and shrubs in the park, the DEIR should provide a scientific or factual basis for the assumption that those areas (1) are available (i.e., not already occupied), (2) provide adequate replacement habitat, and (3) that the wildlife in question can be expected to successfully move to the ‘replacement’ habitat and breed. The DEIR does not provide any such information.

Fifth, the DEIR discusses several raptor species, but it virtually ignores owls. Great-homed Owl and Barn Owls have been observed in the area after sundown. Presumably, ESA’s wildlife surveys were not conducted at night. Lighting can have very significant impacts on owls and their prey. Additional study of nocturnal wildlife must be conducted before a credible conclusion of no impacts can be rendered in the EIR.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-30]*)

“It also fails to provide adequate mitigation measures, for example, Does nothing for the lights. ...” (*Michael Lynes, Golden Gate Audubon Society, public hearing comment [O-GGAS3-04]*)

“As the Beach Chalet Soccer Fields are located within an Urban Bird Refugee as defined by the City’s Bird-Safe Guidelines, a lot more study ... light impacts proposed for them is needed for what is presented on pages IV.F-26, 27. of the DEIR” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-10]*)

“Impacts of Lighting. The DEIR findings, described in Impact AE-3 and Impact BI-2, that there are no significant impacts to adding 150,000 watts of lighting, is not substantiated by evidence. The DEIR lacks the analysis to make this determination. This is true for the impact of lighting on both aesthetics and biological resources.

The DEIR also does not consider the 9-acres of brightly lit fields as a source of light.

Importantly, the DEIR supplies no quantitative data or calculations that would judge the amount of light intensity seen by observers at various distances. The DEIR simply offers statements, some of which are contrary to established evidence and experience at other locations in San Francisco.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-27]*)

“Affects of lighting on Biological resources near the project area. Table ES-11 of the DEIR states:

Impact 81-2: Implementation of the proposed project would not interfere substantially with the movement of native resident wildlife species and with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

The table states that the project will ‘Fully shield all lights to prevent upward and outward light spill beyond the needed illumination area.’

There are several problems with this statement. For one, significant outward light spill exists in every other similar installation in San Francisco. There is no logical reason to believe that this project could be significantly different.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-30]*)

“...the DEIR contains no analysis of the effects of lighting in fog. In place of data is a statement (page IV.B-34), ‘Specifically, under foggy conditions, the lighting would be more diffused and would likely be more visible higher up in the sky and from vantage points further away.’

The evidence of other facilities in San Francisco shows just the opposite: the lights and the brightly lit fields provide a large, lit volume of fog that is visible from large distances, impacting the wildlife on the ground surrounding the site and in the air.

Also, overhead shields do not prevent upward light spill in fog, a condition that is common at the project site on the coast. Fog reflects light in all directions, including upward and outward, which will impact wildlife." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-31]*)

"Western snowy plover, a threatened species, are known to nest in the area across the street (the Great Highway) from the 'project site. The DEIR says that the 60-foot tall lighting will be focused on the fields. However, similar night lighting of fields in San Francisco are quite visible, and bright, not only from across the street, but from several blocks away. The DEIR does not provide an analysis of the effect of lighting on the snowy plover nesting or feeding habits.

The DEIR does not mention the effect of 9 acres of brightly lit, green synthetic turf as a source of light. However, a look at other similar facilities in San Francisco shows that it is such a source that will be seen from the surrounding hills, including the Balboa Natural Area." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-33]*)

"Affects of lighting on Biological resources within the project site. Most of the intensity of the lighting will point downwards from up above, into the wooded habitat surrounding the project site within Golden Gate Park. Page IV.B-34 states, 'the proposed lighting is unlikely to spill over the site's boundaries substantially enough to adversely affect the surrounding neighborhoods.'

This is a questionable statement, as described earlier, but the light certainly will not stop at the fence surrounding the 10-acre site. There will be impacts on wildlife, such as nesting birds, outside of the fence on the ground and in trees below 60 feet, which are most of the trees." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-34]*)

"60-foot stadium lights: these will destroy the character of the night sky and cause a glare that will drive what few migrating birds we have left away. I have lived on the Great Hwy for 25 years. At first, for several years, I heard honking of migrating geese every season. Now, only one or two flocks each YEAR come to my attention. These lights, if installed will be the end of migrating birds along this Pacific Flyway." (*Patricia Arack, letter, December 12, 2011 [I-Arack-05]*)

“When I first moved into my house 25 years ago, I always heard migrating birds honking up above as they flew by and each year there were fewer and fewer. I hardly ever hear them now. This project would put in a light ... that would further confuse any migrating birds and send them off course or they would avoid this area, which is the Pacific flyway, altogether.” (*Patricia Arack, public hearing comment [I-Arack2-03]*)

“Add on top of that the effective removal of the perimeter habitat that will be lit up until 10:00 PM most nights of the year. These areas cannot be used for nocturnal animals that use it to feed or diurnal animals that need it to rest from the high demands of surviving in an near-urban environment. The large increase in traffic from humans will also have a major negative effect on these animals.” (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-04]*)

“Then there is the significant avian casualties, especially of migrating neo-tropical songbirds and shorebirds (many who are seriously threatened as species) that will occur when these light fields cause disorientation during their epic bi-annual journeys. This is well documented science that the producers of the EIR fail to acknowledge.” (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-05]*)

“The EIR is obviously flawed and inadequate in its minimizing of the huge construction’s effects on wildlife, ... and light pollution for the whole western Sunset district.” (*Michael Brant, letter, December 2, 2011 [I-Brant-02]*)

“Installation of 10-60’ towers with stadium lighting that will remain on until 10:00 pm every night. Artificial lighting has been shown to draw birds off course during migration. This site is within the Pacific Flyway, in Golden Gate Park and 1000 feet from Ocean Beach.

The lighting will negatively impact nesting birds and other species that depend on the area surrounding the soccer fields as habitat.” (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-03]*)

“The SF Recreation and Parks Dept. is proposing to replace 9 acres of open, naturally-growing grass in Golden Gate Park with synthetic turf and to install several 60-foot tall lights that will illuminate the western end of Golden Gate Park for the first time. This project will remove important wildlife habitat, increase disturbances ... wildlife, ...” (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-07]*)

"I attended the Planning Commission meeting on Dec. 1 and heard speaker after speaker present lucid, compelling arguments refuting the DEIR's conclusions. They addressed ... the entire issue of light pollution." (*Gary Browd, letter, December 7, 2011 [I-Browd-03]*)

"Artificial light has a profound effect on Wildlife, particularly migrating birds. What is the cumulative effect of the parking lot and walkway lighting as well as the fields lighting? Has this been measured? How is the increase in artificial night lighting compatible with San Francisco's goals of decreasing light pollution?" (*Nancy Buffum, letter, December 12, 2011 [I-Buffum-04]*)

"In addition to the stadium lighting, there will be lighting for paths and lighting for parking also. What will be the cumulative impact on this 'wild' end of the Park for people? What will be the cumulative impact for wildlife?" (*Ben Citron, letter, December 11, 2011 [I-Citron-07]*)

"As for lights- again a must since it permits greater use of a facility and spreads the cost of maintenance per use hour. As for the effect of lights on migratory birds- birds figure these things out. They have for a long time. Cities have developed where once there was open space. Ball parks have had lights for years. The swallows return to Capistrano. And the small homing pigeon community in the Sunset has their birds fly home from great distances that I'm certain is lighted by a Mall or TWO. A city or two. and several lighted used car lots." (*Jack E. D'Angelo, Letter, November 29, 2011 [I-D'Angelo-02]*)

"I am not persuaded by the EIR that the project would 'impede [wrong word, I think-perhaps 'restrict' would be better] the use of wildlife nursery sites.' I'm thinking primarily of the birds, and I doubt that the Audubon Society would agree with the EIR in this respect." (*John de Forest, Letter, December 11, 2011 [I-de Forest-04]*)

"I wanted to hit specifically upon the implementation of said planned lights in the EIR and how they would harm bird migratory patterns, increase light pollution and harm specifically the California red bat, the red bat's hunting ability at night, like in the early evening." (*Jimmy DeLisle, public hearing comment [I-DeLisle-01]*)

“Owls and other nocturnal animals would be deterred by the immense quantity of artificial, late-evening lighting. Other birds would suffer various stresses to their livelihood as well.” (*Charles Denefeld, Letter, December 10, 2011 [I-Denefeld2-02]*)

“In addition to the stadium lighting, there will be lighting for paths and lighting for parking also – what will be the cumulative impact on this ‘wild’ end of the Park for people? What will be the cumulative impact for wildlife?” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-05]*)

“The report appears to underestimate the number of birds’ nests that would be affected, compared to the Audubon Society’s count as reported at the hearing. The DEIR does not make much mention of mammals being affected by the lights and the noise. I have personal experience of the introduction of increased lighting at Crissy Fields by the opening of Planet Granite. Before Planet Granite and its lights (and also increased traffic, both human and automobile) I often saw various larger mammals, coyotes, raccoons, skunks at Crissy Field at night. These sightings dwindled to nothing after Planet Granite’s opening. The argument that the animals and birds will go elsewhere in the city ignores the fact that we are pushing on animal habitats from all directions. Every intrusion is an erosion of animal habitat. We have a responsibility to all of the living creatures of the city of St. Francis.” (*Annemarie A. Donjacour, Letter, December 8, 2011 [I-Donjacour-02]*)

“The conservation of nature in the park- cutting down trees and brush, removing many acres of living turf, installing lights that interfere with the owls, coyotes, skunks and other nocturnal animals in Our park is not good for San Francisco. we should be doing everything possible to PRESERVE what we have left! especially the precious few owls and coyotes we have living in Our park who will be drastically affected by lights that will prevent them from being able to see and to keep from being seen, thus causing them to move on or die due to lights wrecking their hunting grounds. we have a whole city in which we can install a soccer complex with nighttime stadium lights- lets not pick one of the only places in the city that has owls and coyotes living in it as the place to put these lights and artificial turf (which these animals prey need as a food source and living quarters!). coyotes and owls are amazing to not have disappeared completely from our city- it is a miracle that they exist at all in golden gate park, that miracle was very graciously bestowed upon us. let’s not s*&% on that miracle, ok?” (*Andrea Draper, Letter, December 12, 2011 [I-Draper-02]*)

“The DEIR incorrectly asserts that the Western Snowy Plover is absent from the project area, and therefore the impact on them would be low. (p.F-12) The Snowy Plover Protection Area begins at Stairwell 21 on Ocean Beach just 1000 feet to the west of this proposed project, and extends south

to Sloat Boulevard. According to the DEIR table, Snowy Plovers are listed as federally protected, and as a California species of special concern. They rest and forage on Ocean Beach, the only suitable habitat in the area, to conserve the energy needed for breeding and migration. The Plover Protection Area is designed to minimize disturbances by dogs and beachgoers.

The placement of ten 60 foot stadium lighting lamps within 1000 feet of their resting area, not to mention the loud and raucous fan shouting on possibly multiple soccer fields at once, would undoubtedly affect these endangered shore birds negatively. Ocean Beach and Crissy Field are the only sites in San Francisco that can support Snowy Plover populations. Ocean Beach is far more significant with yearly monitoring numbers between 27-30 birds, while Crissy Field has only 2 or so sightings per year." (*Evan Elias, Letter, December 11, 2011 [I-Elias-01]*)

"The DEIR also fails to adequately acknowledge the significance of the impact of bright stadium lights on the essential nightly bird migrations in the Pacific Flyway. As the EIR itself states, bright night lighting is known to disorient nightly bird migrations; cause higher numbers of collisions especially in areas with foggy skies like San Francisco; and disrupt and deter bird usage of nearby habitat for resting. Hundreds of birds and bird species pass through this essential migratory route, which in its present form supplies a safe passage and supportive rest sites. Shielding upward radiance from the lights is not a solution. The effect this project's stadium lighting would have on this critical avian highway is really unknown; what even this EIR makes clear is that it will be negative. And with so many bird species teetering on the edge of endangerment, it is not a reasonable or responsible risk to take in order to increase outside recreation." (*Evan Elias, Letter, December 11, 2011 [I-Elias -05]*)

"Failure to analyze ecological impacts of re-reflected light off clouds. In addition to direct light and forward-scattered light entering the surrounding ecosystem, during cloudy conditions a very large proportion of the light reflecting upward off field surfaces would strike the cloud bases and be re-reflected into the surrounding environment. Even during clear sky conditions, the sky may be expected to be significantly brighter than at present. The effect of likely bright artificial sky glow during (but not limited to) cloudy conditions on the ecology of e.g. insects, birds, mammals, and plant life in the parks, wildlands, and even residential back yards surrounding the proposed project site appears to be basically missing from the DEIR." (*David E. Goggin, Letter, December 10, 2011 [I-Goggin-05]*)

"Many species of birds, mammals, insects and plants and trees depend on a natural day-night cycle for timing their life processes and many are sensitive to what may seem relatively low amounts of nighttime light. So that fake twilight could be very disrupting to the ecology and the surrounding wildlands." (*David Goggin, public hearing comment [I-Goggin2-02]*)

“Since this part of San Francisco is known for its fog, the potential is great for light pollution from the field lights. Birds, mammals, and the insects they feed on, can be negatively affected by extensive night lighting.” (*Thomas Hahn, letter, December 9, 2011 [I-Hahn-05]*)

“Installation of 10-60’ towers with stadium lighting that will remain on until 10:00 pm every night. Artificial lighting has been shown to draw birds off course during migration. This site is within the Pacific Flyway, in Golden Gate Park and 1000 feet from Ocean Beach. The lighting will negatively impact nesting birds and other species that depend on the area surrounding the soccer fields as habitat.” (*Robert Hall, letter, November 29, 2011 [I-Hall-02]*)

“When I drive home at night and turn from Sloat Boulevard onto 44th Avenue, my attention is always drawn to the bright and glaring lights at the soccer fields on South Sunset Playground between 40th and 41st Avenue and I am instinctively scared that there is a big fire. Actually, you can see the lights all the way from the beach. The lights proposed for the soccer fields in the western end of Golden Gate Park will have even a bigger negative effect as you expect to see a dark sylvan area and not a sports arena. Their visual impact is not adequately addressed in the DEIR (no photo montages) nor is their impact on the wildlife, especially birds, sufficiently considered.” (*Inge Horton letter, December 1, 2011 [I-Horton-01]*)

“Lighting will be detrimental to the wildlife and to the people who live in the area.” (*Katherine Hyde, email, December 11, 2011 [I-Hyde-01]*)

“The plan requires the use of night-time lighting: there is insufficient analysis of the impact of night-time lighting upon the Pacific Flyway, the close proximity to the Pacific Ocean shoreline, the migratory corridors in the vicinity, interference with wildlife nursery sites (the Beach Chalet Soccer Fields are located within an Urban Bird Refuge as defined by the City’s Bird-Safe Guidelines).

The plan requires the use of night-time lighting and night-time soccer field use: there is insufficient analysis of the impact of combined night-time lighting and noise upon avian reproduction (the Beach Chalet Soccer Fields are located within an Urban Bird Refuge as defined by the City’s Bird-Safe Guidelines).” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-17]*)

“The plan requires the use of night-time lighting and night-time soccer field use: there is insufficient analysis of the impact of combined night-time lighting ... (the Beach Chalet Soccer Fields are located within an Urban Bird Refugee as defined by the City’s Bird-Safe Guidelines).”
(Jason Jungreis, email, November 21, 2011 [I-Jungreis2-18])

“In addition to the stadium lighting, there will be lighting for paths and lighting for parking also – what will be the cumulative impact on this ‘wild’ end of the Park for people? What will be the cumulative impact for wildlife?” *(Tehmina Khan, email, December 10, 2011 [I-Khan-06])*

“Although the DEIR makes a token reference to the Pacific Flyway, it does not even attempt to analyze most of the effects of an additional 9 acres of lighted area, along the path of the Flyway. Yet, in Impact 81-2, the draft EIR comes to the conclusion that there will be less-than-significant impact in migratory wildlife corridors.

This erroneous conclusion results from the drafter’s decision to confine his analysis to the narrow issue of nighttime strikes. He concludes that because the stadium lights will be configured to avoid pinpoint lights, there will be little danger of night-time strikes. Note that even the literature cited only contends that there is a reduction of 40% in nighttime strikes, far from complete eradication of this terrible way of killing migratory birds. (Cf. text accompanying footnote 44 on page IV-F-2S.)

In addition, this analysis fails to consider two important factors. There is no discussion of the effect of fog on dispersing and reflecting lights that are normally directed groundwards.

Secondly, and more importantly, there is no discussion of how the change in night-time landmarks may affect migratory flight patterns. Up until now, the entire width of Golden Gate Park has provided an oasis of darkness among the city lights .. With the installation of the proposed project, smack in the middle of the dark area will be a series of bright lights covering nine acres up until 10:00 p.m. at night. And these lights are in the section of the park closes to the ocean .. The smell and sound of the ocean will constitute another major landmark along the flight corridor of migrators. Yet, most birds prefer to fly overland. This change in night-time landmarks and configurations is likely to confuse many night-time migrators.

The DEIR’s discussion of the effects of night-time lighting on breeding birds is also obviously deficient, for two reasons. First, the DEIR contends that artificial lights might extend the foraging time of breeding and nesting birds. (Cf. page, IV.F-29, first ~.)

This conclusion is simplistic in the extreme. Many bird species forage at twilight. While twilight falls in the surrounding areas, the proposed project will maintain daylight conditions over at least nine acres of fields. When the stadium lamps are turned off at 10:00 p.m., it will be night-time. There will be no twilight in the vicinity of the soccer fields. The result will be a substantial

diminution in foraging habitat for twilight feeders.” (Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-08])

“Looking at TABLE ES-I Impact BI-2 and BI-3 again raises definition questions. If safety is a goal of the plan, what are the specific areas needing illumination, of what intensity (what does ‘no higher than necessary’ mean?), what is ‘equivalent ecological value’ (is it only similar species, or was that presented as an example of equivalent ecological value?), ...” (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-05])

“The one mention concerning fog comes in the Summary on p. 36. (2nd paragraph, end of the first sentence, in a parenthetical example, and the next sentence). The multiple concerns about light bounce, repeatedly brought up at the scoping session and well documented by many with long experience of SF weather (see the Sidewalk Astronomers, the Astronomical Society of the Pacific, and the physics dept at SFSU, for example), were entirely ignored in the statement:

However, even under conservative conditions, the spillover of the lighting would not be expected to travel so far as to adversely and substantially affect the closest neighborhoods, which are located approximately 800 feet from the project site. (p. IV.B-36)

... It also implies that there is a biological effect from the lights since the only possible viewers at these heights above the stadium lights allowed in the DEIR are birds, aircraft, and spacecraft. This statement, faulty as it is, is misplaced in the DEIR in aesthetics when it rightly belongs in the section on biological impacts.” (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-29])

“Suddenly, also on p. 36, it seems that there are lights for this project that will remain on after 10 p.m.? This is new information. ...Much is being ignored, especially the very real and large impact of stadium lighting on the nature of the western end of the park and the western side of the city, and the effects of light pollution on plants, animals, insects, and humans subject to it.” (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-30])

“... light pollution from the stadium lights will severely affect the dune ecosystem, which is just across the street from the proposed project. ...” (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-45])

“On p. 22 in the discussion of significance criteria, it seems clear that the proposed project would interfere substantially with fish, birds, insects, and other wildlife species using the area for

migration, as well as with natives. Testimony as to the effect the lights would have on fish and birds was presented at the 12/11 meeting, and the effects of light pollution, ... on coyotes, skunks, raccoons, opossum, and foxes (all resident in this area) are easily found in the literature. The conclusion of a less than significant impact with mitigation, then, seems unsupported. ... The lighting issue is inadequately addressed, light bounce is ignored, and the effect of nighttime lighting on migratory corridors and animal health is downplayed contrary to the evidence in the scientific literature on this subject. ...

The issue of bird migration and nighttime lighting is given a curious spin on p. 26. Migratory birds fly low over this area, as daily observations show, and given the amount of fog in the area, all the numbers provided in the migration elevations are too high and therefore incorrect. Thus the lights will affect migrations. As stated on p. 27, 'The tendency of birds to move toward lights at night when migrating, and their reluctance to leave the sphere of light influence for hours or days once encountered, has been well documented.' Eliminating stopover habitat, like the fields, is a severe problem. This space and the Polo Fields are commonly used as resting sites for big birds on long flights (again, based on years of observations of these sites). The soccer fields are located within an Urban Bird Refuge; carpeting over the natural turf and lighting up the night will destroy this area as an Urban Bird Refuge, but this aspect of the project is not addressed in the DEIR. The statement on p. 29 that 'the breeding bird population in the immediate area .. is apparently quite small' seems to be based on conjecture in place of substantial observational data.

Fog eliminates any possible point-source nature of the stadium lights, increasing the possibility of birds being trapped by the light and circling until exhausted or dead, as detailed on p. 28. I'm not sure why migratory corridors in the vicinity of the site are considered to be unknown; what information sources were consulted for migratory information in this area? But the effect on bird populations is clearly considered to be a major problem, as detailed by the DEIR. Then the DEIR goes on to assume that all birds in the area are either migratory and/or flying above the 60 foot lighting tower height; this is contrary to daily observations of the area and to the statements immediately preceding it. The claim that the stadium lighting would not stand out from the neighborhood is unsupported (and dealt with in more detail in the aesthetics part of this response). Generally, the conclusions of the analysis of the effect of lights on birds at this site seems to be based on little direct observational information of the area and contradicted by neighborhood experiences and some statements within the DEIR itself.

Nighttime lighting disrupts not only bird behaviors but mammals' and insects' as well, and has health consequences (the Wikipedia article on light pollution contains excellent references on this topic). Stadium light pollution in this very dark area, especially in conjunction with the synthetic turf and increased noise, can be considered akin to creating an aquatic dead zone in a once fertile marine environment. The elimination of this specific area as a potential habitat for wildlife cannot offset by the existence of other green spaces elsewhere in the park; subtraction of resources is subtraction. There is no evidence presented as to the impacts of other synthetic turf projects on wildlife because no EIRs were done on the other projects. The Dooling and Popper study cited on p. 30 doesn't list the species that apparently prefer traffic noises, and the statement that birds have less sensitive hearing is no longer considered true, especially after recent studies done on

the speed of bird song production and pitch ranges.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-58]*)

“...For example, the effects of the lights on fish in the ocean just across the street are not considered. ...” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-61]*)

“Birds, mammals, and the insects they feed on, can be negatively affected by extensive night lighting.” (*Beth Lewis, letter, December 4, 2011 [I-BLewis-08]*)

“I am also very concerned about Light Pollution: People living in the surrounding areas as well as birds, mammals, and the insects they feed on, will be negatively affected by extensive night lighting.” (*Reddy Lieb, letter, December 5, 2011 [I-Lieb-03]*)

“Also, we are fearful for the fragile shore and other wildlife if floodlights are used. We love our little snowy plovers, and they are barely hanging on as it is.” (*Kathleen McCowin, email, December 8, 2011 [I-McCowin-04]*)

“Regarding the lights, what supports the conclusion there would have been minor impact on birds?” (*Rasa Moss, public hearing comment [I-Moss2-05]*)

“There are a number of facts about bird migration that should be mentioned in the EIR:

1. Fall migration peaks between mid August and mid November in San Francisco.
2. Spring migration takes place between early February and the end of May.
3. Migrating birds in both spring and fall tend to fly at night.
4. Birds migrate along the coast in much greater numbers in fall than spring.
5. In addition to birds considered regular migrants along the Pacific Flyway, there are significant numbers of others that are out of range. San Francisco County has a list of about 400 species. Of those some are listed as endangered, rare, threatened or species of concern. Research could easily come up with specific species, but among those that are likely to use the project site one must start with Tri-colored Blackbird, San Francisco Common Yellowthroat, Yellow Warbler, Willow Flycatcher and the list goes on.

6. Night migrating birds are most active in the hours immediately following sunset and the hours prior to sunrise.
7. Studies indicate migrating birds are attracted to bright lights when they are taking flight and deciding where to land.
8. Migrating birds are attracted to bright lights and the attraction is intensified during foggy conditions.
9. The project site is often fog shrouded during August, September and early October.

Conclusion: Bird use of the woodlands, and for that matter the field itself, is far more significant than what is suggested in the EIR. The fact that bird use of the area is all but dismissed in the EIR is incorrect. Birds depend on this area in considerable numbers. This should be corrected in the EIR and the EIR should be reissued for comment based on accurate data about birds." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-03]*)

"The EIR dismisses impacts from lighting on Western Snowy Plover. That's pretty difficult to state. The plovers do in fact inhabit the beach for about 10 months of the year. During some of that time they roost on the beach north of Lincoln Way. It is unknown what impact night lighting might have on that population. We do know the birds move around a lot. Based on observation of banded birds, it is typical for the beach to host 30 or so banded birds through the course of the year. At anyone time there are usually 5 to 8 banded birds. That means the others are moving elsewhere, probably at night. Whether the lights from the soccer fields might attract them or not is simply not known. The EIR should have a specific action to mitigate any impact on the Western Snowy Plovers. That action should be to immediately turn off the lights and remove the light standards. Unfortunately, there is not much flexibility that can be considered here. With only a few thousand Western Snowy Plovers remaining, we really must do what we can to assure their survival." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-04]*)

"The proposed light standards pose a threat to migrating birds that would be difficult to mitigate. The most significant problem the EIR should address is how impacts will be mitigated with foggy conditions during fall migration. The best course of action would be to simply drop night lighting from the project all together. It is inappropriate on many levels, but I'm sure that will be brought up by others. Therefore these comments will only deal with potential problems with the lights, their standards and the black cyclone fencing.

Lighting on clear nights poses a problem but one that might be mitigated with the use of alternate lighting systems. The issue is that migrating land birds will see the lighting, be attracted to it and in the course of their flight strike structures in the area. With the use of 10 approximately 60-foot towers, 47 approximately 15-foot standards and 13 approximately 18-foot standards, not only is night lighting a critical issue, but it is compounded by an obstacle course of light

standards. Further, the black fencing, though only 42 inches high poses a real threat to birds like swallows and swifts that soar through the air in search of flying insects. They often fly close to the ground and could be victims of collisions with the obscured black fencing. This project has the real potential to be a death trap for migrating land birds. Then there are seabirds, shorebirds and others for which I do not have data, but that the EIR should consider.

The problem of night lighting is compounded during foggy conditions. With the lights on until 10 each and every night of the year, they will shine in the fog. The glare of night lighting in fog attracts birds whose vision is altered by the poor conditions. They fly to the glare and are known to fly in circles until they exhaust themselves or strike an object. With 80 structures in the project site, it would see the chances of disoriented birds striking light standards is pretty high. The problems with fencing stated above would only be compounded by fog." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-05]*)

"The EIR must define just what will be done to control impacts on migratory birds. The minimum is that the Recreation and Park Department should permanently employ an independent biological agency like PRBO Natural Sciences or the San Francisco Bay Bird Observatory to conduct frequent surveys to assess bird strikes at the soccer fields. Appropriate mitigation measures must be ready to put in place on an immediate basis. In other words, if strikes are noted night use of the fields should cease immediately until mitigation measures are put in place. Should bird strikes continue all lighting should be shut off and the towers should be removed immediately." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-06]*)

"I just read the article below on Yahoo News. It reports on the impact on a flock of migrating grebes that crashed into lighted parking lots during a storm. Though not identical to what we might expect to occur in Golden Gate Park, it is an example that reviewers should be aware of when evaluated whether night lighting is appropriate in an otherwise dark parkland. ..." (*Dan Murphy, email, December 14, 2011 [I-Murphy2-01]*)

"I'm a volunteer nest monitor in Golden Gate Park and I keep track of the --this map here is 18 raptor nests in the west end of Golden Gate Park, of great horned owl, red shouldered hawks, red tailed hawks and Cooper's hawks.

I want to talk about the effect of light pollution on these birds. As you know the weather in the western end of the city is almost always gray, and so that gray overcast will provide a great reflector for these lights. And the environmental impact report has not adequately or addressed this at all.

These birds run on light cycles. Their mating behavior, their feeding, their is --their --I feel like Perry here. Their whole cycle of life, how they migrate is based on light. We're asking to turn this park – being asked to turn this park into an all-day summer project where we have five extra hours of light some days in winter.

Birds are not going to like that. So this is going to be potentially very, very bad for these birds. But also it's going to be very, very good for these birds' prey. And these birds' major prey are rats. These are the major suppressors of vermin in Golden Gate Park. If you get rid of these birds, the rats will increase. What happens then is you have increased pressure to use rodenticides and the rodenticides begin a downward cycle of poisoning birds as well.

We lost all our great horned owls 20 years ago to the use of rodenticides in Golden Gate Park. We now have three nesting pairs back and they've only been back for a few years. If we lose these birds, we lose an important part of what makes this place the wild --park's wildness that the design of the Park envisioned." (*John O'Dell, public hearing comment [I-O'Dell-01]*)

"I do not believe that the impact of this proposed artificial lighting on wildlife and residents is adequately addressed in the DEIR." (*Dennis O'Rourke, email, December 2, 2011 [I-O'Rourke-01]*)

"Finally, I would like to see some specific data on the degree of illumination that could occur on Ocean Beach near the Park under various atmospheric conditions. If there is any additional illumination on the Beach, it could affect the Beach as habitat for wildlife, as, for example, many shorebirds on the beach, including the Western Snowy Plover, are nighttime feeders and could be affected by any change in illumination." (*Charles Pfister, email, December 12, 2011 [I-Pfister-04]*)

"The lights would be also and encroachment to nature in that it would make undesirable for nesting birds and resting birds as it is on the Pacific flyway." (*Yope Posthumus, public hearing comment [I-Posthumus2-03]*)

"Lastly, I found a document in my files relating to the effects of artificial night lights on wildlife, should you choose to include this in environmental impact comments, due today." (*Jamie Ray, letter, December 12, 2011 [I-Ray4-02]*)

"1) Climate characteristics vary from one year to the next; it is not uncommon to experience cool summers, dry springs, and slow falls. A season's photoperiod is the only consistent factor in the natural environment.

Therefore, many species of plants and animals rely on the length of the day to indicate the proper season for mating, molting, and other life cycle activities.

This photoperiodic sensitivity is often so acute that many species can detect discrepancies in natural light as short as one minute.

Reproduction cycles are most often disrupted when artificial light at night interferes with species' natural detection systems.

Trees have been known to bud prematurely; some flowers cease blooming.

Artificial light also can cause animals such as squirrels and robins to mate out of season. Changes in plant and animal reproductive activity can create difficulty in finding food and increase chances of starvation.

- 2) Artificial light at night contributes to lack of food (starvation) by interfering with predator/prey relationships. For instance, moths and other night-flying insects are attracted to lights. This involuntary phototaxis leads to their easy capture. Their incessant gravitation toward artificial points of light not only makes them vulnerable as prey and subjects them to increased predation but disrupts the normal nocturnal patterns of predator species by creating an artificial feed concentration around points of light.

For some species of predators, such as bats, this disruption means a change in the concentration and location of their feed, which can lead to imbalances in predator/prey ratio. For species repelled by light, feed becomes scarcer and difficult to procure, as many insects swarm around lights, leaving fewer to be caught as they fly free. The decreasing amount of available food due to night lighting can effect the survival of these species. Most species of bats endemic to California are federally listed.

Hundreds of terrestrial bird species migrate under cover of night.

Skyscrapers and other night lighted pose collision / disorientation hazards.

During the 1960s, it is estimated that over a million birds a year were killed in collisions with lighted television towers in the United States. Since that time, the number and height of communication towers has increased exponentially.

The West End of Golden Gate Park is located on the Pacific Migratory Flyway. This area hosts an amazing diversity of resident and migratory wildlife and should not be degraded with nighttime flood lighting." (*Jamie Ray, letter, December 12, 2011 [I-Ray4-03]*)

"The American Bird Conservancy (ABC) announced the availability of a new, national publication, American Bird Conservancy's Bird-Friendly Building Designs, part of a national-level program to reduce the massive and growing number of bird deaths resulting from building collisions in the US.

The 58-page publication contains over 110 photographs and 10 illustrations and focuses on both the causes of collisions and the solutions, with a comprehensive appendix on the biological science behind the issue. The publication addresses building design, bird movements, and habitat and landscaping, which can help or exacerbate the collision problem. Full publication available in PDF format at: <http://www.abcbirds.org/newsandreports/BirdFriendlyBuildingDesign.pdf>

p.29, 30 Artificial light is increasingly recognized as a negative factor for humans as well as wildlife.

Birds evolved complex, complementary systems for orientation and vision long before humans developed artificial light. We still have much more to learn, especially the differences between species, but recent science has begun to clarify how artificial light poses a threat to birds, especially nocturnal migrants. These birds use a magnetic sense which is dependent on dim light from the blue-green end of the spectrum.

Research has shown that different wavelengths cause different behaviors, with yellow and red light preventing orientation. Different intensities of light also produce different reactions. Despite the complexity of this issue, there is one simple way to reduce mortality: turn lights off.

Rich and Longcore (2006) have gathered comprehensive reviews of the impact of 'ecological light pollution' on vertebrates, insects, and even plants. For birds especially, light can be a significant and deadly hazard.

Beacon Effect and Urban Glow. Light at night, especially during bad weather, creates conditions that are particularly hazardous for night-migrating birds. Typically flying at altitudes over 500 feet, migrants often descend to lower altitudes during inclement weather, where they may encounter artificial light from buildings.

Water vapor in very humid air, fog, or mist refracts light, forming an illuminated halo around light sources.

There is clear evidence that birds are attracted to light, and once close to the source, are unable to break away (Rich and Longcore, 2006; Poot et al., 2008; Gauthreaux and Belser, 2006). How does this become a hazard to birds? When birds encounter beams of light, especially in inclement weather, they tend to circle in the illuminated zone, appearing disoriented and unwilling or unable to leave. This has been documented recently at the 9/11 Memorial in Lights, where lights must be turned off briefly when large numbers of birds become caught in the beams. Significant mortality of migrating birds has been reported at oil platforms in the North Sea and the Gulf of Mexico.

Van de Laar (2007) tested the impact on birds of lighting on an off-shore platform. When lights were switched on, birds were immediately attracted to the platform in significant numbers.

Birds dispersed when lights were switched off.

Once trapped, birds may collide with structures or each other, or fall to the ground from exhaustion, where they are at risk from predators.

While mass mortalities at very tall illuminated structures (such as skyscrapers) during inclement weather have received the most attention, mortality has also been associated with ground-level lighting during clear weather.

Light color also plays a role, with blue and green light much safer than white or red light. Once birds land in lighted areas, they are at risk from colliding with nearby structures as they forage for food by day.

...Overly-lit buildings ... as well as posing a threat to birds.

Reducing exterior building and site lighting has proven effective at reducing mortality of night migrants. In addition, an increasing body of evidence shows that red lights and white light (which contains red wavelengths) particularly attract and confuse birds, while green and blue light have far less impact.

...(Note pers. JR: spotlights, regardless of timers, should not be used, particularly on the Pacific Flyway)

...Monitoring programs can provide important information in addition to quantifying collision levels and documenting solutions. Toronto, for example, determined that if short buildings emit more light, they can be more dangerous to birds than tall building emitting less light.

Ideally, Lights Out programs would be in effect year round, saving birds ..." (*Jamie Ray, email, December 14, 2011 [I-Ray6-02]*)

"Artificial lighting has been shown to draw birds off course during migration." (*Renee Richards, email, December 8, 2011 [I-Richards-05]*)

"How can killing more than eleven acres of open grassland and woods in a semi-wild setting with a plastic blanket and concrete, especially in an area directly in the flyway of thousands of migratory birds and used by them as a resting place be 'less than significant' (IV. F-36) as regards wildlife? How can you be so supremely certain that if the 1500 watt halide lights aren't pointing upward they won't disorient birds? You quote 'one controlled experiment' (IVF-28) research to justify this conclusion. Sorry, but in the science classes I attended, one experiment is only the beginning of research.

...How can 6 or 10 60-foot 1500 watt spot-lights shining until 10 PM every night of the year in this critical bird area be seriously contemplated in a city whose own government initiated a Lights

Out Policy that attracted praise from the Governor and Federal Congresspeople, and has inspired cities all over the world to emulate it?" (*Dan Richman, letter, no date [I-Richman-01]*)

"The project is located within the Pacific Flyway and in close proximity to the Pacific Ocean and shoreline. The DEIR admits that the migratory corridors in the vicinity of the Beach Chalet Athletic Fields are unknown. It is however, known that nighttime lighting has the potential to interfere with migratory corridors and can impede the use of wildlife nursery sites. Increase in ambient noise levels are problematic as it can interfere with avian reproduction as well as deter the use by special-status bats. [DEIR Pages IV.F-26, 27.] As the Beach Chalet Soccer Fields are located within an Urban Bird Refuge as defined by the City's Bird-Safe Guidelines, further study is warranted." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-17]*)

"The project calls for the installation of 10-60' towers with stadium lighting that will remain on until 10:00 pm every night. Artificial lighting has been shown to draw birds off course during migration and disturbs birds from feeding and resting. This site is within the Pacific Flyway, in Golden Gate Park and 1000 feet from Ocean Beach. See the studies conducted by Rich and Longcore and others at <http://www.urbanwildlands.org/> and <http://www.prbo.org/cms/index.php?mid=276#lights>" (*Noreen Weeden, email, November 29, 2011 [I-Weeden-02]*)

"The lighting will negatively impact nesting birds and other species that depend on the area surrounding the current natural grass soccer fields as habitat." (*Noreen Weeden, email, November 29, 2011 [I-Weeden-04]*)

"The DEIR did not do long term modeling of the project effects on flora and fauna in the soccer area. The comments only included 'construction related impacts' of the project, not the environmental consequences over time of the existence of the proposed project or any of the alternatives. ... What happens to all of the wildlife in the western end of the park if lights are installed? ..." (*Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-02]*)

Response BIO-4

In response to comments O-GGAS2-30 and I-Ray6-02, the San Francisco Standards for Bird-Safe Buildings are discussed on EIR pages IV.F-21 and IV.F.27. The Standards as written apply to *buildings* within or adjacent to an Urban Bird Refuge and to *building or structure related features* that are considered potential 'bird traps' no matter where they are. As discussed on EIR

page IV.F.27, restroom renovations would be in compliance with the Standards. The project does not contain any feature-related hazards as defined by the Standards. In addition and also in compliance with the Standards, the project lighting is the minimum required for the project purpose and would minimize lighting impacts by shielding each light and directing lights to avoid spillover off the fields and turning off all lights at 10 p.m. (see EIR Chapter II, Project Description, page II-5) and these measures are described in Improvement Measure I-BI-2 on page IV.F-31 and IV.F-32.

In response to comments O-PAR2-10, I-Jungreis2-17, I-Koivisto-58, I-Schultz-17, I-Brant-02, and I-O'Rorke-01, the EIR recognizes that the project is located in an Urban Bird Refuge and identifies potential impacts from lighting on migratory birds, as well as on breeding birds and other wildlife. The impacts analysis was informed by biological resources surveys of the project site and the project's lighting study as well as numerous sources as cited in the discussion on EIR pages IV.F-25 through IV.F-29. The commenters do not elaborate on the nature of the further studies they would like performed. However, as noted earlier in these responses, analysis of environmental effects in a CEQA document, should comprise efforts that are reasonably feasible (CEQA Guidelines Section 15151). Nor does CEQA require that an agency perform all research or study recommended by commenters, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Section 15204 (a)).

In response to comments O-GGAS2-30, I-Elias-05, I-Horton-01, I-Jungreis2-17, I-Koivisto-58, and I-Moss2-05, the EIR recognizes the fact that Golden Gate Park is located on the Pacific Flyway and is an important migratory stopover point for birds on EIR pages IV.F-6 and IV.F-26 and this fact informed the analysis of potential lighting impacts for migratory birds (EIR pages IV.26 through IV.F-28). Relying on the best available information, the EIR provides a thorough discussion of the ways in which night lighting can induce bird strikes, as well as disorient and 'trap' migratory birds, and concludes that potential impacts on migratory birds would be less than significant based on that discussion. The above comments on the Draft EIR are conclusory and present no substantial evidence to the contrary.

In response to comment O-GGAS2-30, a review of aerial photographs taken at night or the experience of a nighttime airplane flight shows clearly that large lighted areas appear as a field of light, not as a point source from above. Even if the synthetic turf reflected light and it was amplified by the fog, it would still appear as a field of light and would be less likely to attract migrating birds than an isolated point source. Also see response AES-2 regarding light spread.

A number of commenters (I-Bartley-05, I-Bridges-03, I-DeLisle-01, I-Hall-02, I-Kohn2-08, I-Richards-05, I-Richman-01, I-Weeden-02, I-Murphy-02, and I-Murphy-03) state that night lighting of the fields would disorient migrating birds. Most of these comments are conclusory statements and no substantive evidence is provided. The EIR thoroughly discusses this potential impact on pages IV.F-26 through IV.F-28 and concludes that the project night lighting is unlikely to disorient migrating birds because the lighting would be shielded and would therefore not appear as a point source of light. In addition, the athletic field lighting would not appear as an isolated light source, as it is surrounded by lighted neighborhoods, lighted roads in Golden Gate

Park, and the well-lighted Great Highway. In response to a specific example provided (I-Murphy-02), cases of migrating birds crashing into lit parking lots and onto other surfaces mistaken for waterbodies have been documented, one quite recently. Such incidents are rare and typically occur during severe weather. In addition, the project minimizes the chances of such an occurrence by shielding lights and limiting the hours of night lighting. Therefore, the chance of a similar occurrence happening in association with the lit athletic fields is considered relatively small.

Comments I-Murphy-05 and I-Murphy-06 assert that the project light standards would pose a bird strike risk, suggest that surveys should be conducted to assess bird strikes at the athletic fields and, if bird strikes occur, suggest use of the fields should cease until mitigation measures are put into place. The literature on bird strikes at light standards is relatively silent, although there is some evidence that this can occur. The light standards at the project site pose a relatively low risk for bird strikes since the lights would be shielded, especially when compared to the lights along the Great Highway adjacent to the project site, which are unshielded. As noted above, the athletic field lighting would not appear as a point source of lighting due to the combined radiance of multiple lights, particularly in foggy conditions, and this would also reduce the risk of bird strikes. In addition, there is no documentation of significant bird kills related to night lighting in western San Francisco. Surveys for bird kills could be conducted as suggested but there are no additional measures, other than those included as part of the project and suggested in Improvement Measure I-BI-2, that could be imposed as a condition of approval that would be considered reasonable and feasible in the context of the project and its objectives.

A number of commenters (O-SCSFBC-31, I-BLewis-08, I-Goggin-05, I-Hahn-05, I-Kohn2-08, I-O'Dell-01) stated that the EIR contains no analysis of effects of lighting in fog, asserting that overhead shields do not prevent upward spill in fog and that this will impact wildlife. See Response AE-2. As described, the illustration of foggy conditions in visual simulations (particularly those illustrating nighttime views) would lessen their degree of accuracy, because it would be more difficult to accurately depict lighting diffuse conditions and to place the image of the illuminated play fields into the setting photograph. For this reason, this was not done. However, the EIR describes the possible effects of fog on views of and near the project site by stating, on page IV.B-34, that under foggy conditions, the lighting would be more diffuse and would likely be more visible higher up in the sky and from vantage points further away. However, other sources of light in the area, such as street lights along the Great Highway and residential and commercial building lighting, already contribute to light diffusion and the foggy 'glow' that occurs during foggy conditions. Within this context, the overall contribution of the project during foggy conditions would not be large enough to substantially affect views of the project site from the surrounding areas. The EIR concludes that this impact would be less than significant. Similarly, impacts on wildlife would be less than significant because the project lighting is not expected to substantially increase ambient light levels in areas outside of the playing fields and immediately surrounding areas over existing conditions.

In response to comment I-Wuerfel-02, all necessary surveys were conducted for the EIR to determine impacts and prescribe mitigation. CEQA does not require long-term modeling efforts

in support of impacts analysis unless they are warranted. The commenter is not clear as to what, exactly, should be modeled. Consideration of long-term biological effects would be speculative, a type of analysis discouraged by CEQA Guidelines Section 15145, as there are many potentially confounding factors that could influence conditions that might be perceived as a direct result of the project. Nor does CEQA require that an agency perform all research or study recommended by commenters, as long as a good faith effort at full disclosure is made in the EIR (CEQA Guidelines Section 15204 [a]).

Comments A-NPS-11, A-NPS-12, A-NPS-13, O-SCSFBC-33, I-Elias-01, I-McCowin-04, I-Murphy-04, I-Pfister-04, and I-Koivisto-61 raised concerns about the impact of night lighting on western snowy plover and other shorebird habitat at Ocean Beach, and on fish in the ocean. The potential for general impacts on snowy plover and shorebirds and their habitat were addressed earlier under response BIO-1 in the response to comments A-NPS-04, A-NPS-11, A-NPS-12, I-Elias-01 and O-SCSFBC-33. As noted previously, light spillover from the athletic fields would not reach Ocean Beach; the project lighting studies indicate that light spillover would reach zero at 270 feet from the project site and the beach is 400 feet distant from the project site at its closest point. In addition, the beach across from the athletic fields is already well lit by unshielded lighting along the western edge of the Great Highway, where light spillover appears to reach to the surf zone¹⁴. See also Response AE-2 which describes lighting effects west of the project area and includes a new visual simulation for areas west of the Great Highway in the project vicinity. By the same reasoning, fish in the ocean would not be impacted by light from the project site—the surf line is approximately 1,000 feet from the site and measurements of light spillover reach zero at 270 feet from the edge of the playing fields. Comment A-NPS-12, regarding lighting impacts on snowy plover and consistency with the *Western Snowy Plover Recovery Plan* is further addressed in Response BIO-1.

In response to comment I-Donjacour-02, special-status bat species that could be impacted by nighttime lighting are discussed on page IV.F-29. No other special-status mammals considered in Table IV.F-1 have a moderate or high potential to occur at the project area, and were not addressed in the impact analysis for special-status species. Furthermore, the project area is not considered a part of a wildlife corridor for terrestrial mammals for several reasons. Currently, the athletic fields are enclosed by an 8-foot-tall chain link fence, which prevents any terrestrial wildlife movement across the field. Additionally, development surrounding Golden Gate Park and the Great Highway directly west of the project area have already impeded any migratory terrestrial wildlife corridors, and species already present in the Park would be able to move through unlit vegetation on all sides of the project site. Anecdotal evidence of impacts to wildlife from night lighting, informal testimony, and other unofficial reports do not meet the best available evidence standard of CEQA.

In response to comments I-Jungreis-18, I-Jungreis2-17, and I-DeLisle-01, the less than significant determination of lighting and noise impacts on special-status bat species was based on the relatively low potential for such species to occur in the project area, as described on EIR

¹⁴ M. Lowe, ESA, personal observation.

page IV.F-29. In a bat foraging study conducted in Golden Gate Park and cited on page IV.F-17 of the EIR (Krauel, 2009), Yuma myotis and the western red bat represented “an insignificant percentage of vocal records” and were strongly associated with bodies of water. Krauel (2009) also noted that no western red bats were detected at lakes close to the ocean, even at one lake close to a historic western red bat roosting location. Additionally, no bat roosts or bat sign was detected in May 2011 surveys for bats within the project area. Further studies of foraging bats at the project area are not merited based on findings in Krauel and surveys conducted for the proposed project.

In response to comment I-Kohn2-08, asserting that many birds forage at twilight, it is true that owls forage into the evening and night-time hours and foraging effects on owls are discussed below. However, few other species are adapted to forage under low light conditions. Most birds are dependent on vision as their primary sense for locating food.

Comments O-GGAS2-30, I-Denefeld2-02, I-Kohn2-08, and I-O’Dell-01 state that owls were not included in the analysis, that lighting can impact owls and/or their prey, and that additional study of nocturnal wildlife is warranted. The potential presence of owls in the project area has been added to the EIR (see response to comment O-GGAS2-30 under response BIO-1). Lighting could have both beneficial and adverse impacts on owls and their prey. For example, on bright nights most prey likely remain in unlit areas but those that are in brightly lit areas are more readily caught by their predators¹⁵. With respect to the project, the installation of synthetic turf would likely result in fewer prey being available in the project area and the introduction of night lighting and human presence may deter owls from using the area during times of play. However, lights would be turned off at 10 p.m. and owls would still have the opportunity to hunt the area when the fields were not in use. The EIR has determined the special-status species with potential to occur in the project area and text revisions have been made to include Great horned owl and barn owl. The EIR analysis has also determined the loss of foraging habitat for raptors, including owls, would not be significant (see EIR page IV.F-31). While other nocturnal wildlife, such as raccoon, opossum, and skunk likely use the athletic fields and surrounding areas for foraging, these are common species and impacts to such species are not considered significant in CEQA analysis. Therefore, additional studies of nocturnal wildlife in the area are not warranted.

Comments I-Ray4-02 and I-Ray4-03 state that night lights could interfere with predator/prey relationships and cause wildlife species to starve from lack of food, citing bats and insect prey as an example. The EIR describes the potential for changing species dynamics in regards to special-status bats on page IV.F-29. Further consideration of changing species dynamics on special-status bats, however, is not discussed in the EIR because of the relatively low potential for them to occur in the project area. Night lighting is not expected to substantially alter predator/prey relationships of other wildlife currently using the project site, as other nocturnal mammals cannot access the playing field and most birds are inactive at night.

¹⁵ Beir, P. Effects of Artificial Night Lighting on Terrestrial Mammals. In: *Ecological Consequences of Artificial Night Lighting*, Catherine Rich and Travis Longcore, eds. 2006, Island Press, Washington D.C. pp. 19-42.

In response to comments O-GGAS3-04, I-Bridges-02, and I-Lieb-03, no mitigation measures have been proposed for field lights because all lighting-related impacts are already considered less than significant without mitigation. Shielding of lights as part of the project described in Section IV.B, *Aesthetics* minimize the effect of lighting and would prevent light spillover both upward from the project area and outside of the athletic fields; this would substantially reduce impacts on both migratory and resident wildlife. Additionally, Improvement Measure I-BI-2 on EIR pages IV.F-31 and IV.F-32 would further ensure that lights are shielded to the maximum extent feasible. Thus, playing fields would not be 'a source of light' as asserted in Comments O-SCSFBC-27. See also Response AE-2.

In response to comments O-CSFN-04, I-Citron-07, I-Dennenberg-05, I-Edelson-07, I-Khan-06, and I-Koivisto-30, the impacts of night lighting on wildlife are discussed within the context of the project's significance criteria for biological resources presented on page IV.F-22 of the EIR. Potential impacts from night lighting on special-status species, as well as migratory corridors and wildlife nursery sites, are discussed on EIR pages IV.F-23 through IV.F-31.

In response to comments I-Ray4-03 and I-Koivisto-05 regarding the effects of artificial lighting on plants, understanding tree and shrub responses to outdoor supplemental lighting depends on the types of lamps used and the spectrum of radiation emitted, the intensity of that radiation, and the role of light in certain biological processes. In considering the effects of night lighting on plants, the visible and infrared segments of the electromagnetic spectrum are important. Visible light is 380-760 nanometers (nm) along the spectrum, and infrared is 760-1,000,000 nm along the spectrum. The metal halide lamps used on the Beach Chalet project emit light in the green to orange wavelengths (about 550-630 nm). Two important photobiological processes in plants and the wavelengths required are: 1) photosynthesis requiring visible blue (400-450 nm) and red (625-700 nm) and 2) photoperiodism requiring visible red (625-760 nm) and infrared (760-850 nm). Since the wavelength of light emitted by the metal halide lamps used for this project fall outside the wavelengths used by plants for these two important processes (which control conversion of light energy to sugars, vegetative growth, and reproductive activities), there would be little to no effect to the plants remaining on the site from the introduction of night lighting.

Comments A-SFPC-Antonini-06, O-SCSFBC-34, I-Bridges-03, I-Ray4-03, I-Bufferum-04, I-Arack-05, I-Arack2-03, I-Bartley-04, I-Draper-02, I-de Forest-04, I-Koivisto-29, I-D'Angelo-02, I-Goggin2-02, I-O'Dell-01, I-Bridges-07, I-Browd-03, I-Hyde-01, I-Jungreis2-17, I-Posthumus2-03, I-Murphy-03, and I-Weeden-04 provide general statements about the adverse effects of the project with respect to night lighting, personal opinion, information that is already presented in the EIR or additional information that is not considered pertinent to the biological resources analysis, but do not address the adequacy or accuracy of the analysis presented in the EIR. As such these comments are noted, however, no further response is required.

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M. Hydrology and Water Quality

M.1 Overview of Comments on Hydrology and Water Quality

The comments and corresponding responses in this section cover topics in Chapter IV, Section IV.G, of the EIR. These include topics related to:

- HYD-1, Standards for Turf Products
- HYD-2, Leachate and Groundwater
- HYD-3, Stormwater Runoff
- HYD-4, Impacts Related to Natural Disasters

Portions of some of the comments addressed in this section also relate to other resource topics and are therefore responded to in those sections, including Section X.N, Hazards and Hazardous Materials and Air Quality.

M.2 Standards for Turf Products [HYD-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPUC-04
O-SCSFBC-24

I-Barish-15
I-Barish-16

I-GoHoward-05
I-Koivisto-65

I-Koivisto-73

“The appropriateness of the synthetic turf standard for soluble zinc in SBR infill of 250 mg/L should be discussed. When comparing the standards in Table IV.G-4, the standards for chromium and lead, and for the non-SBR infill for zinc, all are less than the drinking water standards, and less than or equal to the ESL for Groundwater. Zinc standard for SBR infill of 250 mg/L is 50 times the drinking water standard. The CCSF Recreation and Park Department 2009 reference document identifies the 250 mg/L standard for soluble zinc as the soluble threshold limit concentration (STLC) for zinc, which is a regulatory level used to classify a substance as a hazardous waste. It is not appropriate to use the STLC as a standard for drinking water protection. The same zinc standard should be used for SBR infill and non-SBR infill (i. e., 0.081 mg/L), and the EIR should be modified accordingly. If a different zinc standard is proposed, then sufficient justification should be provided demonstrating that this standard would be protective of groundwater to be used as a source of drinking water. The last sentence states the Waste Extraction Test results are not necessarily representative of the zinc concentration that could dissolve into water as a result of storm water runoff or leachate through the field. While SFPUC agrees with this statement, it does not provide sufficient justification should be provided demonstrating that this standard would be protective of groundwater to be used as a source of drinking water.

The last sentence states the Waste Extraction Test results are not necessarily representative of the zinc concentration that could dissolve into water as a result of storm water runoff or leachate through the field. While SFPUC agrees with this statement, it does not provide sufficient justification for the elevated synthetic turf standard for soluble zinc in SBR in fill (250 mg/L).” (Irina P. Torrey, Manager, Bureau of Environmental Management, San Francisco Public Utilities Commission, letter, December 9, 2011 [A-SFPUC-04])

“Parks Department ignored independent studies on the effects of synthetic turf when developing standards. The DEIR states that the San Francisco Recreation and Parks Department Commission (Commission) established a Task Force to review existing research on synthetic playfields in March 2008. The Task Force results were used to develop synthetic turf standards for the Department. The DEIR says that the Task Force refers to a single study in the state of Washington, upon which it recommended moving forward with using synthetic turf at various sites, including at the Beach Chalet.

Regarding ‘Ecosystem,’ Page IV.G-5 states:

The Commission approved the recommendations of the Task Force on October 2, 2008 ... The study group evaluating the effects of synthetic turf on the ecosystem **did not find independent studies** that specifically addressed this topic. However, they found one study commissioned by the King County Water and Land Resources Division in Seattle that looked at the quality of stormwater runoff from synthetic turf. According to the task force report, the researchers found that the runoff had no effect on test organisms, and met all state and federal water quality standards.

First, it is questionable whether this lone study is enough to base a decision on the use of synthetic turf throughout the park system.

Further, the statement that the Task Force for could not find any ‘independent studies that specifically addressed this topic’ speaks to the inadequacy of the Task Force, since there certainly exist a number of studies on this topic. For instance, there’s the work of the Connecticut Department of environmental Protection,-which the DEIR references. There have also been published other EIRs from different California agencies (for instance, Moraga Canyon Sports Fields Project, Piedmont, California, State Clearinghouse Number: 2009112054). The DEIR bases some of its conclusions on the work of the Task Force, which is clearly inadequate.

Second, the DEIR provides no information on the study referred to by the Task Force. It does not quote the study. Nor does the DEIR provide a title or other reference that would enable the public to locate this study.

There are a number of unanswered questions that the public requires in order to be informed of the impact of the project. For instance:

- When was the study conducted?

- Was the study adequate?
- Was the water quality tested under different weather conditions at different times of the day, and multiple times, such as on sunny days, during the hottest time of the day or during high rains?
- Sun affects material and rates of leaching. Was the study done at different ages and conditions of the artificial turf, such as when the turf is worn, it may leach more and turf particles may detach more frequently?

The DEIR offers not information about the referred to study that the Task Force used to develop standards.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-24]*)

“The standards developed by the Task Force specify maximum levels for soluble chromium, lead, and zinc. Table IV.G-3 identifies many additional metals that were monitored and identified copper, iron, and manganese as exceeding MCL. Explain why these metals as well as all other metals found in rubber tire crumb are not included in the Task Force standards. (*Jean Barish, letter, December 12, 2011 [I-Barish-15]*)

“According to Table IV.G-3 the zinc standard for SBR infill exceeds the drinking water MCL. The DEIR states: ‘... the Waste Extraction Test...is not necessarily representative of the zinc concentration that could dissolve into water as a result of stormwater runoff or leachate through the field.’ Absent a representative test, therefore, explain the rationale for the standard established by the Task Force for allowable zinc levels in SBR infill.

Impact Analysis HY-1 states: ‘... there is a substantial amount of research ... that suggest[s] the runoff from the fields would not cause adverse water quality effects ... ’ Yet Table IV.G-1 states, in part: ‘ ... there is a potential for synthetic turf to leach metals .. ’; and, ‘Total iron and manganese concentrations in stormwater samples from two synthetic turf installations exceeded secondary drinking water standards.’ Please reconcile this inconsistency.

Impact Analysis HY-1 discusses capturing all runoff and leachate from the fields, which would then connect to the SF sewer system. Alternatively, if the runoff and leachate quality are acceptable, then drainage into the groundwater basin would be allowed, provided the project complied with the SF Stormwater Management Ordinance. Please clarify if these are two separate constructions projects, and, if so, what would be the environmental and economic impact of initially building a drainage system, and subsequently constructing a compliant Stormwater Management System.

Impact Analysis HY-3 states that in the worst case there would be increased volume of overflow stormwater discharge. What would be the increase in the amount of heavy metals and other

toxins from all components of artificial turf due to this increased volume of stormwater overflow discharge?

According to the DEIR, Cumulative Impacts C-HY are potentially significant, however they can be successfully mitigated. This assumes that the underlying liner and drainage system will work effectively and is not vulnerable to damage from an event such as an earthquake or tsunami, and that there will not be a significant impact if the fields are flooded. Please evaluate the proposed mitigations in view of the risk of such events." (*Jean Barish, letter, December 12, 2011 [I-Barish-16]*)

"Leachate. Leach tests generally use purified water, though some testing is done using a range of pHs.

I have not found a test which uses salt water. None of the field studies conducted on artificial turf cited in the DE IR used salt water or were in salt water impacted areas.

The Beach Chalet soccer fields are subject to salt spray, vapors and condensate.

The impact of salt in the leach water on the release of the metals and other components of an artificial turf field should be investigated." (*Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-05]*)

"Repeatedly the comment is made that specific requirements for content, testing, and recyclability will be made of synthetic turf manufacturers. There are numerous fields already in SF with synthetic turf. How many of the manufacturers of the synthetic materials for these fields meet which of these requirements? Where are the details on these specific requirements? What is the track record for the success of these specific requirements?" (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-65]*)

"How many of the recommendation of the Task Force, listed on p. 9-10 been accomplished? How, for instance, do they ensure that no synthetic turf is purchased that contains lead?

How was exposure of human and animal neighbors to the chemicals where risk evaluations were done studied? After all, the players will get a maximum exposure of 3 hours a day, 4 days a week, 8 months a year while downwind neighbors will get 12 or more hours a day exposure, 365 days per year.

No matter how the studies chop up the data, zinc qualifies as above the total threshold limit, but is excluded from the final summary of the data on the synthetic fields. Why? On p. 16, a test is determined to be more aggressive at dissolving constituents from a material than water because

the solution was acidic. But water is acidic due to acidic compounds dissolving into clouds and CO₂ solubility in general.

...What evidence is there that exceeding by 10 times the STLC is a good measure for soluble analysis of metals? Why were only metals studied in regards to hazardous waste classification? Why has the SFRP yet to implement the synthetic turf standards? Has there been no turf replacement at all up to this point? Generally, the section on Hazards seemed slapdash and often tangential to the point." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-73]*)

Response HYD-1

In response to comment I-Koivisto-73, the Task Force emphasized the following recommendations to SFRPD, as discussed on DEIR pages IV.H-9 and IV.H-10:

- Explore synthetic turf infill alternatives to styrene butadiene rubber (SBR) rubber,
- Meet with the California Environmental Protection Agency (CalEPA) and the San Francisco Department of Public Health (SFDPH) to determine the feasibility of conducting further studies on ingestion exposure,
- Use a criteria-driven site selection process, and
- Do not purchase synthetic turf products with lead.

SFRPD indicates that they continually research alternative infill products that will meet the specifications and the use requirements for recreation needs.¹ SFRPD has also participated in a field test evaluation of Crocker Amazon Fields with CalEPA to explore inhalation exposure. SFRPD used a criteria-driven site selection process for the proposed project, with criteria developed by CCSF, City Fields Foundation, and park stakeholder groups. Finally, synthetic turf products purchased have lead levels below California requirements, as further discussed below in response HAZ-4.

In response to Comment I-Barrish-15, the SFRPD developed synthetic turf standards in 2009 to address the required composition of synthetic turf products in San Francisco (including lead) as discussed in Section G, Hydrology and Water Quality and Section H, Hazards and Hazardous Materials and Air Quality. As discussed on EIR p. IV.H-15, all products must be analyzed for semivolatile organic compounds (SVOCs) and the list of metals specified in Title 22 of the California Code of Regulations (CCR) for which waste classification criteria have been established. In addition, infill samples must be analyzed for leachable concentrations of lead, zinc, total chromium, and any metals for which the total concentration is equal to or greater than 10 times the Soluble Limit Threshold Concentration (STLC).² Analytical methods for examining

¹ D. Mauer, SFRPD, personal communication, April 8, 2012.

² The California Waste Extraction Test, used to determine the soluble concentration of a substance under state regulations, involves a 10-to-1 dilution of the sample. Therefore, the total concentration of a substance would need to exceed 10 times the STLC for the soluble concentration to possibly exceed the STLC in the extract.

SVOCs and metals are specified in these synthetic turf standards, and submittals from the vendor must include certified laboratory reports documenting the analytical methods and results. In accordance with SFRPD policies, a vendor would not be selected to supply the synthetic turf if it did not meet these standards.

In response to Comments A-SFPUC-04 and I-Barish-16, as acknowledged in the EIR, the composition of synthetic turf with SBR infill is variable, and depends on the chemical composition of the tires used to manufacture the SBR infill. Zinc oxide is commonly used as an activator in the tire vulcanization process, and is added to tires at concentrations of two percent or more. The maximum level for soluble zinc in SBR infill materials specified in the standards (250 mg/L) is higher than the drinking water standard of 5.0 mg/L. The environmental screening levels (ESL) for protection of groundwater quality is 0.081 mg/L. The Waste Extraction Test (WET) used to determine the soluble concentration is a test used for waste disposal purposes that utilizes an acidic solution which is more aggressive at dissolving constituents from a material than water. Therefore, the soluble level determined using the WET is not necessarily representative of the zinc concentration that could dissolve into water as a result of stormwater runoff or leachate through the fields. Because of this, the dissolved concentrations in stormwater runoff and leachate would likely be far lower.

In addition, and in response to I-GoHoward-05, stormwater runoff sampling at the South Sunset Playground and Garfield Square Park in San Francisco are both constructed of similar synthetic turf to what is proposed for the Beach Chalet Athletic Fields. The South Sunset Playground would be subject to a saltwater environment similar to that which would occur at the Beach Chalet Athletic Fields. The dissolved concentrations of zinc tested at South Sunset Playground and Garfield Square Park do not exceed drinking water standards or ESLs for fresh water, marine water, or groundwater. Kimbell Playground and Mission Playground fields met the current turf specification and there are at least two turf vendors that meet the requirements during implementation of those projects. Regardless, the SFRPD recognizes that there is limited data to demonstrate water quality effects related to synthetic turf installations. Therefore, as discussed in DEIR Chapter II, Project Description and Section IV.G, Hydrology and Water Quality, the SFRPD would construct a liner and perimeter drainage system to restrict infiltration of leachate and surface runoff. This would directly discharge to the combined sewer system until there is sufficient data to demonstrate that the synthetic turf used on the Beach Chalet fields would not result in adverse effects on groundwater or surface water quality. SFPUC staff would make this determination.

M.3 Leachate and Groundwater [HYD-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-GGAS2-33
O-PAR2-02

O-SCSFBC-17
O-SCSFBC-20

I-Cope-03
I-Daley-03

I-Jungreis2-08
I-Kohn2-06

O-PAR2-03	O-SCSFBC-23	I-Elias-06	I-Kohn2-11
O-PAR4-02	O-SCSFBC3-01	I-Gatusso-01	I-McDevitt-03
O-RCA-05	I-Arack-04	I-Gatusso-02	I-Posthumus2-02
O-SCSFBC-11	I-Barish-10	I-Glichstern-03	I-Ray3-13
O-SCSFBC-12	I-Bartley-08	I-GIHoward-01	I-Schoggen-04
O-SCSFBC-13	I-Colao-07	I-Jungreis2-02	I-Schultz-02

“The DEIR’s authors take pains to emphasize that even though the artificial turf may leach toxic heavy metals, those impacts are ‘less than significant’, even when considered under cumulative impacts. (See, e.g., DEIR at IV.G-28) The DEIR reaches this conclusion even though it acknowledges:

[T]he composition of tire crumb is dependent on the tires used in the manufacturing process and can be variable. **Therefore, the quality of storm water runoff and leachate from the proposed synthetic playfields is unknown and could contain pollutants that could degrade groundwater quality.**

(DEIR, at IV.G-29 (emphasis added)) The DEIR relies on vaguely described ‘underlying liner’ that will apparently capture all leachate and storm water runoff from the site, without describing the nature or efficacy of the liner. (See id. at IV.G-25) Moreover, by relying on actions taken by the SFPUC to regulate water discharge from the site-something there is no guarantee will be done-the DEIR improperly defers mitigation of the impact.

The DEIR is silent as to the fact that the San Francisco Public Utilities Commission (SFPUC) is currently planning to extract 4.1 million gallons of water from aquifers in San Francisco to mix with water from the Hetch Hetchy reservoir. That would amount to a reported 10% of the water used locally. The SFPUC is also starting a program to increase the amount of rainfall that can make its way to the aquifer. The SFPUC is discussing the use of swales, water gardens catch basins and several other innovations designed to capture water to charge the city’s aquifer.

Golden Gate Audubon is informed and believed that materials from this project are likely to leach into the groundwater supply. As such, the use of artificial turf is in conflict with the San Francisco Groundwater Supply Project and appears to conflict with the goals of the SFPUC rainwater harvesting program. The DEIR is silent as to these impacts and conflicts and should be amended to address them.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-33]*)

“The synthetic turf that is proposed for the soccer fields would have a planned life of only ten years (3rd paragraph, page ES-1 of the DEIR). The tire crumbs in that turf are replete with contaminants and toxics. There is no independent analysis provided in the DEIR for the potential environmental impact the synthetic turf would have on the groundwater underneath the western end of the park.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-02]*)

“Because the SFPUC’s Water Treatment Plant will also contain a pump that would extract that groundwater to supplement San Francisco’s drinking water system without any added treatment and because there should be zero tolerance for any possible toxic contamination of that system, PAR believes an independent third party analysis of the synthetic turf’s potential impact on the groundwater should be undertaken in accordance with Environmental Policy 1.4 of the General Plan of the City and County of San Francisco.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-03]*)

“According to the DEIR for the soccer fields (3rd paragraph, page ES-1), the life span of the artificial turf is only ten years. However, little or no information is provided on how that turf ages or on the potential environmental impacts the plethora of contaminants in it would have on the aquifer beneath it when the turf has to be disrupted for removal and replacement.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR4-02]*)

“There are plans to build a water purifying and pumping station in Golden Gate Park. This is part of a major plan to supply ground water to supplement San Francisco’s water supply. Installing artificial turf will have a major negative impact because it will produce chemical run off into the aquifer which has not been fully investigated. The DEIR did not consider the cumulative impact of both the soccer field renovation and the water treatment plant. This is a major flaw, and the State CEQA laws require the consideration of impacts of foreseeable projects.” (*Richmond Community Association, letter, December 12, 2011 [O-RCA-05]*)

“The hydrology sections of the report state the possible levels of pollutants from the synthetic turf based on various studies in the U.S. and San Francisco. Although there do exist studies that indicate levels of pollutants above U. S. and California standards (Page IV G-S or 224), the DEIR focuses on the studies that indicate various levels of pollutants (chemicals, metals and volatile compounds) that are below California Maximum Contaminant Levels (MCL) or not detected. It unjustifiably downplays some contaminants that are above MCL, such as zinc.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-11]*)

“The DEIR incorrectly claims no significant impact to water quality of runoff and groundwater, nor cumulative impacts (which focus on runoff to the system, rather than pollutants to water quality). In fact, there is a possibility of increased levels of pollutants above standards based on the fact that the composition of the tire crumb varies in the infill as a result of the manufacturing process.

As described in this section, there exist the possibility of significant impacts that are not studied or analyzed.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-12]*)

“The effects of bioaccumulation in organisms, as defined by the United States Environmental Protection Agency, are not analyzed. Bioaccumulation refers to the accumulation of substances, such as pesticides, or other chemicals in an organism. The term does not appear in the DEIR.

There are a number of places in the DEIR where bioaccumulation is relevant but not considered. For instance page IV.G-27 (Pg 246) states:

‘If sampling by the SFRPD indicates that water quality is acceptable, SFPUC could allow drainage from synthetic field to infiltrate into the groundwater basin. Because the SFRPD would not allow leachate or runoff from the fields to infiltrate to the groundwater until sampling data indicate that the quality is acceptable, impacts related to degradation of groundwater quality would be less than significant.’

What is acceptable can still contribute to bioaccumulation and the cumulative impact over time. The pollutants are there even in low levels.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-13]*)

“TABLE IV.G-1, Page IV.G-7 (pg 226) describes low levels of toxic materials:

‘it is unlikely that leachate from tire shreds used in outdoor applications, such as playground surfaces, would yield such concentrated leachate with high enough concentrations to cause adverse effects. When installations of play fields are above the water table, risks to groundwater quality are low.’

‘The samples exhibited slight acute and chronic toxicity at 15 days after installation, but none of the samples showed toxicity 3 months after installation.’

‘Laboratory leaching methods indicated the potential for release of zinc, aniline, phenol, and benzothiazole from synthetic turf installations. However, laboratory leaching procedures are more aggressive than would occur due to rainfall, and these results are not necessarily representative of potential leachate quality from a synthetic turf installation .

Zinc, chromium, copper, lead, and nickel were detected in one stormwater runoff sample. However, the concentrations were below New York surface water standards.

Semivolatile organic compounds were not detected in groundwater samples collected down gradient of four synthetic turf installations’

The studies vary as to level indicators: below levels or above. For instances, Pages IV.G-16 and -17 (pgs 235 -236) of the DEIR state that zinc is higher than the California Maximum Contaminant

Levels (MCL) based on the SFRPD developed synthetic turf standards in 2009 Chromium & Lead are equal to the MCL.

The DEIR does not state if there is a cumulative impact of introducing even low levels chemicals and metals over the 10-12 lifespan of the synthetic turf fields, or whether there is bioaccumulation." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-17]*)

"There is no analysis of whether there is any possibility of chemical reactions between turf pollutants in water or soil with existing chemicals or metals, or even whether or not other chemicals exist. In fact, other chemicals, not mentioned in the DEIR, are known to leach out of or outgas from synthetic turf. (See the section 'Failure to identify dangerous substances listed by Proposition 65' later in this document.)

The DEIR lacks the application the Precautionary Principle, which is necessary because the level of pollutants varies and there is a possibility of levels above accepted standards. If the possibility of leachate exists and has existed, the DEIR should justify (but does not justify) moving forward with the use of synthetic turf in the project. This DEIR Hydrology section is focused on all the reasons to use synthetic turf rather than natural alternatives." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-20]*)

"The DEIR does not include an analysis of potential contamination of the ocean. Page IV G-4 states that other sites, such as the San Francisco Zoo, use the groundwater of the proposed project:

Within San Francisco, groundwater from the Westside Groundwater Basin is primarily used for irrigation at Golden Gate Park, the Edgewood Development Center, and three golf courses located in the vicinity of Lake Merced. Groundwater is also used for San Francisco-Zoo operations and to maintain lake levels in Golden Gate Park and Pine Lake. The production well located nearest to the project site is the South Windmill Deepwell, approximately 190 feet to the southeast of the proposed playfields.

However, the state whether or not toxins and bacteria from turf material will leach into groundwater and spread through irrigation. This needs to be analyzed. Furthermore, the DEIR states that groundwater flows to the Pacific Ocean, but does not mention the impacts of this state:

...depth to groundwater in the vicinity of the project area was between 25 and 27 feet below ground surface in October 2009 when groundwater levels were at a seasonallow.⁹ Based on a hydrograph of groundwater levels in the USGS South Windmill monitoring well MW-57 between 2006 and 2009, shallow groundwater levels in the area fluctuate 6 to 8 feet seasonally, and therefore groundwater levels could rise 6 to 8 feet during the wet season. The groundwater flow direction in this portion of the North Westside Groundwater Basin is to the west, towards the Pacific Ocean.'

The DEIR does not state the depth levels and flow to the Ocean, nor does it look at the speed of travel and level of accumulation of synthetic turf toxins and bacteria. This is required to determine the environmental impact on the ocean." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-23]*)

"We're looking into issues of hydrology which doesn't seem to be --well, we're still looking into it." (*Sierra Club San Francisco Bay Chapter, public hearing comment [O-SCSFBC3-01]*)

"Independent research has proved that the materials used in the artificial turf are 100% toxic. This will be an environmental disaster for animals who live in the park, birds, and the water table and the ocean. How could anyone even contemplate such a thing, much less draw up plans. Unbelievably bad idea." (*Patricia Arack, letter, December 12, 2011 [I-Arack-04]*)

"The long-term environmental impacts of the release of harmful and toxic substances from synthetic turf into water runoff and groundwater are not fully explored." (*Jean Barish, letter, December 12, 2011 [I-Barish-10]*)

"This project is a very bad idea for wildlife and people who use the parks as a place to commune with nature without even addressing the other huge environmental impacts including:

Toxic runoff from the plastic field into the local aquifer" (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-08]*)

"Artificial 'grass' does not filter pollutants and, contamination from animal feces and urine." (*Flora Colao, letter, November 23, 2011 [I-Colao-07]*)

"I'm concerned with the use of the heavy metal often associated with these synthetic surf fields as well as its capacity to leach toxic chemicals into the ground and its potential impact on water quality." (*Jeffrey Cope, public hearing comment [I-Cope-03]*)

“One last comment, under the grass playing field at the Beach Chalet is a large pool of fresh water which shows itself as ground fog on cold and moonlit nights.” (*Thomas Daley, letter, November 22, 2011 [I-Daley-03]*)

“The leaching of toxic metals into the surrounding area by the proposed Astroturf playing surfaces is another significant environmental impact that this report underestimates. According to the authors’ own findings the parks in San Francisco that have used astroturf composed with tire crumbs, all have levels of toxic leachate that exceed the acceptable levels. The types of leachate vary depending on the different tire crumbs used to compose the astroturf, but in study after study, they leach. And according to their own studies, the leachate is fatal to aquatic animals. This proposed site with seven acres of leaching astroturf is less than 1000 feet from Ocean Beach. If through excessive flooding any of those metals reached the ocean, it would be an environmental disaster as the poison would likely move up the food chain. The ground around the proposed fields would likely be immediately affected by the toxic leachate. The ground plants, water and bugs would all be rendered deadly to the birds and animals that live in the area. The small ground animals, raccoons, opossums and skunks that use that area for habitat would all be negatively affected, even if the leachate runs into sewers as the project proposes. This astroturf surface is dangerous to wildlife and is completely inappropriate in a park area.” (*Evan Elias, Letter, December 11, 2011 [I- Elias-06]*)

“I understand that the project will consist of the conversion of four existing soccer fields to a synthetic turf alternative. Although the turf will not need additional watering and maintenance, the composition will include toxic heavy metals that will have the potential of leaching into the city’s local groundwater and surrounding environment.” (*Courtney Gattuso, public hearing comment [I-Gattuso-01]*)

“These chemicals will disrupt the well-being of the species habitat and bio accumulate within the organisms that live in the area.” (*Courtney Gattuso, public hearing comment [I-Gattuso-02]*)

“You know, ... the heavy metal might leach into the water table. ...” (*Anastasia Glichstern, public hearing comment [I-Glichstern-03]*)

“It is noted in the DEIR that the artificial field will drain into the storm water system and not feed the aquifer in the same manner as a natural grass field. The entire field is half the width of the Golden Gate Park. By preventing rain from percolating into the soil at the West end of half of the

Park, the flow of water toward the ocean will be altered for underground flow from the East. This not only alters the recharge of the upper aquifer but could prove to permit increased intrusion of salt water into that portion of the aquifer." (*Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-01]*)

"The plan requires many many tons of finely shredded used automotive tires to be dumped into the ground: there is no analysis of the impact of these particles on the water aquifers that lie underneath these fields." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-02]*)

"The plan requires many many tons of synthetic turf to form the synthetic surface of the soccer fields: there is no analysis of how local conditions (i.e., high humidity, high salinity, cool temperatures) will effect the anticipated lifespan degradation of the synthetic surface, and consequent impacts upon the water aquifers that lie underneath these fields." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-08]*)

"He has dismissed the possibility of water contamination by both carcinogens and non-carcinogens." (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-06]*)

"One of the most specious and dangerous conclusion in the DEIR addresses the environmental impact of contaminants on natural water in the vicinity of the soccer fields. The DEIR claims that there will be no leaching of contaminants into the soil and the ground water below, nor any other contamination of water generated by the astro-turf.

Yet, to arrive at this conclusion, the drafter simply ignores the storm conditions which result direct run-off into the ocean which occurs on average seven times per year. As the soccer fields lie less than 1,000 feet from the ocean, it is inevitable that contaminants from the astro-turf will reach the ocean and destroy aquatic life.

Furthermore, the DEIR fails to discuss at all the effect of crumbled turf mixing with surrounding soil and then leaching contaminants into the aquifer. The DEIR assumes that the proposed underlay material for the astro-turf will solve all leaching problems. Yet, he does not consider this problem." (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-11]*)

"Loss of water re-charge of the subterreanean aquifer by both rain and irrigation. Millions of gallons of water that normally percolates into the aquifer beneath the fields would be blocked from getting there by this project. The section of the report that covers water quality makes no

mention of this. The water used in irrigation and that which arrives by precipitation produce the field to play on, oxygen and re-charging of the aquifer. All these positive environmental effects would be negated by this project. This was not covered in the report.” (*Terry McDevitt, email, January 1, 2012 [I-McDevitt-03]*)

“My concern is also on the artificial turf. Beyond not belonging in a landmark park, it would just leach all those hazardous chemicals in the substrate.” (*Yope Posthumus, public hearing comment [I-Posthumus2-02]*)

“The alternative proposed by RPD and City Fields is to lay down several tons of toxic car tire crumb, above the freshwater aquifer that serves as emergency water in case of a severe earthquake. These toxins will percolate down to this aquifer when it rains.” (*Jamie Ray, letter, no date [I-Ray3-13]*)

“There is so little green space in urban areasthat helps filter and absorb large amounts of water,” (*Leida Schoggen, letter, November 29, 2011 [I-Schoggen-04]*)

“The synthetic turf that is proposed for the soccer fields would have a planned life of only ten years (DEIR page ES-1). There is inadequate information provided on the potential environmental impacts the contaminants in that proposed turf may have on the quality of the water in the aquifer underneath it. The Task Force formed to investigate the synthetic turf concurred, encouraging further exploration.” (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-02]*)

Response HYD-2

Groundwater Quality

Many of the comments above addressed potential groundwater effects associated with the proposed project. As discussed in Impact HY-2 beginning on DEIR p. IV.G-26, research suggests the leachate from the synthetic turf installations would not cause adverse effects on groundwater quality. The studies reviewed on DEIR pages. IV.G-6 through IV.G-16 indicate that leachate concentrations of chemicals were highest in settings where the tire-derived materials were in direct contact with water and that chemical concentrations decreased substantially within a few feet. Leachate produced using a rain collection system generally did not contain chemicals at concentrations in excess of drinking water standards, and any toxicity effects were reduced within three months of installation. Semivolatile compounds were not detected in the

groundwater where sampled for these constituents. In their 2007 study, the Office of Environmental Health Hazard Assessment (OEHHA) concluded that where installation of playfields are above the water table, as the Beach Chalet Athletic fields would be, the risk to groundwater quality would be low. It is noted that the depth to groundwater in the vicinity of the project area was between 25 and 27 feet below ground surface in October 2009 when groundwater levels were at a seasonal low.³ Shallow groundwater levels in the area fluctuate 6 to 8 feet seasonally, and therefore groundwater levels could rise 6 to 8 feet during the wet season.

However, as acknowledged in the EIR, the composition of SBR material is dependent on the tires used in the manufacturing process and can be variable, but must meet the purchasing standards required by the task force (see Response HYD-1). Therefore, additional material-specific information is needed to assess the specific levels of chemicals in leachate from the synthetic fields and whether the detected levels could cause degradation of groundwater quality. As discussed in EIR Chapter II, Project Description, and Section IV.G, Hydrology and Water Quality, the SFRPD would construct a liner and drainage system to restrict leachate recharge to the groundwater. The liner would underlie the turf installation and direct leachate and stormwater runoff to a perimeter drainage system that would discharge to the combined sewer system via a new pipeline and connection. The proposed drainage system is fully described in the EIR Project Description on page II-14, and the operation of the liner and drainage system is adequately addressed in the EIR's Hydrology and Water Quality section, page IV.G-25 – IV.G-26. In response to comment GGAS2-33, the typical lifespan of the liner proposed is 15 to 20 years, which exceeds the lifespan expected for the synthetic turf material, and there is no reason to presume that the liner would not function as designed or intended. Because all runoff would be directed towards the drainage system, any loose turf material that would be carried in stormwater runoff would likewise be transported to the system and, ultimately, to engineered stormwater controls once infiltration is approved by the SFPUC. This would restrict migration of any particulates beyond the boundaries of the field in surface runoff, including to the Pacific Ocean. The SFRPD would conduct periodic water sampling from the underdrain system, in conjunction with SFPUC, and evaluate the quality of water drained from the synthetic turf. Pollutants from animal feces and urine, if present, would also be discharged to the combined sewer system with this drainage system.

If sampling by the SFRPD indicates that water quality is acceptable, the SFPUC could allow drainage from the synthetic fields to infiltrate into the underlying Westside Groundwater Basin. Because the SFRPD would not allow leachate or runoff from the fields to infiltrate to the groundwater until sampling data indicate that the quality is acceptable, impacts related to degradation of groundwater quality would be less than significant. Further, the liner and drainage system would contain any discharges during removal and replacement of the turf. Therefore these activities would not result in degradation of groundwater quality.

In addition, once allowed to infiltrate, the leachate and stormwater runoff quality would be similar to drinking water quality or stormwater quality at unaffected sites. Thus, it would not: 1) adversely

³ AGS, Inc., Draft Geotechnical Data Report, Westside Golden Gate Park Recycled Water Project, San Francisco, California. November, 2009.

react with existing chemicals in the soil, 2) result in an accumulation of contaminants in the groundwater, or 3) result in bioaccumulation in aquatic life (Comments O-SCSFBC-13, O-SCSFBC-17, O-SCSFBC-23, and I-Gattuso-02). In addition, Comments O-PAR2-02, O-PAR4-02, and I-Schultz-02 requested information regarding groundwater quality impacts associated with turf aging. Those comments generally referred to generation of dust and crumb rubber particulates, one of the studies reviewed in response to the comments received observed an increase in the leaching of metals in the aged crumb rubber samples. With implementation of stormwater collection and testing requirements, the field would not contribute to degradation of groundwater quality and to Ocean Beach from groundwater outflow even if the release of chemicals from the turf increased with age, or the turf were adversely affected by environmental conditions. This is because only water meeting standards as demonstrated via testing would be permitted to infiltrate. Because there would be no degradation of groundwater quality, the project would not result in a spread of contaminants through ongoing existing use of groundwater for irrigation from the North Westside Groundwater Basin.

Groundwater Recharge

Comments O-GGAS2-33, I-Daley-03, I-GIHoward-01, and I-McDevitt-03 referenced the potential for decreased groundwater recharge under the project. The proposed project includes installation of approximately 314,000 square feet of synthetic turf that would be underlain by a liner. Until the SFPUC determines that the runoff quality is sufficient to protect the underlying aquifer, runoff and leachate from the fields would be discharged to the combined sewer system. This would result in reduced recharge to the groundwater basin. However, the Westside Groundwater Basin encompasses approximately 40 square miles. The decreased recharge area comprises only 0.03 percent of the area of the total basin. Further, once the SFPUC determines that the runoff quality is sufficient, the SFRPD would need to comply with the Stormwater Design Guidelines for the fields as discussed below in response HYD-3. The Guidelines would require infiltration of stormwater runoff to the groundwater. Therefore, this minor reduction in groundwater recharge would be temporary, and no additional analysis is required in the DEIR.

Cumulative Effects

Comments O-GGAS2-33, O-RCA-05, and SCSFBC-12 through SCSFBC-17 request information regarding cumulative stormwater and groundwater quality effects. The relationship of the proposed project to the San Francisco Groundwater Supply Project is discussed in Cumulative Impact C-HY on DEIR p. IV.G-29. As discussed in this impact, without control measures, stormwater runoff and leachate from the proposed synthetic playfields could contain pollutants. These pollutants could degrade groundwater quality if infiltrated to the Westside Groundwater Basin. The San Francisco Groundwater Supply Project would convert the existing South Windmill Deepwell to a municipal supply well. The South Windmill Deepwell is used for irrigation, and located approximately 190 feet south of the proposed playfields. However, as discussed above and in the EIR, the proposed playfields would be constructed with an underlying liner and a drainage system equipped to capture all runoff and leachate from the fields. The drainage would be directed to the combined sewer system until the SFPUC determines, on the basis of monitoring required by SFPUC, that the discharge meets acceptable

standards for infiltration to the groundwater. In addition, the potentially cumulative projects would be required to minimize pollutant loads in their stormwater runoff in compliance with the Stormwater Design Guidelines. Therefore, infiltration of stormwater runoff and leachate would not degrade water quality in the Westside Groundwater Basin, and would not cumulatively contribute to degradation of groundwater such that drinking water standards would be exceeded in the Westside Groundwater Basin.

Independent Analysis

In response to Comment O-PAR2-02, Policy 1.4 of the San Francisco General Plan requires that the City and County of San Francisco (CCSF) assures that all new development meets strict environmental quality standards and recognizes human needs. The EIR presents an objective analysis of the potential for the use of synthetic turf to adversely affect the environment, including degradation of groundwater quality. In addition, given the uncertainty of leachate and runoff quality from the fields, the project includes use of liner and drainage system to restrict recharge to the underlying aquifer until water quality monitoring demonstrates that such discharge would not degrade groundwater quality. No additional independent analysis is needed.

M.4 Stormwater Runoff [HYD-3]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPUC-01	I-Arack2-05	I-Donjacour-04	I-Kohn2-11
A-SFPUC-02	I-Barish-13	I-Dworsky-01	I-Koivisto-49
A-SFPUC-03	I-Barish-16	I-Englander-01	I-Koivisto-63
O-SCSFBC-18	I-Crowley-02	I-GIHoward-02	I-O'Leary-09
O-SCSFBC-19	I-FDavis-04	I-Ivanhoe-07	I-Schultz-03
O-SCSFBC-22			

“The SFPUC would allow the management of storm water runoff from the artificial turf surface to be managed **separately** from the stormwater runoff from all other site improvements with regard to compliance to the Stormwater Design Guidelines. SFPUC will allow the artificial turf runoff to discharge to the combined sewer system until results of the proposed water quality monitoring are determined. The SFPUC will coordinate with the San Francisco Recreation & Parks Department (SFRPD) on potentially feasible options to manage the stormwater runoff from the artificial turf underdrain system onsite; if and when it is determined that artificial turf runoff can be infiltrated and managed onsite.” (*Irina P. Torrey, Manager, Bureau of Environmental Management, San Francisco Public Utilities Commission, letter, December 9, 2011 [A-SFPUC-01]*)

“It is required that stormwater runoff from all proposed disturbed impervious and pervious surfaces such as the landscaping, new parking, concrete, buildings, and plaza, etc. (excluding the artificial turf area 3I1d associated underdrain system discharge) comply with the requirements of the Stormwater Design Guidelines to meet the existing peak runoff rate and total runoff volume from the proposed project site.” (*Irina P. Torrey, Manager, Bureau of Environmental Management, San Francisco Public Utilities Commission, letter, December 9, 2011 [A-SFPUC-02]*)

“The overall project area (excluding the artificial turf area) must meet the requirements of the Stormwater Design Guidelines. Revise 3rd Paragraph to clearly state that: This project will trigger compliance with the Stormwater Design Guidelines (SDG) based on all new ground disturbance (excluding the artificial turf area). As per the requirements of the SDG, this project must implement a stormwater management approach to prevent stormwater runoff flow rate and volume from exceeding existing conditions. The SFPUC prefers that stormwater runoff from the new and existing impervious surfaces are directed to naturalized BMPs such as infiltration swales or bio-infiltration facilities to reduce the peak runoff rate and runoff total volume prior to discharge to the combined sewer system.” (*Irina P. Torrey, Manager, Bureau of Environmental Management, San Francisco Public Utilities Commission, letter, December 9, 2011 [A-SFPUC-03]*)

“Currently, stormwater at the site infiltrates to groundwater, the Westside Groundwater Basin within San Francisco. The basin includes three aquifers known as the Shallow Aquifer, Primary Production Aquifer, and Deep Aquifer.

Page IV.G-3 states that the new 9 acres of synthetic turf athletic fields will connect to the City’s combined stormwater runoff/sewage pipe system, instead of going into the groundwater.

Pages IV.G-1 and -2 states wastewater treatment capacity, but doesn’t state how this project will contribute to the capacity.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-18]*)

“The DEIR PDF pages 230-235 discuss the San Francisco Park studies of synthetic turf. The results showed low levels of chemicals and metals and volatile compounds not detected. However it also said on page IV.G-16 (PDF page 235):

These sampling results are representative of the storm water runoff quality from the Garfield Square Park and the South Sunset Playground. **However, the composition of the styrene butadiene rubber in fill material used in synthetic turf can vary widely** because of the variable composition of the tires used to manufacture the infill material. Therefore, for other fields, **it would be necessary to conduct additional sampling** to assess stormwater runoff quality specific to that installation, and future studies should also

evaluate background metals concentrations in runoff from grass fields to evaluate the contribution of metals due to the synthetic turf materials.

These addition studies were not conducted for this DEIR, and still have not been conducted. While it is laudable that the DEIR identifies this shortfall, the studies should be conducted and the results published in the Final EIR." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-19]*)

"Although the DEIR describes bacterial concentrations related to the Southwest Ocean Outfall (SWOO) of existing conditions, it does not describe the impacts for the proposed project. Page IV G-3 states:

Biological parameters and sediment pollutant concentrations at the SWOO discharge area have generally been the same or essentially the same as at reference stations. Bacterial concentrations may increase to levels above water quality standards in the vicinity of the combined sewer overflows. When overflows occur, signs must be posted on beaches in the vicinity of the CSO until the bacteria level drops below the single sample minimum protective bacteriological standards contained in the California Department of Health Services regulations for public beaches and ocean water contact sports. Although bacterial concentrations are a concern, they do not currently result in a violation of either of the CCSF wastewater NPDES permits.

The DEIR only meets CEQA part way. An analysis of the impact of synthetic turf is required." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-22]*)

"The artificial turf, I thought the young girl who gave her presentation about the hazards of this toxic substance was brilliant and should absolutely be listened to." (*Patricia Arack, public hearing comment [I-Arack2-05]*)

"The DEIR stated that the San Francisco Synthetic Playfields Task Force (the 'Task Force') did not find independent studies that specifically addressed the effect of synturf on the ecosystem. Please review Dworsky, C., et al., 'Runoff Water from Grass and Artificial Turf Soccer Fields: Which Is Better for the Soccer Player, the City and the Environment?'

The DEIR states that the synthetic turf will meet standards set by the SF RPD Synthetic Playfields Task Force. What other organizations have standards and how do the Synthetic Playfields Task Force standards compare to those of other organizations and jurisdictions?" (*Jean Barish, letter, December 12, 2011 [I-Barish-13]*)

“According to Table IV.G-3 the zinc standard for SBR infill exceeds the drinking water MCL. The DEIR states: ‘... the Waste Extraction Test...is not necessarily representative of the zinc concentration that could dissolve into water as a result of stormwater runoff or leachate through the field.’ Absent a representative test, therefore, explain the rationale for the standard established by the Task Force for allowable zinc levels in SBR infill.

Impact Analysis HY-1 states: ‘... there is a substantial amount of research ... that suggest[s] the runoff from the fields would not cause adverse water quality effects ... ’ Yet Table IV.G-1 states, in part: ‘ ... there is a potential for synthetic turf to leach metals .. ’; and, ‘Total iron and manganese concentrations in stormwater samples from two synthetic turf installations exceeded secondary drinking water standards.’ Please reconcile this inconsistency.

Impact Analysis HY-1 discusses capturing all runoff and leachate from the fields, which would then connect to the SF sewer system. Alternatively, if the runoff and leachate quality are acceptable, then drainage into the groundwater basin would be allowed, provided the project complied with the SF Stormwater Management Ordinance. Please clarify if these are two separate constructions projects, and, if so, what would be the environmental and economic impact of initially building a drainage system, and subsequently constructing a compliant Stormwater Management System.

Impact Analysis HY-3 states that in the worst case there would be increased volume of overflow stormwater discharge. What would be the increase in the amount of heavy metals and other toxins from all components of artificial turf due to this increased volume of stormwater overflow discharge?

According to the DEIR, Cumulative Impacts C-HY are potentially significant, however they can be successfully mitigated. This assumes that the underlying liner and drainage system will work effectively and is not vulnerable to damage from an event such as an earthquake or tsunami, and that there will not be a significant impact if the fields are flooded. Please evaluate the proposed mitigations in view of the risk of such events.” (*Jean Barish, letter, December 12, 2011 [I-Barish-16]*)

“A good portion of those particles will sit on or close to the playing surface. Thus strong winds and heavy rain will easy carry those very small tire particles all over the surrounding area - an area that is the ecosystem for that area of the park.” (*William Crowley, letter, December 10, 2011 [I-Crowley-02]*)

“Another technical issue; one potentially even more serious, is the nature of the ‘synthetic turf’, which is stated to be composed of fiber, infill, and backing. The ‘fiber’ and the ‘backing’ are composed of polyethylene and polypropylene. While such polyolefins are made from petroleum, and lack any possible aesthetic appeal, they are not known to be toxic, or any special environmental hazard, in such an application.

In contrast, the 'infill' is potentially a true environmental hazard. It is stated to 'be composed of about 70% styrene butadiene rubber (SBR) and 30% sand. The SBR infill, commonly called 'tire crumb', is recovered from scrap tires and from the tire-retreading process'. This statement, while broadly correct, totally ignores the facts that, while the initial rubber might have originally been mostly pure styrene-butadiene polymer, it has necessarily been mixed with various vulcanizing and stabilizing chemicals, some of which are recognized carcinogens, and then vulcanized. The rubber is then 'used', with varying and extended exposure to ultra-violet light, ozone, and other unknown environmental influences; and then 'reclaimed' by various mechanical and thermal processes. And then, this 'infill', some 8.5 acres of it, is to be further exposed to ultra-violet light and natural weathering for some extended length of time. Note I am not saying that persons using such a playing field are of some increased risk of cancer; but I certainly believe that any creature exposed to the leachate - the 'run-off' - from such a playing field WOULD be at some increased risk." (*Fred W. Davis, Letter, July 15, 2011 [I-FDavis-04]*)

"The effect of artificial turf on run-off water quality was eloquently stated at the hearing by Claire Dworsky. This aspect of the DEIR is clearly under assessed." (*Annemarie A. Donjacour, Letter, December 8, 2011 [I-Donjacour-04]*)

"The proposed EIR cites a Connecticut study that admits the water runoff from synthetic turf was fatal, fatally toxic to aquatic life. As the winner inner of a National Science Foundation Kids Science Challenge, I studied the chemical content of grass and turf runoff water with Dr. Dina Deighton, from UC Santa Cruz, and we found that the water from the turf to be 100 percent fatal to all aquatic life. 100 percent. The EIR acknowledges this. The peer-reviewed studies confirm this.

The State of California and USGS say the Beach Chalet is likely to flood in the event of severe ocean storms. It's a matter of when, not if there will be a flood. If turf and crumb rubber get into ocean beach water, aquatic life would die.

I love sports but I also love Golden Gate Park and its ecosystem and I urge you to vote against this. It's a picture that paints 1,000 words. A video paints a million. I urge you to look at the video I made with my digital microscope of a daphnia magnus in the runoff waters from synthetic turf water. See how the rubber gets into its digestive tract and kills it. " (*Claire Dworsky, public hearing comment [I-Dworsky-01]*)

"I disagree with the finding of the Hydrology and Water Quality sections which report that there will be less than significant impact to water quality in the Park with synthetic turf placement. Crumb rubber used to secure the turf does have toxic materials in it and does have a negative impact on the environment in and of itself The California Office of Environmental Health Hazard Assessment (OEHHA), in a January 2007 report, found that forty-nine chemicals could be

discharged from crumb rubber, some of it highly toxic with neurological and carcinogenic consequences. We are talking about children being exposed to these noxious materials in the name of 'fun,' as some of the witnesses testified at the December 1 hearing on this DEIR. These materials also have the potential to be released into the soil, endangering animal and plant life. This does not sound like maintaining the natural recreational value of the park, much less its role as a bioresource to the Parks's ecosystems." (*Susan Englander, Letter, December 12, 2011 [I-England-01]*)

"In addition, municipal codes now demand that paved over and large area structures provide for dry wells, capable of holding 2 to 4 inches of rain per total area, as recharge basins instead of having the water run into the storm sewer systems. The artificial field is in the same class as a parking lot or large building and the drainage should not be to the storm sewer but into dry wells placed at the end or sides of the field. 7.2 acres of synthetic fields would, for a minimum of 2 inches of rain need to contain 1.2 acre feet of water (52,271 cu ft or 391,000 gallons). At 4 inches this is nearly 800,000 gallons of runoff that is not recharged but wasted. The DEIR does not address this environmental issue." (*Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-02]*)

"I am not convinced that the synthetic turf is not toxic –to the athletes playing on the field and due to runoff from the field." (*Richard Ivanhoe, letter, December 13, 2011 [I-Ivanhoe-07]*)

"One of the most specious and dangerous conclusion in the DEIR addresses the environmental impact of contaminants on natural water in the vicinity of the soccer fields. The DEIR claims that there will be no leaching of contaminants into the soil and the ground water below, nor any other contamination of water generated by the astro-turf. .

Yet, to arrive at this conclusion, the drafter simply ignores the storm conditions which result direct run-off into the ocean which occurs on average seven times per year. As the soccer fields lie less than 1,000 feet from the ocean, it is inevitable that contaminants from the astro-turf will reach the ocean and destroy aquatic life.

Furthermore, the DEIR fails to discuss at all the effect of crumbled turf mixing with surrounding soil and then leaching contaminants into the aquifer. The DEIR assumes that the proposed underlay material for the astro-turf will solve all leaching problems. Yet, he does not consider this problem." (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-11]*)

“Under Policy E, point 4, it needs to be added that the water from the synthetic turf is 100% fatal to aquatic organisms as testified to by Adina Paytan at City Hall on 12/1/11.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-49]*)

“I could find nothing in regards to the migration of hazardous materials due to wind and water, yet I know from a study I did of the South Sunset Playground that crumb rubber migrates and gets into storm drains. Photographic evidence was presented at the 12/1/11 hearing as to crumb rubber migration at Crocker Amazon. And the soccer league community has frequently mentioned the tracking and migration of crumb rubber into their cars and homes. This site is windy and prone to flooding; crumb rubber here will migrate into the rest of the park, onto the beach, and into the ocean, yet this is not addressed. This issue was brought up in the scoping session.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-63]*)

“Water run-off from washing fake grass and from drip of the fog and rain will wash along with it crumbled particles from this material and end up in the Ocean and clogging drainage systems.” (*Andrea & Rick O’Leary, email, December 11, 2011 [I-O’Leary-09]*)

“The potential for pollutants from storm-water runoff should only increase the disuse of synthetic turf. Findings of iron, manganese, chromium, lead, zinc and other chemical components that are known carcinogens should in and of itself ask us why we would even consider using this material and how in good conscience we could or would allow our children to ever play on it. The DEIR is inadequate in this instance as it does not adhere to San Francisco Environmental Code Section 201, Goals which states:

The purpose of this Chapter is to reduce negative impacts to human health and the environment through the development of specifications for City purchases that:

1. Reduce occupational health hazards for City staff as well as reduce exposure of City residents and visitors to potentially toxic chemicals by purchasing products for use in City operations that do’ not harm human health or the environment;
2. Reduce San Francisco’s contribution to global climate change by purchasing products that lead to a reduction in greenhouse gas emissions from Commodities;
3. Improve the air quality for San Francisco residents and visitors by purchasing vehicles and motorized equipment that minimize emissions of air pollutants;
4. Protect the quality of San Francisco’s ground and surface waters by eliminating the use of chemicals known to contaminate local water resources through toxicity, bioaccumulation or persistence; and

5. Preserve resources locally and globally through purchasing practices that include:

- (i) Maximizing water and energy efficiency and favoring renewable energy sources;
- (ii) Maximizing post consumer recycled content and readily recyclable or compostable materials;
- (iii) Favoring long-term use through product durability, reparability, and refuse; and
- (iv) Considering life cycle economics of a product that includes manufacture, transportation, use and disposal." (Cheryl Schultz, letter, December 11, 2011 [I-Schultz-03])

Response HYD-3

Discharge to Combined Sewer and Compliance with Stormwater Design Guidelines

Comments A-SFPUC-01 through A-SFPUC-3, O-SCSFBC-18, I-Crowley-02, and I-O'Leary address stormwater runoff and compliance with stormwater design guidelines. As described in Impact HY-1 on EIR page IV.G-25 and in the Project Description, the SFRPD would construct the playfields with an underlying liner and a drainage system equipped to capture all runoff and leachate from the fields. The drainage system would initially direct all runoff and leachate to the combined sewer system via a new pipeline and connection. SFRPD would conduct periodic water sampling from the underdrain system, in conjunction with the SFPUC, and evaluate the quality of water drained from the synthetic turf. If sampling by the SFRPD indicates that runoff and leachate quality is acceptable, the SFPUC could allow drainage from the synthetic turf athletic fields to infiltrate into the groundwater basin. If approval is obtained from the SFPUC to infiltrate runoff from the synthetic turf, the proposed project would be required to comply with the San Francisco Stormwater Management Ordinance (Stormwater Design Guidelines). The Guidelines require projects that disturb more than 5,000 square feet of land to capture and treat stormwater runoff from the site. Compliance with the Stormwater Design Guidelines would require that the SFRPD prepare a stormwater control plan describing the Best Management Practices (BMPs) that would be implemented. The plan would include post construction operation and maintenance of the BMPs. Comment A-SFPUC-1 indicates that the SFPUC concurs with this approach and will work with the SFRPD on managing stormwater runoff from the underdrain system if and when it is determined stormwater can be managed onsite. Discharge to a dry well or other recharge facility as suggested in comment I-HowardGL-02 would occur as part of compliance with the Stormwater Design Guidelines. However, the discharge would not be protective of groundwater quality until there are sufficient monitoring data to demonstrate that such discharge would not adversely affect water quality.

In comment A-SFPUC-02 and A-SFPUC-03, the SFPUC also notes that stormwater from all disturbed surfaces must also comply with the Stormwater Design Guidelines. This was not specifically addressed in Draft EIR Section IV.G, Hydrology and Water Quality; therefore, the third paragraph on EIR page IV.G-26 has been revised as follows:

With implementation of the monitoring program described above to evaluate runoff quality from the playfields, and compliance with the Stormwater Design Guidelines once approval is obtained to infiltrate stormwater runoff, impacts related to additional sources of polluted runoff from the play fields would be less than significant.

The proposed project would also increase the area of the parking lot from 25,320 square feet to 34,060 square feet. However, approximately 12,450 feet of the parking lot would be constructed of permeable pavement, resulting in a net total of 21,610 square feet of impervious surfaces. This is 3,710 square feet less than existing conditions, but any runoff could still contain common stormwater pollutants such as sediments, metals, oil and grease, and trash. The project would also include construction of less than 1 acre of impervious surfaces, including pathways and other site improvements. These new impervious surfaces would also be potential sources of stormwater pollutants. In accordance with the Storm Water Design Guidelines, the SFRPD would construct infiltration swales or other measure that would prevent the stormwater runoff flow rate and volume from exceeding existing conditions (except for fields) and provide treatment for stormwater pollutants. Compliance with the Stormwater Design Guidelines would require that SFRPD prepare a stormwater control plan describing the BMPs that would be implemented, including a plan for post construction operation and maintenance of the BMPs. With compliance with the Stormwater Design Guidelines, impacts related to additional sources of polluted runoff from the parking lot and new impervious surfaces would be less than significant.

This revision does not change the analysis or conclusions presented in the EIR.

Effects on Wastewater Treatment Capacity and Combined Sewer Overflows

In response to Comment SCSFBC-18, the effects of project-related discharges to the combined sewer system are discussed in Impact HY-3 beginning on DEIR p. IV.G-27. As stated in that analysis, the overall increase in sewage from the project would be 1,100 gallons per day (0.0011 million gallons per day [mgd]). Total dry weather flows (typically May 1–October 15) to the Oceanside Water Pollution Control Plant (OWPCP) are currently 14 mgd, and the treatment plant has the capacity to treat up to 43 mgd to a secondary level. The increased flows from the project represent a small proportion of the existing dry weather flows to the OWPCP and are well within the capacity of the treatment plant.

During wet weather (typically October 16–April 30), there is a wide variation in volume of flow to the combined sewer system because of the addition of stormwater discharges to the system. The volume of wet weather flows is directly related to the rainfall intensity. Treatment of the wet weather flows vary depending on the characteristics of any individual rainstorm. Flows in excess of 175 mgd (about 13 percent of the total wet weather flows) are discharged at the shoreline through one of seven combined sewer overflow (CSO) structures located along the ocean coast. These overflow facilities are designed for a long - term average of eight overflows per year.

Based on an analysis using the Westside Planning Model,⁴ discharges of all of the runoff from the play fields would increase the volume of wet weather discharges to the combined sewer by an estimated 3.35 million gallons per year.⁵ This increase would not result in an increase in the number of CSO discharges, but could increase the volume of these discharges by approximately 1.2 million gallons (i.e. from 310.6 million gallons per year to 311.8 million gallons per year), and could increase the duration of the discharges by 0.1 hour per year (from 32.0 hours per year to 32.1 hours per year). Further, when brought into compliance with the Stormwater Design Guidelines, project - related discharges of stormwater to the combined sewer system would decrease, and the project would decrease the effect on CSO discharge volumes and duration.

Stormwater Runoff Quality

Most of the comments above address the quality of stormwater associated with the project, including comments regarding the Synthetic Playfields Task Force findings and independent review of applicable research. Note that the Synthetic Playfields Task Force published their findings in 2008. The EIR summarizes the results of those findings related to water quality beginning on page IV-G.4 of the EIR. The EIR authors did not review all of the studies referenced in the task force findings. While the task force did not find independent studies addressing the effects of synthetic turf on the ecosystem as stated on EIR page IV.G-5, the EIR presents summaries of literature researched by the EIR authors in addition to summarizing the findings of the Synthetic Playfields Task Force. The EIR also presented the results of stormwater sampling at Garfield Square Park and found that with the exception of dissolved copper, none of the metals concentrations exceeded the Regional Water Quality Control Board (RWQCB) ESLs for fresh water or marine environments.

Available literature regarding stormwater runoff quality from synthetic turf is limited, and the results are variable. In addition, as discussed in the EIR, the composition of synthetic turf with SBR infill is variable, depending on the chemical composition of the tires used to manufacture the SBR infill. Some studies, including the study titled "Runoff Water from Grass and Artificial Turf Soccer Fields: Which is Better for the Soccer Player, the City, and the Environment" by Claire Dworsky, were not initially reviewed for the EIR, but referenced in several comments. The study indicates some toxicity in runoff. The SFRPD has developed the synthetic turf standards to address this issue (discussed on EIR page IV.G-16 and in response to HYD-1, above). These standards limit the chemical content of the turf materials. In addition, the SFRPD would construct a liner and perimeter drainage system to direct stormwater runoff to the combined sewer system until the SFPUC provides approval to infiltrate the stormwater on-site (based on runoff monitoring conducted by the SFRPD).

While the project could result in an increase in metals loading into the stormwater runoff, stormwater sampling (described on EIR pages IV.G-10 to IV.G-16) has demonstrated that only the dissolved copper concentration exceeded the ESLs for marine surface waters in stormwater runoff

⁴ HydroConsult Engineers, *Westside Model Documentation*, July, 2001. This document is available for review at the Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2010.0016E.

⁵ HydroConsult Engineers, *Hydrology Study, Beach Chalet*, August 2011. This document is available for review at the Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2010.0016E.

from similar fields. Volatile and semivolatile organic compounds were not detected in the runoff samples. Further, for the most part, the runoff would be treated at the Oceanside Water Pollution Control Plant and discharged in accordance with National Pollutant Discharge Elimination System (NPDES) permit CA0037681 issued by the RWQCB and the U.S. Environmental Protection Agency (USEPA). Although some wet weather flows are discharged at the shoreline during combined sewer overflows, these overflows are routed through a series of flow-through treatment boxes. The boxes provide the equivalent of primary treatment (removal of settleable solids and floatable materials). Any solids present in the overflow would be settled out in the boxes prior to discharge, preventing the discharge of crumb rubber particulate matter.

Regarding Comment I-Barish-16, as discussed in EIR Section IV.H, Hazards and Hazardous Materials and Air Quality, iron and manganese are components of the steel belts and beads used in tires. The maximum contaminant levels (MCL) for both iron and manganese are secondary MCLs, and as discussed under "Water Quality Regulations," secondary MCLs are established to protect the aesthetic quality of drinking water, and are based on effects such as taste and odor. Unlike primary MCLs, these drinking water standards are not based on potential health effects.

The stormwater runoff from the Beach Chalet play fields would represent approximately 0.4 percent of the sewer system overflows. As discussed on EIR page IV.G-27 and IV.G-28, an addition of this small volume would not appreciably increase bacterial levels in the overflows.

Additional studies of runoff quality are not needed for the Final EIR because the project includes the necessary sampling and precautionary methods for ensuring that adverse water quality effects do not result from use of the synthetic turf at the Beach Chalet play fields, as discussed above.

San Francisco Environment Code

Section 201 of the San Francisco Environment Code specifies goals for San Francisco's Environmentally Friendly Purchasing Policy. Those goals that relate to human health and environmental effects of the proposed project include:

- Reduce occupational health hazards for City staff as well as reduce exposure of City residents and visitors to potentially toxic chemicals by purchasing products for use in City operations that do not harm human health or the environment.
- Protect the quality of San Francisco's ground and surface waters by eliminating the use of chemicals known to contaminate local water resources through toxicity, bioaccumulation or persistence.

While the synthetic turf would include chemicals contained in used tires, the turf would be installed such that runoff and leachate from the fields would be discharged to the combined sewer system until sampling by the SFRPD indicates that infiltration of the runoff and leachate would not cause adverse water quality effects. Human health effects related to use of synthetic turf are addressed in response HAZ-4, and in EIR Section IV.H, Hazards and Hazardous Materials and Air Quality

M.5 Impacts Related to Natural Disasters [HYD-4]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-SCSFBC-16
O-SCSFBC-21

I-Barish-11
I-Barish-14

I-Dworsky-01

I-Elias-06

“... the DEIR limits the analysis to runoff load to the sewage system, as described on page IV.G-28 (page 248 in the PDF file). It does not describe the effects of runoff into the park (as with flooding) or other places. ...” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-16]*)

“Page IV G-6 admits, ‘The Department should not install synthetic turf fields in areas of parks that are prone to flooding.’ However, the project site includes areas that frequently flood or are continually saturated. An area prone to flooding, and one that is frequently saturated, is located here:

37 deg. 45’ 58.24” N
122 deg. 30’ 32.88” W

Exhibit C offers a photograph of this area.

This issue of flooding, stormwater runoff, and sea level rise are linked.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-21]*)

“The impact of a man-made or natural disaster that might increase the release of harmful or toxic materials into the environment needs to be considered. ...” (*Jean Barish, letter, December 12, 2011 [I-Barish-11]*)

“Please assess the risk of a natural or man-made disaster causing damage to the proposed lining and drainage system designed to capture runoff and leachate from the fields, and discuss all possible environmental impacts should such an event occur. Please discuss plans to minimize these impacts.

Please assess the risk of a natural or man-made disaster causing flooding of the soccer fields, and discuss all possible environmental impacts should such an event occur. Please discuss plans to minimize these impacts. ...” (*Jean Barish, letter, December 12, 2011 [I-Barish-14]*)

“...The State of California and USGS say the Beach Chalet is likely to flood in the event of severe ocean storms. It’s a matter of when, not if there will be a flood. If turf and crumb rubber get into ocean beach water, aquatic life would die. ...” (*Claire Dworsky, public hearing comment [I-Dworsky-01]*)

“The leaching of toxic metals into the surrounding area by the proposed AstroTurf playing surfaces is another significant environmental impact that this report underestimates. ... This proposed site with seven acres of leaching astroTurf is less than 1000 feet from Ocean Beach. If through excessive flooding any of those metals reached the ocean, it would be an environmental disaster as the poison would likely move up the food chain. The ground around the proposed fields would likely be immediately affected by the toxic leachate. The ground plants, water and bugs would all be rendered deadly to the birds and animals that live in the area. The small ground animals, raccoons, opossums and skunks that use that area for habitat would all be negatively affected, ...” (*Evan Elias, Letter, December 11, 2011 [I-Elias-06]*)

Response HYD-4

In response to the comments above, the potential for flooding at the project site is assessed in the Initial Study included as Appendix A of the Draft EIR. As discussed in Impact HY-5 of the Initial Study (pages 51 and 52), the project site is not located in a flood zone identified on preliminary flood maps prepared by the Federal Emergency Management Agency. Based on maps published by the Bay Conservation and Development Commission in 2007, the site is not located in an area that would be inundated due to sea level rise by 2100.⁶ Also, the project site is not in an area subject to tsunami runup based on Map 6 of the San Francisco General Plan. Therefore, the project site would not likely be subject to flooding or cumulative impacts associated with flooding. Although there are currently areas of ponded surface runoff and saturated ground, this ponding would not occur with implementation of the proposed project because the Beach Chalet Athletic Fields would be appropriately graded and engineered with a liner and perimeter drainage system. These engineering methods would direct flows to the combined sewer system and ultimately to engineered stormwater controls once infiltration is approved by the SFPUC. Therefore, the proposed project would be an improvement over existing conditions, and the synthetic turf would not be subject to prolonged contact with surface water. Further, the fields would not contribute to flooding at the site because the drainage system would be sized to accommodate maximum expected runoff from the fields.

⁶ Bay Conservation and Development Commission, “San Francisco Bay Scenarios for Sea Level Rise: San Francisco,” 2007. Available on the internet at: <http://www.bcdc.ca.gov/index.php?cat=56>.

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N. Hazards and Hazardous Materials and Air Quality

N.1 Overview of Comments on Hazards and Hazardous Materials and Air Quality

The comments and corresponding responses in this section cover topics in Chapter IV, Section IV.H, of the EIR. These include topics related to:

- HAZ-1, Potential for Injuries and Infections
- HAZ-2, Longevity and Recycling of Turf Products
- HAZ-3, Hazardous Materials used for Construction and Maintenance
- HAZ-4, Chemical Content of Turf Products and Potential Human Health Effects
- HAZ-5, Migration of Turf Materials
- HAZ-6, Fire and Vandalism Hazards of Turf Products
- HAZ-7, Hazardous Building Materials

Portions of some of the comments addressed in this section also relate to other resource topics and therefore, those portions of the comments are responded to in those sections, including discussion of groundwater quality effects and stormwater quality.

N.2 Potential for Injuries and Infections [HAZ-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Moore-01	I-Barish-33	I-Jungreis2-12	I-Pinchuk-05
O-CSFN-09	I-Duderstadt-01I-	I-Jungreis2-32	I-Pinchuk2-01
O-CYSA-02	Duderstadt2-01	I-Livas-01	I-Ray-03
O-CYSA2-02	I-Glichstern-02	I-Lounsbury-06	I-Ray-04
O-CYSA3-01	I-Glichstern-05	I-McCowin-03	I-Schultz1-09
O-PAR2-04	I-Glichstern-07	I-McGrew-06	I-Schultz2-01
O-SCSFBC-26	I-Hemphill-01	I-Olivas-01	I-Triska-01
O-SFPARKS-21	I-Hemphill2-01	I-Ogilvie-02	I-Van Riel-01
I-Barish-17	I-Hyde-03	I-Ogilvie-03	I-Wilkinson-01

“I believe that there were numerous comments made by numerous experts tonight pointing out numerous deficiencies that would make me personally supportive of an extension partially because I believe within the three minutes these people had to present their points there was not enough room to really fully bring forward the full extent of what was implied here.” (*Kathrin Moore, Commissioner, San Francisco Planning Department, public comment [A-SFPC-Moore -01]*)

“Artificial turf safety: This question was not fully studied in the draft. It does not fully evaluate the artificial turf and the safety. Many college and professional football and baseball fields have

switched from artificial turf to natural turf because of injuries attributed to artificial turf.”
(*Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-09]*)

“Eliminate forever the injuries caused by gopher holes and uneven turf. Make the Beach Chalet fields safe and create a facility we can be proud of in San Francisco.” (*California Youth Soccer Association, letter, November 11, 2011 [O-CYSA-02]*)

“While the draft EIR is generally quite thorough, I have a problem because it does not fully address the impact of the field surface on the users. What is the impact on a player being injured by uneven grass or a gopher hole? How does a child learn to pass the ball over grass pitted with dirt patches? These are certainly important considerations for athletic usage.” (*California Youth Soccer Association, letter, December 1, 2011 [O-CYSA2-02]*)

“While the Draft EIR is generally quite thorough, I have a problem because it does not fully address the impact of the field’s surface on the users. What is the impact on a player being injured by uneven grass or a gopher hole? How does a child learn how to pass a soccer ball over a grass pitted with dirt paths?” (*California Youth Soccer Association, public hearing comment [O-CYSA3-01]*)

“The DEIR for the soccer fields does not sufficiently address the safety of the synthetic turf for humans (most importantly, children) who would be playing on it and it does not cite any independent studies on that issue.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-04]*)

“Other Issues Related to Human Health. The DEIR contains no analysis of latex allergies in field users.

There is no analysis of mechanical injuries specific to artificial turf despite numerous published studies, include one by the National Football League, which reported a higher level of injuries on synthetic turf than with natural turf.

The DEIR presents no examination of the possible synergistic effects of high temperatures that synthetic fields experience.

The DEIR discounts any possible crumb rubber ingestion effects without justifying this position.”
(*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-26]*)

“METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA). Any research about surface bacteria such as Methicillin-resistant Staphylococcus aureus (MRSA) is absent from the Draft EIR report.

It is our position that in the context of the Draft EIR’s stated ‘MAINTENANCE PROGRAM’ that MRSA infection poses a ‘Potentially Significant Impact’. The DEIR states in regards to scheduled maintenance ‘ ... no disinfectants or special detergents would be used’. (Draft EIR page 11-24),

A 2008 San Francisco Department of Public Health memo cited in the Draft EIR states that ‘MRSA is now a common disease in the community.’ ‘Any type of skin breakdown, including ‘turf burns,’ may provide a portal of entry for infection.’ Athletes are among the group at higher risk for MRSA infections, according to the Centers for Disease Control and Prevention (CDC).

We dispute the conclusions that a representative from SF-DPH gave to the 2008 San Francisco Synthetic Task Force that MRSA was not a turf problem because ‘people only get these infections from skin contact, open sores and contact with other people.’

In a study that is cited in this DEIR, (‘Chemicals and Particulates in the Air above the New Generation of Artificial Turf Playing Fields, and Artificial Turf as a Risk Factor for Infection by Methicillin-Resistant Staphylococcus Aureus (MRSA), July, 2009 - CIEHHA), concluded that, ‘Participation in contact sports is a risk factor for infection by MRSA.’

- Skin abrasions and other types of skin trauma are risk factors for MRSA infection in contact sports.
- Whether the new generation of artificial turf causes more skin abrasions than natural turf has only been carefully addressed in a single study (Meyers and Barnhill, 2004) of male high school football players. In that study, artificial turf was associated with a 9-fold higher incidence of ‘surface/epidermal injury’ compared to natural turf.

The study goes on to say; ‘Outbreaks in the general community, in otherwise healthy individuals, are considered community-associated MRSA. Risk factors for community-associated MRSA include young age and playing a contact sport (Boucher and Corey, 2008). In the case of athletes, this may be due in part to the frequent physical contact that occurs during play, as well as the propensity of these athletes to have skin cuts and abrasions.

An association between MRSA infection and player-to-playing surface contact could have at least two different explanations. Such contacts could cause relatively long-lasting skin abrasions that serve as efficient portals of entry for MRSA, perhaps during subsequent player-to-player contacts. Alternatively, the playing surface itself might be a carrier of MRSA, such that player contact with the surface transfers MRSA to the previously uncontaminated skin.

An association between skin abrasions due to falls to the turf (termed turf burns) and skin infection by MRSA has been tested in two MRSA outbreaks among football teams. In a college

football team, players with MRSA-induced boils were 7.2-fold more likely to have had skin abrasions from artificial turf (new generation) than uninfected players (Begier et al., 2004). In a professional football team, eight of eight MRSA-induced skin abscesses occurred at the site of a turf burn.

The results of these two studies demonstrated an association between skin trauma due to falls to the playing surface and skin infections by MRSA. This suggests that traumatized skin is more susceptible to MRSA entry and infection. ‘

As mentioned above, a second possible explanation for why player-to-playing surface contact might be a risk factor for MRSA infection in competitive sports is that the playing surface itself is a source of MRSA. An inanimate object capable of transmitting infectious bacteria to humans is called a fomite. While player-to-player contact is considered the most important mode of sports-associated MRSA transmission, possible instances of fomite transmission have been reported.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-21])

“As the DEIR readily admits, there has been a great deal of public concern regarding health issues related to the use of synthetic turf with tire crumb infill. There is a wealth of information regarding these potential health hazards from all over the world, many of which conclude that the product raises significant health and environmental concerns. Unfortunately, the DEIR failed to consider many studies and papers that discuss these issues, and skewed the studies that it did consider. Some of these issues are discussed in section IV.G - Hydrology, above.

The studies that are referred to in this section of the DEIR state there is a need for additional information and research regarding the risks of artificial turf before it can be considered safe enough to use on athletic fields. These safety considerations are especially important since the proposed fields will be used by young children, who are known to be more vulnerable to environmental toxins.

In addition to concerns discussed above about the impact of artificial turf with tire crumb on hydrology and water quality, there are many other issues that must be considered when reviewing the environmental safety of artificial turf. These include: ...

- The risk of exposure to MRSA that breeds on artificial turf;
- The risk of certain injuries such as ACL injury and ‘turf toe’” (Jean Barish, letter, December 12, 2011 [I-Barish-17])

“Risk of Injury. Experts have expressed concern that certain types of injuries occur more on artificial turf often due to its composition and inflexibility.

- Please compare the risk of all injuries on artificial turf to the risk of injury on natural grass. Please indicate if the incidence varies by age and/or gender.
- Please compare the incidence of the following injuries on artificial turf to their incidence on natural turf: first metatarsophalangeal joint sprain ('turf toe'); anterior cruciate ligament injuries ('ACL'); foot lock; all other musculoskeletal injuries, including but not limited to sprains, fractures, and the like; turf burn; head injuries, including but not limited to concussion and skull fractures. Please indicate if the incidence varies by age and/or gender.

Risk of Infection. Due to the combination of warmth and moisture, artificial turf is a breeding ground for harmful bacteria, including the life-threatening Methicillin-resistant *Staph aureus* (MRSA).

- Please compare levels of harmful bacteria, including MRSA, found on artificial turf compared to natural grass during the lifetime of the product.
- Please compare the incidence of bacterial infections, including MRSA infections, related to play on artificial turf compared to playing on natural grass, during the lifetime of the product." (*Jean Barish, letter, December 12, 2011 [I-Barish-33]*)

"This DEIR is lacking in an adequate discussion of the **physical safety of users** of the proposed project. Numerous studies exist showing reduced surface-caused injury when natural grass surfaces are replaced with current synthetic turf. Sadly, these studies only consider quality grass fields, not the rutted gopher-ridden conditions typical of San Francisco's current 'natural' recreationally surfaces." (*Christopher Duderstadt, Letter, November 28, 2011 [I-Duderstadt-01]*)

"I find the mitigations quite acceptable. My concern is reading the EIR it doesn't deal with the safety of the users of this facility.

In 1992, I started with a shovel and a wheelbarrow at Beach Chalet trying to fill the holes that were rampant. In '96, if you could put up this, please. We had a young boy I'll pan you through. This was Alex Goodman. He broke his ankle in a hole at the Beach Chalet.

I was fortunate enough to get this picture before the mayor. It took us a little while but we spent about four million dollars on our soccer fields. In '98 we redid the soccer field. Willie was there, everybody was there. He made two quotes that I think we need to repeat. One he says, 'We now have the best 11 soccer fields in the country in Golden Gate Park.

We will make the same commitment to maintaining these fields as we have restoring them.'

A year later I did field surveys repeatedly. This was Beach Chalet a year later. It's not possible for us to maintain natural lawn fields in San Francisco with the number of recreational users we have. Even if we have all the gardeners in the world, we still can't do it.

I think you need to consider the safety of the children and adults that will use this field going into the future. It is historic, the natural grass, ruts and gopher holes I don't think should be considered historic. I think we move forward with this project and thank you very much." (*Christopher Duderstadt, public hearing comment [I-Duderstadt2-01]*)

"I printed something. I'm kind of excited and cannot read it very well, but basically, one of these things current and former players from the --have recently criticized the surface, expressing concern that, among other things, it may exacerbate injuries. American national team manager Bob Bradley called on FIFA in June, 2009, have courage and ban artificial surfaces." (*Anastasia Glichstern, public hearing comment [I-Glichstern-02]*)

"Friction between skin and artificial turf causes abrasions and burns to much greater extent than natural grass, by the way, if you don't maintain something since 1991, of course it will be ruined." (*Anastasia Glichstern, public hearing comment [I-Glichstern-05]*)

"The biggest impact of the game of the turf was in the bodies of the player. It caused more wear and tear on knees, ankles, feet and lower back, possibly even shortening the career of the players who played a significant portion of their game on artificial surfaces. This is about baseball, not soccer, but the same goes for soccer. Thank you." (*Anastasia Glichstern, public hearing comment [I-Glichstern-07]*)

"Under Hazards, the DEIR for the Beach Chalet Athletic Turf Project does not address the medical/orthopedic injury and other medical health issues posed by the artificial turf. I submitted various medical article abstracts during the scoping process, but that information was not included in the DEIR or addressed in any way. There is now even more current literature available in the form of more current medical abstracts from pubmed.gov. I have attached the abstracts and from the numbers these can also be retrieved online.

Throughout the hearings, it has constantly been stated by project advocates that artificial turf is safer than grass and this has been used as an argument to push the project forward, stating that installing artificial turf will be an improvement in terms of safety. The example that has usually been given is of an ankle injury. Reviewing the literature, this is not what appears in studies comparing natural grass and artificial turf, and there are injuries that are specific to artificial turf, such as 'turf toe', and there appear to be more ankle injuries on the artificial turf than are seen on grass. Artificial turf also can allow the survival of bacteria that can cause infections. The other issue which has not been mentioned is the fact that on a sunny day artificial turf can become very hot.

Article 20456680...*Comparison of injuries sustained on artificial turf and grass by male and female elite football players.* 'During matches, men were less likely to sustain a quadriceps strain and more likely to sustain an ankle sprain on artificial turf.'

Article 21985212...*A review of football injuries on third and fourth generation artificial turfs compared with natural turf.* 'There was increased risk of ankle injury playing on artificial turf in eight cohorts.' '...artificial turf was very likely to have harmful effects for minor injuries in rugby union training and severe injuries in young female soccer players.' 'Changing between surfaces may be a precursor for injury in soccer.' 'Ankle injury prevention strategies must be a priority for athletes who play on artificial turf regularly.'

Article 20647952...*The cost of running on natural grass and artificial turf surfaces.* There is a 'higher physical effort in matches played on artificial turf'. It takes more metabolic effort to run on artificial turf. That combined with a hotter surface threatens heat injury on hot days and we have more of those now.

Article 21306640...*Comparison of the incidence, nature and cause of injuries sustained on dirt field and artificial turf field by amateur football players.* 'The most common injury type in the dirt field was skin injuries (abrasion and laceration) and in the artificial turf was sprain and ligament injury followed by hematoma/contusion/bruise. Most injuries were slight and minimal in dirt field cohort but in artificial turn cohort the most injuries were mild.' Sprains and ligament injuries are more problematic.

Article 20424406...*Turf toe: soft tissue and osteocartilaginous injury to the first metatarsophalangeal joint.* 'The use of artificial turf in the United States has created a dramatic increase in first metatarsophalangeal joint dorsiflexion injuries...In the high performance or elite athlete, a turf toe or severe dorsiflexion injury can be disabling, and can threaten an athlete's career if not treated properly.'

Article 20391085...*Risk of injury associated with rugby union played on artificial turf.* 'The results indicate that the overall risks of injury on artificial turf are not significantly different from those experience on grass; however, the difference in the incidence of anterior cruciate ligament injuries on the two surfaces is worthy of further study.'

Article 20962684...*Community-associated methicillin-resistant Staphylococcus aureus survival on artificial turf substrates.* 'These results suggest that CA-MRSA could survive on artificial turf in significant numbers for 1 week and lower numbers for at least a 1 month, if supplied with appropriate nutrients.' This does not happen on natural grass and this problem exists for all body secretions.

In summary, there remains many questions about the safety of artificial turf for athletes, especially young ones, and this needs to be addressed in the DEIR." (*Pam Hemphill MD, letter, December 12, 2011 [I-Hemphill-01]*)

"I'm a physician, and I'm a 41-year resident of San Francisco. I think the DEIR is really inadequate in terms of medical things and hazards. There's a whole orthopedic literature that has to do with how artificial turf is not in fact safer. We've been hearing that it's safer over and over. Well, I think that literature got ignored and I did submit it at one point. There are a lot of articles, there's some specifics that only apply to artificial turf like turf toe. You may want to research 'turf toe'" (*Pam Hemphill, public hearing comment [I-Hemphill2-01]*)

"I would like a through investigation of the detrimental effects of the plastic turf on children from frequent use and also if they fall and are cut by the plastic turf." (*Katherine Hyde, email, December 11, 2011 [I-Hyde-03]*)

"The plan requires the use of synthetic turf to form the synthetic surface of-the soccer-fields: there is no analysis of an increased risk of serious injury caused by synthetic turf versus natural turf.

The plan requires the use of synthetic turf to form the synthetic surface of the soccer fields: there is no analysis of an increased risk of skin injury caused by synthetic turf versus natural turf." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-12]*)

" The plan requires the use of artificial surfaces: there is insufficient analysis as to the impact to the ability to play soccer on artificial surfaces when those surfaces are regularly saturated with condensation." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-32]*)

"Ditto for me. Please support this project. Too many athletes, adults, children, men and women have injured themselves at Beach Chalet because of its condition." (*Rico Livas, email, November 30, 2011 [I-Livas-01]*)

"However, gophers found it too. And our field as it is, is a dangerous landmine for athletes. My team in particular has several girls who play on National Teams, play Professionally overseas, and high schooler's preparing themselves for a college career complete with a full ride scholarship. I cannot in good conscience have them play on a field where people regularly break ankles and legs in gopher holes." (*Jill Lounsbury, email, December 6, 2011 [I-Lounsbury-06]*)

"Besides constant skin abrasions and poor footing, there were many more accidents, and the girls just hurt more after playing on them My daughter had a mini-concussion." (*Kathleen McCowin, email, December 8, 2011 [I-McCowin-03]*)

“...Has the DEIR investigated the injuries on artificial turf?” (*Shana McGrew, email, no date [I-McGrew-06]*)

“MRSA infections are on the increase. The most rapidly growing staph infection is Community Acquired MRSA or CAMRSA.

- The Center for Disease Control or CDC estimates that MRSA kills more people per year in the US than AIDS.
- The CDC latest figures, from 2001 state that in American hospitals alone, Healthcare-Associated Infections (HAI's) account for an estimated 1.7 million infections and 99,000 associated deaths each year. These figures are 9 years old, and it can be safely assumed that the more recent figures would be alarmingly higher. ...

Notwithstanding the extremely high fatality rate, the costs associated with overcoming the infections in a clinical setting are staggering. ...

In the course of my profession I was required to monitor the world wide issue of HAI's, and in particular MRSA. I maintained a website blog which over the course of two years there were over 4000 entries following and reporting on the worldwide spread of the potentially deadly bacteria.

Due to the prolific use of antibiotics in the past thirty years or so, this has become a worldwide problem as bacteria have become more and more resistant to antibiotics.

With regards to CA MRSA, this particular infection has been known to occur in many schools, colleges and universities, in particular affecting students, male or female, who are involved in sports.

Contact sports such as Football, Soccer, Wrestling, Lacrosse, and Gaelic Football all involve skin to skin contact, and present the potential for transmission of the bacteria from one person to another.

The infection can be harbored on equipment, on hard surfaces, clothing, Jacuzzis, towels, razors, footwear, door handles, gymnasium floors and mats, toilet seats, and artificial turf.

Outbreaks of CAMRSA have also been known to occur in prisons or areas where there can potentially be skin to skin contact. The Military have also seen concerning infection numbers.

- A study by the CDC found that athletes who sustained a skin bum from artificial turf were seven times more likely to develop a MRSA infection. Another study published in the Journal of Clinical Microbiology in 2000 found that MRSA survives better on artificial turf than on other surfaces.

- CA MRSA and MRSA are known to be particularly relevant in attacking people with compromised or undeveloped immune systems. Young children and the elderly are at particular risk of serious consequences from acquiring this infection.
- According to a 2007 report by the NFL Players Association, 61 percent of 1,511 players polled had negative reviews of artificial surfaces, with many believing artificial surfaces were more likely to cause injury and shorten players' careers. ...

Please also this article which appeared in Time magazine about the issue ...

While the subject of MRSA has been addressed to some degree in the proposal, it seems to me that the potential dangers presented by the use of artificial turf have been minimized and require further research.

- A number of American hospitals have been sued in the past by families of patients who have contracted the bacteria and as a result have either died or have necessitated numerous live saving surgeries due to the extent of the infection.

These suits have been filed stating unsanitary practices or poor medical treatment. In many cases MRSA was not immediately diagnosed, leading to severe consequences ..

- As of 2007, California Lawmakers implemented legislation requiring all California hospitals to report all HAI's including CA MRSA. These records should allow insight into infections resulting from artificial turf injuries.

The potential legal ramifications to the city of San Francisco as a result of a serious infection resulting in the death of a player cannot be understated.

To minimize Of dismiss this potential serious issue would be a major oversight, and is worthy of further research.

I refer to these links below which will help explain the issue even further" (*Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-02]*)

"The proposal from Rec and Park states that one of the key factors they considered in promoting the use of artificial turf over grass was due to injuries sustained by the poor condition of the grass fields due to gopher holes.

- They quote one example of a player breaking an ankle. This begs the question is there statistics available staging the number of injuries incurred due to the poor condition of the field?
- They point to Garfield Square Playground stating that it was formerly known as 'The Park where you break your foot'. Are there any statistics available on the number of players that have actually broken their foot, or is this purely anecdotal?

Soccer is a contact sport, and it is inevitable that injuries will result from playing it. Most adult players have been injured in one way or another during the course of their careers.

This applies to amateur as well as professional players.

Other sports such as Lacrosse or Gaelic football are also contact sports which will also result in injuries.

While there is no specific evidence to suggest that there is more likelihood of injury by playing on artificial turf, the main cause for concern is rashes or bums acquired by the player having contact with the ground. This raises the MRSA issue.

- It is vital in the case of a potential infection or injury to ensure that the affected area is cleaned and protected as soon as possible.
- Within the proposal, with regards to the bathroom renovation, there has been no provision made for shower stalls. If a player has access to a shower immediately following injury this could severely reduce the chance for infection to set in.
- Currently players, after they leave the field, are reduced to either changing in the toilet or more commonly in the car before they head home to hopefully take a shower. Should there be a delay in showering, this again could result in infection taking hold.
- There is also the question of chemical infection occurring in a wound due to the composition of the turf, which in some cases is known to contain lead, chrome, zinc and possibly others....

Another area where grass is better than artificial turf is in the length of the cleats required to play. Longer cleats used with grass reduce the possibility of a player slipping or twisting due to better stability.

Provisions should be made to improve the bathroom facilities to include showers for both male and female players regardless of which surface they should play on." (*Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-03]*)

"I'm one of those kids that was in the picture for the PAL in the '50's I played then. And the beach was not much better than it is now. I would urge all of you to take a trip out to the Polo Field and find out why they're closed. Take a trip out to Beach Chalet, find out why it's closed. It's closed because it's dangerous. Kids get their legs broken. Adults who are playing on it who play at a greater pace with a lot more weight, I'm sorry to say, will injure themselves worse because of the holes and the ruts.

San Francisco City and County does not have the money to maintain the fields in proper shape, in pristine shape so that nobody could get hurt. So all the rhetoric about whether it's good or bad really falls by the wayside because they just don't have the money to keep them maintained the way they should be." (*Ric Olivas, public hearing comment [I-Olivas-01]*)

“...**A review of football injuries on third and fourth generation artificial turfs compared with natural turf.** ...Football codes (rugby union, soccer, American football) train and play matches on natural and artificial turfs. A review of injuries on different turfs was needed to inform practitioners and sporting bodies on turf-related injury mechanisms and risk factors. Therefore, the aim of this review was to compare the incidence, nature and mechanisms of injuries sustained on newer generation artificial turfs and natural turfs. Electronic databases were searched using the keywords ‘artificial turf, ‘natural turf, ‘grass’ and ‘inj*’. Delimitation of 120 articles sourced to those addressing injuries in football codes and those using third and fourth generation artificial turfs or natural turfs resulted in 11 experimental papers. These 11 papers provided 20 cohorts that could be assessed using magnitude-based inferences for injury incidence rate ratio calculations pertaining to differences between surfaces. Analysis showed that 16 of the 20 cohorts showed trivial effects for overall incidence rate ratios between surfaces. There was increased risk of ankle injury playing on artificial turf in eight cohorts, with incidence rate ratios from 0.7 to 5.2. Evidence concerning risk of knee injuries on the two surfaces was inconsistent, with incidence rate ratios from 0.4 to 2.8. Two cohorts showed beneficial inferences over the 90% likelihood value for effects of artificial surface on muscle injuries for soccer players; however, there were also two harmful, four unclear and five trivial inferences across the three football codes. Inferences relating to injury severity were inconsistent, with the exception that artificial turf was very likely to have harmful effects for minor injuries in rugby union training and severe injuries in young female soccer players. No clear differences between surfaces were evident in relation to training versus match injuries. Potential mechanisms for differing injury patterns on artificial turf compared with natural turf include increased peak torque and rotational stiffness properties of shoe-surface interfaces, decreased impact attenuation properties of surfaces, differing foot loading patterns and detrimental physiological responses. Changing between surfaces may be a precursor for injury in soccer. In conclusion, studies have provided strong evidence for comparable rates of injury between new generation artificial turfs and natural turfs. An exception is the likely increased risk of ankle injury on third and fourth generation artificial turfs. Therefore, ankle injury prevention strategies must be a priority for athletes who play on artificial turf regularly. Clarification of effects of artificial surfaces on muscle and knee injuries are required given inconsistencies in incidence rate ratios depending on the football code, athlete, gender or match versus training.

...**Comparison of the incidence, nature and cause of injuries sustained on dirt field and artificial turf field by amateur football players.** ...

BACKGROUND: Data on the incidence, nature, severity and cause of match football injuries sustained on dirt field are scarce. The objectives of this study was to compare the incidence, nature, severity and cause of match injuries sustained on dirt field and artificial turf field by amateur male football players.

METHODS: A prospective two-cohort design was employed. Participants were 252 male football players (mean age 27 years, range 18-43) in 14 teams who participated in a local championship

carried on a dirt field and 216 male football players (mean age 28 years, range 17-40) in 12 teams who participated in a local championship carried on a artificial turf field in the same zone of the city. Injury definitions and recording procedures were compliant with the international consensus statement for epidemiological studies of injuries in football.

RESULTS: The overall incidence of match injuries for men was 36.9 injuries/1000 player hours on dirt field and 19.5 on artificial turf (incidence rate ratio 1.88; 95% CI 1.19-3.05). Most common injured part on dirt field was ankle (26.7%) and on artificial turf was knee (24.3%). The most common injury type in the dirt field was skin injuries (abrasion and laceration) and in the artificial turf was sprain and ligament injury followed by haematoma/contusion/bruise. Most injuries were acute (artificial turf 89%, dirt field 91 %) and resulted from player-to-player contact (artificial turf 59.2%, dirt field 51.4%). Most injuries were slight and minimal in dirt field cohort but in artificial turf cohort the most injuries were mild.

CONCLUSIONS: There were differences in the incidence and type of football match injuries sustained on dirt field and artificial turf.

...The effect of playing surface on injury rate: a review of the current literature. ...Synthetic playing surfaces are widely used for field and court sports. Artificial turf surfaces are commonly used as an alternative to natural grass, while outdoor surfaces like clay and acrylic are also prevalent. The effect of these synthetic surfaces on injury rates has not been clearly established. The available literature is largely limited to football and soccer data and the majority of studies are short-term. Confounding variables such as climate, player position and footwear, as well as varying definitions of injury, also make it difficult to draw firm conclusions about the general effect of artificial playing surfaces on injury rates. Many peer-reviewed studies cite a higher overall rate of injury on first- and second-generation artificial turf surfaces compared with natural grass. Despite differences in injury type, the rate of injury on third-generation and natural grass surfaces appears to be comparable. It also appears that clay is significantly safer than either grass or hard court tennis surfaces, but this is a conclusion drawn with limited data. Further research investigating overall injury trends as well as sport-specific data is needed to draw more definitive conclusions regarding the effect of artificial playing surfaces on injury rates.

...Playing field issues in sports medicine. ...The use of artificial turf on playing fields has increased in popularity. Advances in technology have allowed for the development of turf that closely mimics the properties of natural grass. Overall injury incidence does not differ between the two surfaces, but unique injury patterns are apparent between the two surfaces. Differences in shoe-surface interface, in-shoe foot loading patterns, and impact attenuation may provide insight into the different injury patterns. Player perceptions of artificial turf vary and may be related to different physiological demands between the two surfaces. Artificial turf has been implicated in skin infections, but concerns about other health consequences related to the synthetic materials have not been proven yet. Understanding the differences between artificial turf and natural grass will help physicians, athletic trainers, and coaches better care for and train their athletes.

...Incidence of injury among adolescent soccer players: a comparative study of artificial and natural grass turfs. ...

OBJECTIVE: To investigate the incidence of acute injuries and soccer-related chronic pain from long-term training and during matches in adolescent players using natural grass turfs (NT) and artificial turfs (AT).

DESIGN: Case-controlled prospective study.

SETTING: Institutional-level Federation Internationale de Football Association Medical Centre of Excellence.

PARTICIPANTS: Youth soccer players (12-17 years of age) from 6 teams, with a predominant tendency to train on either NT or AT, were included. Of 332 players enrolled in this study, 301 remained to completion.

INTERVENTIONS: Medically diagnosed acute injuries and chronic pain were recorded daily by team health care staff throughout 2005, and reports were provided monthly to the authors.

ASSESSMENT OF RISK FACTORS: Noninvasive prospective study.

INDEPENDENT VARIABLES: Age and turf type.

MAIN OUTCOME MEASURES, Acute injuries per 1000 player hours on each surface and chronic complaints per 1000 player hours were evaluated according to frequency of surface used > or = 80% of the time. Incidence rate ratio (IRR) of acute injuries and chronic complaints during play on NT and AT was calculated.

RESULTS: There was no significant difference in the incidence of acute injuries between the 2 surfaces during training and competition. However, the AT group showed a significantly higher incidence of low back pain during training (IRR, 1.62; 95% confidence interval, 1.06-2.48). Early adolescence and prolonged training hours were factors associated with an increased incidence of chronic pain in the AT group.

CONCLUSION: Adolescent players routinely training on AT for prolonged periods should be carefully monitored, even on AT conforming to new standards.

...Comprehensive evaluation of player-surface interaction on artificial soccer turf. ...The purpose of this study was to evaluate the traction characteristics of four different stud configurations on Federation Internationale de Football Association (FIFA) 2-Star, third generation artificial soccer turf. The investigated stud configurations were hard ground design, firm ground design, soft ground design, and an experimental prototype. The concept of this study combines performance, perception, biomechanical, and mechanical testing procedures. Twentyfive soccer players took part in the different testing procedures. Variables of this study were: running times, subjective rankings/ratings, ground reaction forces, and mechanical traction properties. Statistical

discrimination between the four stud configurations was shown for performance, perception, and biomechanical testing ($p < 0.05$). Unsuitable stud configurations for playing on artificial turf are characterized by less plain distributed and pronounced studs.

...Injury risk on artificial turf and grass in youth tournament football. ...The aim of this prospective cohort study was to investigate the risk of acute injuries among youth male and female footballers playing on third-generation artificial turf compared with grass. Over 60 000 players 13-19 years of age were followed in four consecutive Norway Cup tournaments from 2005 to 2008. Injuries were recorded prospectively by the team coaches throughout each tournament. The overall incidence of injuries was 39.2 (SD: 0.8) per 1000 match hours; 34.2 (SD: 2.4) on artificial turf and 39.7 (SD: 0.8) on grass. After adjusting for the potential confounders age and gender, there was no difference in the overall risk of injury [odds ratio (OR): 0.93 (0.77-1.12), $P=0.44$] or in the risk of time loss injury [OR: 1.05 (0.68-1.61), $P=0.82$] between artificial turf and grass. However, there was a lower risk of ankle injuries [OR: 0.59 (0.40-0.88), $P=0.008$], and a higher risk of back and spine [OR: 1.92 (1.10-3.36), $P=0.021$] and shoulder and collarbone injuries [OR: 2.32 (1.01-5.31), $P=0.049$], on artificial turf compared with on grass. In conclusion, there was no difference in the overall risk of acute injury in youth footballers playing on third-generation artificial turf compared with grass.

...Turf toe: soft tissue and osteocartilaginous injury to the first metatarsophalangeal joint. ...The use of artificial turf in the United States has created a dramatic increase in first metatarsophalangeal joint dorsiflexion injuries. Turf toe has been reported to occur in athletes who participate in sporting activities. An injury to the plantar capsular ligamentous complex can result in acute and chronic pain, resulting in time lost from sports participation for a short- or long-term period. Classification of this injury is based on clinical findings and imaging studies, including plain radiographs and magnetic resonance imaging. The early recognition of this injury is crucial to successful treatment. Nonoperative treatment may often suffice for incomplete injuries; however, surgery may be warranted for a complete plantar plate disruption or injury to one or both sesamoids. In the high-performance or elite athlete, a turf toe or severe dorsiflexion injury can be disabling, and can threaten an athlete's career if not treated properly.

...Risk of injury on third-generation artificial turf in Norwegian professional football. ...**BACKGROUND:** Artificial turf is used extensively in both recreational and elite football in areas with difficult climatic conditions.

OBJECTIVE: To compare the risk for acute injuries between natural grass (NG) and third-generation artificial turf (3GAT) in male professional football. **study design:** Prospective cohort study.

METHODS: All injuries sustained by players with a first-team contract were recorded by the medical staff of each club, from the 2004 throughout the 2007 season. An injury was registered if the player was unable to take fully part in football activity or match play.

RESULTS: A total of 668 match injuries, 526 on grass and 142 on artificial turf, were recorded. The overall acute match injury incidence was 17.1 (95% CI 15.8 to 18.4) per 1000 match hours; 17.0

(95% CI 15.6 to 18.5) on grass and 17.6 (95% CI 14.7 to 20.5) on artificial turf. Correspondingly, the incidence for training injuries was 1.8 (95% CI 1.6 to 2.0); 1.8 (95% CI 1.5 to 2.0) on grass and 1.9 (95% CI 1.5 to 2.2) on artificial turf respectively. No significant difference was observed in injury location, type or severity between turf types.

CONCLUSION: No significant differences were detected in injury rate or pattern between 3GAT and NG in Norwegian male professional football.

...Comparison of injuries sustained on artificial turf and grass by male and female elite football players. ...The objective of this study was to compare incidences and patterns of injury for female and male elite teams when playing football on artificial turf and grass. Twenty teams (15 male, 5 female) playing home matches on third-generation artificial turf were followed prospectively; their injury risk when playing on artificial turf pitches was compared with the risk when playing on grass. Individual exposure, injuries (time loss) and injury severity were recorded by the team medical staff. In total, 2105 injuries were recorded during 246 000 h of exposure to football. Seventyone percent of the injuries were traumatic and 29% overuse injuries. There were no significant differences in the nature of overuse injuries recorded on artificial turf and grass for either men or women. The incidence (injuries/1000 player-hours) of acute (traumatic) injuries did not differ significantly between artificial turf and grass, for men (match 22.4 v 21.7; RR 1.0 (95% CI 0.9-1.2); training 3.5 v 3.5; RR 1.0 (0.8-1.2)) or women [match 14.9 v 12.5; RR 1.2 (0.8-1.8); training 2.9 v 2.8; RR 1.0 (0.6-1.7)]. During matches, men were less likely to sustain a quadriceps strain ($P=0.031$) and more likely to sustain an ankle sprain ($P=0.040$) on artificial turf.

...Risk of injury on artificial turf and natural grass in young female football players. ...**BACKGROUND:** Artificial turf is becoming increasingly popular, although the risk of injury on newer generations of turf is unknown.

AIM: To investigate the risk of injury on artificial turf compared with natural grass among young female football players.

STUDY DESIGN: Prospective cohort study.

METHODS: 2020 players from 109 teams (mean (SD) 15.4 (0.8) years) participated in the study during the 2005 football season. Time-loss injuries and exposure data on different types of turf were recorded over an eight-month period.

RESULTS: 421 (21 %) players sustained 526 injuries, leading to an injury incidence of 3.7/1000 playing hours (95% CI 3.4 to 4.0). The incidence of acute injuries on artificial turf and grass did not differ significantly with respect to match injuries (rate ratio (RR) 1.0, 95% CI 0.8 to 1.3; $p = 0.72$) or training injuries (RR 1.0, 95% CI 0.6 to 1.5, $p = 0.93$). In matches, the incidence of serious injuries was significantly higher on artificial turf (RR 2.0, 95% CI 1.3 to 3.2; $P = 0.03$). Ankle sprain was the most common type of injury (34% of all acute injuries), and there was a trend towards more ankle sprains on artificial turf than on grass (RR 1.5, 95% CI 1.0 to 2.2; $p = 0.06$).

CONCLUSION: In the present study among young female football players, the overall risk of acute injuries was similar between artificial turf and natural grass.

A comparison of artificial turf. ...

BACKGROUND: In an attempt to decrease injuries, newer forms of artificial turf have been marketed. The purpose of this study was to determine whether a new shredded rubber-based turf improves impact attenuation.

METHODS: An instrumented computerized impact recording device (IRD, Techmark, Lansing, MI) was dropped 20 times from a height of 48 inches onto five types of turf used by a professional football team.

RESULTS: Duncan's multiple range test shows that the new rubber-based field and the older foam field are not significantly different. There were significant differences, however, between sites on the shredded rubber-based field.

CONCLUSION: The change from a foam-based system to a shredded rubber-based system had no effect on impact attenuation overall. However, areas in the shredded rubber-based field were significantly compacted, causing some sites to be much harder than the foam-based surface it replaced. ..." (Miriam Pinchuk, letter, no date [I-Pinchuk-05])

"I was shocked at the lack of scientifically valid data presented in Section 4, Hazards and Hazardous Materials. I have worked as a medical editor for more than ten years editing research papers and medical information. In a 15-minute search on a publicly accessible database, I was able to identify numerous scientifically valid studies on hazards associated with artificial turf, on MRSA in artificial turf, and studies on injuries that compared artificial turf with grass playing fields.

The most recent study on injuries was published in November 2011. None of these studies was included in the Draft EIR. And contrary to the arguments I have heard from City Fields and their supporters, the evidence on injury is clear. There is no difference in the number of injuries sustained on grass playing fields compared with artificial turf fields. There is no difference in terms of the number of minor structures or in the number of severe injuries. The only difference is in terms of the types of injuries.

Section 4 of the Draft EIR reviews studies from 2007, 2009 and 2010. Yet the Draft EIR cites no studies from 2011. Given the dirt of appropriate scientifically valid data presented in the report, I would like to ask that an unbiased independent expert with knowledge of scientific method and research conducts a thorough review of the scientific and medical literature before any conclusions are drawn about the hazards of artificial turf, either to the environment or to health, and its ability to reduce injuries." (Miriam Pinchuk, public hearing comment [I-Pinchuk2-01])

“MRSA infections are on the increase. The most rapidly growing staph infection is Community Acquired MRSA or CAMRSA.

- The Center for Disease Control or CDC estimates that MRSA kills more people per year in the US than AIDS.
- The CDC latest figures, from 2001 state that in American hospitals alone, Healthcare-Associated Infections (HAI's) account for an estimated 1.7 million infections and 99,000 associated deaths each year. These figures are 9 years old, and it can be safely assumed that the more recent figures would be alarmingly higher. ' ...

Notwithstanding the extremely high fatality rate, the costs associated with overcoming the infections in a clinical setting are staggering. ...

In the course of my profession I was required to monitor the world wide issue of HAI's, and in particular MRSA. I maintained a website blog which over the course of two years there were over 4000 entries following and reporting on the worldwide spread of the potentially deadly bacteria.

Due to the prolific use of antibiotics in the past thirty years or so, this has become a worldwide problem as bacteria have become more and more resistant to antibiotics.

With regards to CA MRSA, this particular infection has been known to occur in many schools, colleges and universities, in particular affecting students, male or female, who are involved in sports.

Contact sports such as Football, Soccer, Wrestling, Lacrosse, and Gaelic Football all involve skin to skin contact, and present the potential for transmission of the bacteria from one person to another.

The infection can be harbored on equipment, on hard surfaces, clothing, Jacuzzis, towels, razors, footwear, door handles, gymnasium floors and mats, toilet seats, and artificial turf.

Outbreaks of CA MRSA have also been known to occur in prisons or areas where there can potentially be skin to skin contact. The Military have also seen concerning infection numbers.

- A study by the CDC found that athletes who sustained a skin burn from artificial turf were seven times more likely to develop a MRSA infection. Another study published in the Journal of Clinical Microbiology in 2000 found that MRSA survives better on artificial turf than on other surfaces.
- CA MRSA and MRSA are known to be particularly relevant in attacking people with compromised or undeveloped immune systems. Young children and the elderly are at particular risk of serious consequences from acquiring this infection.
- According to a 2007 report by the NFL Players Association, 61 percent of 1,511 players polled had negative reviews of artificial surfaces, with many believing artificial surfaces were more likely to cause injury and shorten players' careers. ...

Please also this article which appeared in Time magazine about the issue ...

While the subject of MRSA has been addressed to some degree in the proposal, it seems to me that the potential dangers presented by the use of artificial turf have been minimized and require further research.

- A number of American hospitals have been sued in the past by families of patients who have contracted the bacteria and as a result have either died or have necessitated numerous live saving surgeries due to the extent of the infection.

These suits have been filed stating unsanitary practices or poor medical treatment. In many cases MRSA was not immediately diagnosed, leading to severe consequences .

- As of 2007, California Lawmakers implemented legislation requiring all California hospitals to report- all HAI's including CA MRSA. These records should allow insight into infections resulting from artificial turf injuries.

The potential legal ramifications to the city of San Francisco as a result of a serious infection resulting in the death of a player cannot be understated.

To minimize or dismiss this potential serious issue would be a major oversight, and is worthy of further research.

I refer to these links below which will help explain the issue even further ...” (*Jamie Ray, letter, December 12, 2011 [I-Ray-03]*)

“The proposal from Rec and Park states that one of the key factors they considered in promoting the use of artificial turf over grass was due to injuries sustained by the poor condition of the grass fields due to gopher holes.

- They quote one example of a player breaking an ankle. This begs the question is there statistics available staging the number of injuries incurred due to the poor condition of the field?
- They point to Garfield Square Playground stating that it was formerly known as ‘The Park where you break your foot’. Are there any statistics available on the number of players that have actually broken their foot, or is this purely anecdotal?

Soccer is a contact sport, and it is inevitable that injuries will result from playing it. Most adult players have been injured in one way or another during the course of their careers.

This applies to- amateur as well as professional players.

Other sports such as Lacrosse or Gaelic football are also contact sports which will also result in injuries.

While there is no specific evidence to suggest that there is more likelihood of injury by playing on artificial turf, the main cause for concern is rashes or bums acquired by the player having contact with the ground. This raises the MRSA issue.

- It is vital in the case of a potential infection or injury to ensure that the affected area is cleaned and protected as soon as possible.
- Within the proposal, with regards to the bathroom renovation, there has been no provision made for shower stalls. If a player has access to a shower immediately following injury this could severely reduce the chance for infection to set in.
- Currently players, after they leave the field, are reduced to either changing in the toilet or more commonly in the car before they head home to hopefully take a shower. Should there be a delay in showering, this again could result in infection taking hold.
- There is also the question of chemical infection occurring in a wound due to the composition of the turf, which in some cases is known to contain lead, chrome, zinc and possibly others.

<http://www.cdc.gov/nceh/lead/tips/artificialturf.html>

Another area where grass is better than artificial turf is in the length of the cleats required to play. Longer cleats used with grass reduce the possibility of a player slipping or twisting due to better stability.

Provisions should be made to improve the bathroom facilities to include showers for both male and female players regardless of which surface they should play on." (*Jamie Ray, letter, December 12, 2011 [I-Ray-04]*)

"The DEIR has not addressed the dangers and serious injuries caused by synthetic turf vs. natural turf and this must be included. A study by a third party, unbiased team of qualified orthopedic surgeons, or the like is necessary to gain a complete understanding of the comparison. The study must also address the ACL injuries that are much more common on synthetic turf as compared to natural grass turf." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-09]*)

"Couple things that I wanted to talk about. The DEIR does not address the dangers and serious injuries caused by synthetic turf versus natural turf and somebody else did bring that up but I did want to make sure that it is addressed in the final DEIR. ACL injuries, as people have talked about, are serious injuries caused by synthetic turf." (*Cheryl Schultz, public hearing comment [I-Schultz2-01]*)

“I think most people agree that soccer is an appropriate use for this particular parcel. I would like to see the most safe surface, but on one hand people say grass is dangerous because people fall and break their legs; on the hand people say that it’s toxic and therefore should not be installed.” *(Frank Triska, public hearing comment [I-Triska-01])*

“I’d just like to add my perspective as a soccer player. I enjoy playing soccer on Sundays and playing on a natural field that is poorly maintain hurts and sometimes I play on the artificial fields and it’s much more comfortable to play.” *(Walter Van Riel, public hearing comment [I-Van Riel-01])*

“Also the use of synthetic turf means fewer injuries and the ability to play in adverse weather, a huge boost to our kids so they can play year round supporting a healthy and positive childhood. We support the Beach Chalet renovation and urge you to move past comment on the DEIR to support the project renovation. Thank you very much for your time.” *(John Wilkinson, public hearing comment [I-Wilkinson-01])*

Response HAZ-1

In response to the comments above regarding physical injuries and spread of infection, consistent with the standard practice of the San Francisco Planning Department, the hazards and hazardous materials resources significance criteria used in the EIR impact analysis, and listed in Chapter IV.H., Significance Criteria (page IV.H 26-27), focuses on whether the project would (1) create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials, or (2) create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. As described in Chapter IV.H., Approach to Analysis, page IV.H-27, the impact analysis determines the potential for hazards and hazardous materials impacts associated with use of synthetic turf on the Beach Chalet Athletic Fields; renovation of the existing restroom building; inhalation of vapors and particulate matter from the synthetic turf; ingestion of synthetic turf; dermal contact with synthetic turf materials; and disposal of the synthetic turf after its useful life.

Numerous comments express concern regarding the change in the incidence or type of physical injuries that may be incurred by athletic field users under the project, or the likelihood of the acquisition or spread of infections due to the use of the athletic fields and restroom facilities under the project. While such health effects are considered social rather than physical effects on the environment under CEQA, the risk of injury or infection may be considered by the City decision makers as part of the issues related to the project approval process. However, it is noted that the San Francisco Department of Public Health indicates that they are not aware of any evidence that suggests that artificial turf is a vehicle of infection, and that any type of skin

breakdown may provide a portal of entry for infection and that standard care should be implemented, regardless of turf type and there is no substantial evidence that the incidence or type of physical injuries that may be incurred by athletic field users under the project would increase as suggested by commenters.¹ The information requests and comments received on these issues will be forwarded to the decision-makers, but a direct response to these requests is not required under CEQA.

N.3 Longevity and Recycling of Turf Products [HAZ-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-CSFN-08	I-Barish-36	I-GIHoward-10	I-Moss-07
O-GGAS2-07	I-Bartley-10	I-GoHoward-03	I-Olivas-02
O-GGAS2-08	I-Bridges-04	I-Jungreis2-05	I-Pertcheck-02
O-GGAS3-03	I-Colao-08	I-Jungreis2-06	I-Pertcheck2-02
O-SCSFBC-14	I-Fukuda-02	I-Jungreis2-10	I-Richards-06
O-SCSFBC-15	I-Glichstern-04	I-Jungreis2-11	I-Schultz-02
O-SFPARKS-46	I-Hahn-03	I-Koivisto-71	I-Schultz-07
O-SFPARKS-51	I-Hall-03	I-BLewis-05	I-Schultz2-02
O-SFPARKS-52	I-GIHoward-09	I-McGrew-06	I-Weeden-07

“Artificial turf replacement: What happens to the field when it wears out in 8-10 years? This is important because there are approximately 30 acres of artificial turf throughout the city. ... What is the guarantee that it will be replaced properly? ...” (*Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-08]*)

“For example, the DEIR consistently states that the synthetic turf fields will last at least 10 years. However, the DEIR provides no references to support that conclusion. Golden Gate Audubon is informed and believed that some synthetic turf surfaces have shown visible breakdown after approximately 8 years of use. At a minimum, the DEIR must be revised to provide the foundation for this conclusion, especially given that the DEIR allows the turf manufacturer up to seven years to come up with a recycling and replacement plan.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-07]*)

“The Executive Summary misrepresents over over-promises some of the benefits and characteristics of the Project. By downplaying the impacts in the Executive Summary, the

¹ San Francisco Department of Public Health, Artificial Turf Playfields Memorandum, February 6, 2008.

Planning Department will unfairly skew decision makers to approving the project as preferred by the Project proponents. For example, the DEIR states that the artificial turf is 'expected' to have a minimum life of ten years, but it never in the document provides a basis for this conclusion. (DEIR, at ES-1) This incompleteness in the DEIR constitutes a fatal flaw that undermines the purpose of CEQA." (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-08]*)

"There's many other examples of the inadequacies of the study, for example, ... They provide no basis for their conclusion that it will last 10 to 15 years." (*Michael Lynes, Golden Gate Audubon Society, public hearing comment [O-GGAS3-03]*)

"Synthetic turf manufacturers state that the lifespan of such a field is from 10-to-12 years. Over that time, the field breaks down until it becomes unusable.

The DEIR does not disclose the wear and tear of 360 people per day using a field of 312,000 square feet of synthetic turf. As this usage wears down the turf, particles will break off into the soil and water. Sunlight and heat also break down synthetic turf. These effects are completely missing from the DEIR and needs to be analyzed.

The DEIR also does not analyze the impacts under various weather and age conditions. It also does not state have often the cited studies that it cites conducted.

Dust is also created as the synthetic turf ages, as noted by the California Attorney General's office. In 2008, the California Attorney General, the City of Los Angeles, and Solano County sued three manufacturers of synthetic turf, accusing the manufacturers of violating California's Proposition 65 by knowingly failing to disclose that their products contain lead. The defendants were Beaulieu Group, AstroTurf, and FieldTurf USA Inc., the vendor that the Recreation and Parks Department plans to use for the proposed project.

Deputy Attorney Gen. Dennis Ragen, the state's lead attorney on the lawsuit, was quoted in the LA Times:

'As it ages, it forms more dust,' he said, and could contain levels of lead that are more than 20 times what's allowed by Proposition 65. ...

The dust analysis mentioned on page IV.H-18 was performed on relatively new fields. It does not consider any data on aged fields that the Attorney General had." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-14]*)

“The life span of synthetic turf fields is only 10-to-12 years, when it breaks down to such a degree that it becomes unusable. When this happens, the synthetic turf needs to be removed and disposed of, typically in a hazardous waste landfill facility.

The DEIR does not consider the impacts of the process of removal and disposal process.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-15]*)

“RECYCLING AND DISPOSAL OF USED TIRES. DEIR Page IV.H-25

The Beach Chalet SBR synthetic field would stockpile the equivalent of 250,000 pulverized tires in a public space.

Division 30, Chapter 16 of the California Public Resources Code, created a regulatory program for the disposal of waste tires that are not recycled. In accordance with these regulations, persons intending to store or stockpile 500 or more waste tires in California are required to obtain a major or minor waste tire facility permit and comply with waste tire storage standards. By definition, a major waste tire facility stores, stockpiles, accumulates, or discards 5,000 or more waste tires, and a minor waste tire facility stores, stockpiles, accumulates, or discards from 500 to 4,999 waste tires.

Waste tire laws, found in Division 30, Chapter 16 of the California Public Resources Code, created a regulatory program designed to reduce the improper storage of waste tires.

It is our position the pulverization and spreading onto The City of San Francisco’s public playfields is an improper storage of waste tires under the label of recycled.” (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-46]*)

“It is our opinion that the artificial turf SBR tire crumb infill and plastic ‘turf’ constitute hazardous materials as defined in Section 25501(h) of the California Health and Safety Code.

Hazardous materials. Defined in Section 25501(h) of the California Health and Safety Code, are ‘materials that, because of their quantity, concentration, or physical or chemical characteristics, pose a substantial present or potential hazard to human health and safety or to the environment if released to the workplace or environment.” (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-51]*)

“It is our opinion that the artificial turf SBR tire crumb infill and plastic ‘turf’ constitute hazardous waste according to Title 22 of the California Code of Regulations, Division 4.5, Chapter 11. ‘Hazardous waste. Any material that is relinquished, recycled, or inherently waste-like. Title 22 of the California Code of Regulations, Division 4.5, Chapter 11 contains regulations for the classification of hazardous wastes. A waste is considered a hazardous waste if it is toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or

damage to materials), or reactive (causes explosions or generates toxic gases) in accordance with the criteria established in Article 3. '

The US-EPA defines hazardous waste as, 'Hazardous waste is waste that is dangerous or potentially harmful to our health or the environment.' <http://www.epa.gov/osw/hazard/>

The US-EPA also defines hazardous waste as 'Hazardous waste is defined as liquid, solid, contained gas, or sludge wastes that contain properties that are dangerous or potentially harmful to human health or the environment.' <http://www.epa.gov/osw/hazard/>." (SFPARKS, letter, December 12, 2011 [O-SFPARKS-52])

"Artificial turf and tire crumb infill are not biodegradable. Please detail the manner of reuse, recycling and/or disposal of artificial turf and tire crumb infill." (Jean Barish, letter, December 12, 2011 [I-Barish-36])

"The lack of an 'end of life' plan

The massive 400 ton per cycle of toxic landfill waste" (Eddie Bartley, letter, November 29, 2011 [I-Bartley-10])

"There is no recycling of the artificial turf plastic and tire crumb rubber, in 8-10 years 400 tons of debris will go to the landfill." (Stacey Bridges, letter, December 2, 2011 [I-Bridges-04])

"Artificial 'grass' is not biodegradable making it difficult to dispose of or recycle it and would have to be removed if ever vegetation was to be re-established." (Flora Colao, letter, November 23, 2011 [I-Colao-08])

"but there's some questions about artificial turf. What happens to the field when it wears out in eight to ten years? And this is important because it's not just at Beach Chalet. There are approximately 30 acres of artificial turf throughout the city. They have also had to be replaced, and to replace this is a rather --... So what's the guarantee that it's going to be replaced properly. ..." (Hiroshi Fukuda, public hearing comment [I-Fukuda-02])

“It needs to be replaced every seven or eight years and the city doesn’t have any money. So why is this project even talked about? It’s complete mystery.” (*Anastasia Glichstern, public hearing comment [I-Glichstern-04]*)

“...How the artificial turf will be handled at the end of its life, in 8 to 10 years.

How can we be certain that any company that installs the artificial turf will be financially viable in 8 to 10 years to recycle it?

What will be the impact on the environment if the artificial turf starts to break down and there is no money to replace it? Will the artificial turf be left in place to degrade?” (*Thomas Hahn, letter, December 9, 2011 [I-Hahn-03]*)

“There is no recycling of the artificial turf plastic and tire crumb rubber, in 8-10 years 400 tons of debris will go to landfill.” (*Robert Hall, letter, November 29, 2011 [I-Hall-03]*)

“This will consist of debris, turf fibers and fragments which contain heavy metals, and the sub structure ground tire material. None of this should go to a land fill or a normal disposal facility but should be treated in the same manner as would the turf and sub structure if removed for replacement.” (*Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-09]*)

“While perhaps not required by a DEIR, the removal of old artificial turf is mentioned are being returned to the manufacturer (after 10 to 15 years of use), but there is no indication in the DEIR of how this will be handled if the manufacturer is no longer in business. Normally, to protect a municipality in construction of any facility, a performance bond is required. If the original manufacturer is not in business, the turf cannot be returned but must be disposed of by the City of San Francisco. Therefore, it would seem prudent and proper to require a disposal bond from the supplier or manufacturer to cover the cost of disposal should they not be in business. This would be held in escrow and returned at that time.” (*Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-10]*)

“Recycling. The DEIR states that at the end of its useful life all of the synthetic material will be recycled by the manufacturer or its designee [IV.H-30].

The manufacturer would be given **7 years** from contract ratification to develop and submit a recycling plan. [ROFL) . (*'A signed commitment guaranteeing implementation of the plan within 7 years of contract ratification.'*)

While DEIR states that the product life is between 12 and 15 years, there are no warranties that approach 12 years.

The typical warranty expires between 5 and 8 years, which might explain the 7 year span to develop a recycling plan.

The DEIR does not address the process for dealing with material removed prior to the end of the 7 years allowed the manufacturer to develop a recycling plan.

The DEIR does not address situations in which the manufacturer is no longer in business either through litigation, bankruptcy, or restructuring. (Ask people who used to have a guaranteed pension and health benefits about the joys of a business restructuring).

Accompanying each bid for this project, the merchant I contractor should provide a workable plan for recycling the material provided. Additionally, it should provide a performance bond at the time the bid is submitted.

There is no analysis of the legality of transporting hazardous waste *or/and* nonhazardous waste across governmental jurisdictions: municipality, county, or state. This analysis needs to be completed prior to any approval of this project if the project contains an assurance of that the synthetic turf and infill will be recycled." (*Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-03]*)

"The plan requires many many tons of finely shredded used automotive tires to be dumped into the ground: there is no analysis of the impact of these particles on the environment when they must be removed at the end of their lifespan or the repurposing of the fields." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-05]*)

"The plan requires many many tons of synthetic turf to form the synthetic surface of the soccer fields: there is no analysis of how local conditions (i.e., high humidity, high salinity, cool temperatures) will effect the anticipated lifespan of the synthetic surface." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-06]*)

"The plan requires many many tons of synthetic turf to form the synthetic surface of the soccer fields: there is no analysis of how local conditions (i.e., high humidity, high salinity, cool temperatures) will effect the anticipated lifespan degradation of the synthetic surface, and

consequent impacts upon the health of the animals in the ecosystem surrounding the fields.”
(*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-10]*)

“The plan requires many many tons of synthetic turf to form the synthetic surface of the soccer fields: there is no analysis of how local conditions (i.e., high humidity, high salinity, cool temperatures) will effect the anticipated disposal of the synthetic surface.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-11]*)

“What are the guarantees of recycling of the 400 tons of debris estimated to be produced by this synthetic turf project after 8-12 years of use? What penalties are there for noncompliance? How does the production of 400 tons of debris after 8-12 years of use square with the environmental concerns of the city as stated in numerous regulations cited in other parts of the DEIR?” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-71]*)

“...How the artificial turf will be handled at the end of its life, in 8 to 10 years.

How can we be sure that any company that installs the artificial turf will be financially viable in 8 to 10 years to recycle it?” (*Beth Lewis, letter, December 4, 2011 [I-BLewis-05]*)

“Plastic/tire crumb can NEVER be recycled. It will be blight forever and ever. ...” (*Shana McGrew, email, no date [I-McGrew-06]*)

“There appeared to be only one company that indicated they had an active recycling component/program associated with their turf projects.’

In addition, the report points out that this is ‘a volatile market,’ companies come and go rapidly in the artificial turf industry. So even if a promise is made that the material will be recycled, it may well be that the company that sells it to the City will be out of business when the time to recycle arrives. ...” (*Rasa Gustaitus (Moss), letter, December 12, 2011 [I-Moss-07]*)

“Down the line, the estimate of eight to ten years of replacement for a field, that’s not true. They haven’t gotten to the limit yet of how long these fields are actually going to last. Oregon has one of the first synthetic surface fields that was put in. The university up there plays there. And that’s field’s over 15 years old, and I can guarantee you it’s not in as bad shape as Beach Chalet or the

Polo Fields and it's not ready to be replaced. Thank you." (*Ric Olivas, public hearing comment [I-Olivas-02]*)

"...Also, the artificial turf manufacturers need to guarantee that they will uninstall their product at the end of its life and recycle it. Artificial turf is much like interior carpet, and many interior carpets are now being recycled. If this is not a requirement, these projects will generate tons of landfill waste. San Francisco has a goal of no landfill waste by the year 2030. It is simply irresponsible for us to allow these projects to be exempt from this goal." (*Edward Pertcheck, letter, December 12, 2011 [I-Pertcheck-02]*)

"...Because these fields have to be thrown away every ten years, And yet San Francisco claims to be an environmentally friendly city and we have a goal no landfill use by the year 2030. And someone told me that, 'Oh, they're just going to exclude Rec and Park. Rec and Park didn't have to comply with that.' But taxpayers are going to have to comply with that and ... " (*Edward Pertcheck, public hearing comment [I-Pertcheck2-02]*)

"There is no recycling of the artificial turf plastic and tire crumb rubber, and in 8-10 years 400 tons of debris will go to the landfill. In addition, from what I can tell by going to Crocker Amazon, I would be surprised if highly used artificial turf fields get the 10 year lifespan described in the DEIR." (*Renee Richards, email, December 8, 2011 [I-Richards-06]*)

"The synthetic turf that is proposed for the soccer fields would have a planned life of only ten years (DEIR page ES-1). ..." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-02]*)

"Replacement of an 80,000 square foot field would produce approximately 400 tons of debris that would use up valuable landfill space and would result in considerable disposal costs (DEIR page IV.H-9). There are currently no standards for recycling of this synthetic turf material as verified with the California Environmental Protection Agency." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-07]*)

"Also, I wanted to talk about the synthetic turf causing approximately 400 tons of debris that would need to go directly into our valuable landfill. It is not currently recyclable and it is not, as verified by the California Environmental Protection Agency, there are no standards for recycling this material. The only thing that is mentioned in the DEIR about this is 400 tons of material that

will have to go into landfill is that the manufacturers will look into what they can do about it. To me that's just not good enough when this has to be replaced every ten years." (*Cheryl Schultz, public comment [I-Schultz2-02]*)

"There is no recycling of the artificial turf plastic and tire crumb rubber, in 8-10 years 400 tons of debris will go to the landfill. Since 2008 the San Francisco Department of the Environment has called for reducing waste that is sent to landfill. See the link to Stop Trashing the Climate on the Department of the Environment's website at <http://www.stoptrashingthecclimate.org/> Why does the project not include recycling?" (*Noreen Weeden, email, November 29, 2011 [I-Weeden-07]*)

Response HAZ-2

Longevity of Synthetic Turf

In response to the numerous comments above regarding the longevity of synthetic turf, as stated on DEIR page II-14, the expected life span of the synthetic turf is anticipated to be a minimum of 10 years. A number of factors such as weather and amount of use affect the lifespan of turf products, and could shorten or lengthen the life of the turf. However, warranties provided by turf manufacturers span from 8 to 10 years, and would guarantee the life of the product during the warranty period (with a third party warranty or other performance guarantees) without additional cost to the SFRPD. For example, the vendor Field Turf guarantees their fields for eight years and also offers a third party extended warranty for their product.

See response GC-2 regarding project costs. While cost is not a CEQA issue, for informational purpose, it is noted that the SFRPD conducted an analysis of the cost effectiveness of using synthetic turf and determined that at the end of its life span, a new synthetic field would cost substantially less than the original because the basic design, foundation, and drainage would already be provided.² In comparison, the life span of a natural-turf field varies greatly, depending on factors such as the amount of use, turf practices, and staffing levels. There is no warranty for grass fields. Given the existing pressure to use soccer fields in San Francisco, it is difficult to keep them adequately maintained, and highly used grass turf fields need ongoing reseeding, fertilization, and rest periods for regrowth requiring limited or no public access to the facilities for extended lengths of time, similar to the current conditions at the project site.

Site-related impacts of synthetic turf replacement would result from site disturbance for removal and replacement of the turf, and would be similar to the impacts of construction of the proposed project, as described in the EIR. Further, pesticide use could be required to maintain the grass fields, but would not be required for the synthetic turf. With regard to comments about the potential for the selected turf manufacturer to go out of business or otherwise be unable to

² San Francisco Recreation and Parks Department, 2005. Natural and Synthetic Turf: A Comparative Analysis. December 20.

replace turf as needed, such presumptions are speculative and it is not necessary to address this further under CEQA Guidelines section 15145.

Recyclability of Synthetic Turf

In response to the numerous comments above regarding the recyclability of synthetic turf, as discussed in Impact HZ-1 (DEIR p. V.H-30), the SFRPD would require the vendor to comply with the City and County of San Francisco's (CCSF) "Synthetic Turf Standards." These Standards require the vendor of the synthetic turf product to provide a detailed end-of-life recycling plan for the ultimate disposition of the turf at the end of its useful life. At a minimum, the recycling plan would specify:

- The manner of reuse/recycling for each turf component,
- Identification of parties responsible for the removal and disposal of field products,
- A description of the reuse or recycling process, and
- A signed commitment guaranteeing implementation of the plan within seven years of contract ratification.

In addition, the "Synthetic Turf Standards" specify that incineration, or any other type of high-temperature conversion technology, cannot be used for disposition of the used turf products, and that these products may not be used as Alternate Daily Cover at a permitted landfill facility.

As stated on EIR page IV.H-31, recycling options for used turf materials are currently under development, and continue to evolve as more synthetic turf applications reach the end of their useful life. Currently, spent turf can be recycled for uses such as manufacture of, batting cages, barn mats, top dressing for natural grass, lining for highway barrels and backing for road bases, tote bags, t-shirts, coasters, and park benches. In response to comment I-Koivisto-71, regarding compliance with recycling requirements at other SFRPD synthetic turf facilities have not yet required replacement and therefore recycling.

The requirement for recycling of the product would be enforced through the guarantee provided by the vendor as a part of the purchase agreement with the SFRPD, which is included in a written commitment letter. Development of the required recycling plan within seven years would allow the vendor to continue developing recycling options (in addition to those currently available), and would ensure completion of the plan. Therefore, the ability to ultimately recycle the turf product, before the end of the minimum 10-year life span of the product, is ensured. The turf would be recycled as enforced through the guarantee provided by the vendor as part of the purchase agreement and would not be placed in a landfill. Recycling of the turf assists the City in achieving its zero waste goal by 2030.

Characterization of Hazardous Waste and Storage of Waste Tires

In response to Comments O-SCSFBC-15 and O-SFPARKS-52, *hazardous materials*, defined in Section 25501(p) of the California Health and Safety Code, are materials that, because of their

“quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released to the workplace or environment.”

Title 22 of the California Code of Regulations, Chapter 11 (Identification and Listing of Hazardous Waste) contains regulations for the classification of hazardous wastes (22 CCR 66261.1, et seq.). A waste is considered a hazardous waste if it is toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gases) in accordance with the criteria established in Article 3 of Chapter 11. Articles 4 and 4.1 also list specific hazardous wastes. Article 5 identifies specific waste categories: including federal Resource Conservation and Recovery Act (RCRA) hazardous wastes; non-RCRA hazardous wastes; extremely hazardous wastes; hazardous wastes of concern; and special wastes.

The synthetic turf would not be considered a hazardous waste (or constructed of hazardous waste) because, as discussed in Impact HZ-1 (DEIR p. IV.H-30), in accordance with the SFRPD’s “Synthetic Turf Standards,” the vendor would be required to analyze all of the turf components. The analysis includes identification of Title 22 metals in fibers, infill, underlayment, and backing. The vendor must demonstrate that none of the total metal concentrations exceed the California Total Threshold Limit Concentration (TTLC), with the exception of zinc. Also, the vendor must analyze the infill materials for soluble metals using the Waste Extraction Test (WET) procedure, and demonstrate that none of the soluble metal concentration materials exceed the Soluble Limit Threshold Concentration (STLC). Although zinc levels could exceed the TTLC, the turf should be able to be managed and disposed of consistent with the management practices of recycled used tires, which are not considered hazardous wastes. Thus, transportation of the turf would not be subject to hazardous materials transportation requirements. Further, California’s Tire Recycling Act of 1989 identifies production of styrene butadiene rubber (SBR) materials as an accepted environmentally safe application for the use of recycled tires (see DEIR p. IV.H-25).

While the SBR infill is composed largely of recycled tires, the turf would not be managed as waste tires because the turf is not considered a waste. In addition, as discussed in EIR Chapter II, Project Description and Section IV.G, Hydrology and Water Quality, the SFRPD would construct a liner and perimeter drainage system to restrict infiltration of leachate and surface runoff, and direct discharge to the combined sewer system until there is sufficient data to demonstrate that the turf used on the Beach Chalet Athletic Fields would not result in adverse effects on groundwater or surface water quality.

N.4 Hazardous Materials used for Construction and Maintenance [HAZ-3]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-SFPARKS-22

I-Barish-25

I-Glichstern-06

I-Koivisto-70

“MAINTENANCE / DISINFECTANTS. It is our position that the stated maintenance program does not adequately, if at all, address the daily bacteria buildup that is associated with organic material, (food, gum, blood, sweat, saliva, fecal material, and other general organic decay, etc.), that is regularly collected in an outdoor public synthetic turf’s inorganic medium. Nor does it address the hidden debris (needles etc.) buried with in the tire crumb.

One of the stated objectives given in the Draft EIR for the use of synthetic turf is to ‘reduce ongoing maintenance’. EIR page 11-5

The Draft EIR states, ‘Maintenance would consist of garbage pick-up and periodic sweeping and, as needed, spot washing of the synthetic turf (using only dish soap and water, no disinfectants or special detergents would be used). Although small amounts of solvents and adhesives could be required to make minor repairs, they would not be used in large quantities but only in spot applications at t he specific repair location.’ - page 11-24

‘for example, the South Sunset Playground maintenance schedule includes sweeping every 2 weeks, or as needed, and turf grooming every 5 to 8 weeks. Repair of turf, removal of graffiti, and spot washing with soap and water is conducted as needed.’- page 11 -24

Proper maintenance of synthetic turf requires that the fields be sanitized to remove body fluids and droppings. Soils in grass fields contain bacteria which decompose body fluids, algae, and dog, bird, and other droppings. These do not decompose on artificial turf. Regular lawn mowing accelerates the breakdown of introduced objects and material.

We believe the maintenance program as stated in the Draft EIR creates a situation that constitutes a potentially hazardous environment as defined in Section 25501(h) of the California Health and Safety Code.

Most all suppliers of synthetic turf require additional maintenance for their safe usage as well as to maintain warranty requirements.

Sportexe, (Crocker Amazon, etc.), recommends; ‘While routine brushing keeps your artificial grass field free of surface debris it does not, however remove the dangerous metal that may exist beneath.’ ‘You may be surprised at what could be trapped in your field.’ ...

FieldTurf, (Silver Terrace, etc), recommends the following cleaning products to ‘ensure compliance with FieldTurf’s industry-best third-party insured warranty’

- FieldTurf Scrub - a powerful industrial cleaner and conditioner used for removal of grease and oil, mold and mildew, and can be used as a deodorizer.
- Static Conditionor – control of electrical static buildup on artificial Grass surfaces

- Gum Remover - a solvent formulated for removing gum, tar, and adhesives. ...

Other industry recommended treatments include

- algaecides to mask the odor, and various specialized cleansers.
- germicide products - to target bacteria, fungi, and viruses.
- a large commercial grade magnet to sweep the turf to eliminate ferromagnetic metal parts to reduce injury via pins, needles, etc. that may be in the tire crumb.
- disinfectants including for methicillin-resistant staphylococcus, (MRSA) ... 1

'Synthetic Turf Sports Fields: A Construction and Maintenance Manual', published by the American Sports Builders Association, states some synthetic turf owners disinfect their fields as often as twice a month, with more frequent cleanings for sideline areas, where contaminants concentrate.

It is our position that the project's artificial surface area that is not intended for use as an athletic playing field or athletic court falls under the CA HEALTH AND SAFETY CODE SECTION 115725-115735. ((2) 'Playground' means an improved outdoor area designed, equipped, and set aside for children's play that is not intended for use as an athletic playing field or athletic court, and shall include any playground equipment, fall zones, surface materials, access ramps, and all areas within and including the designated enclosure and barriers.'" (SFPARKS, letter, December 12, 2011 [O-SFPARKS-22])

"What are all the chemical compounds, including but not limited to epoxies and adhesives, that will be used in the construction of the artificial turf fields?"

What are the amounts of the chemical compounds identified above that will be used in the construction of the artificial turf fields?" (Jean Barish, letter, December 12, 2011 [I-Barish-25])

"Its limited life, periodic cleaning requirements, petroleum use, toxic chemicals from infill and some heightened health and safety concerns. That's the same with artificial turf." (Anastasia Glichstern, public hearing comment [I-Glichstern-06])

"Glue and binding materials are mentioned for the first time on p. 9 but no mention of the chemicals they are composed of is listed anywhere I could find. Adhesives and binders are notorious VOC releasers, and many leech chemicals into contacting solvents (such as water). What are these materials composed of?" (Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-70])

Response HAZ-3

In response to comments O-SFPARKS-22, I-Barish-25, I-Glichstern-06, and I-Koivisto-70, *hazardous materials*, defined in Section 25501(p) of the California Health and Safety Code, are materials that, because of their “quantity, concentration, or physical or chemical characteristics, pose a significant present or potential hazard to human health and safety or to the environment if released to the workplace or environment.”

As discussed in the Project Description (EIR page II-24) and Impact HZ-1 (EIR page IV.H-30), as directed by the turf manufacturers, the athletic fields would be cleaned with a solution of soap and water as required, but no disinfectants would be used. This is the practice of the SFRPD at existing artificial turf fields and would be the practice under the proposed project. Small amounts of solvents and adhesives could be required to make minor repairs in spot applications at the specific repair location. These materials typically consist of volatile organic compounds and other organic compounds. Construction of the fields could also include use small amounts of the same chemicals. Because of the quantity of chemicals used, the use of these materials would not present a potential hazard to human health and safety or to the environment if released at the workplace or in the environment. As concluded in the EIR, impacts related to the use of these chemicals would be less than significant.

N.5 Chemical Content of Turf Products and Potential Human Health Effects [HAZ-4]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Borden-01	O-SFPARKS-24	I-Bufferum-07	I-Koivisto-73
O-PAR2-05	O-SFPARKS-25	I-Butler-02	I-Learner-16
O-PAR3-01	O-SFPARKS-26	I-Colao-01	I-BlLewis-04
O-PAR4-02	O-SFPARKS-27	I-Crowley-01	I-Lieb-02
O-SCSFBC-14	O-SFPARKS-28	I-Crowley-04	I-McGrew-05
O-SCSFBC-25	O-SFPARKS-29	I-Crowley2-02	I-Moss-05
O-SCSFBC2-02	O-SFPARKS-30	I-FDavis-04	I-Moss2-07
O-SCSFBC3-03	O-SFPARKS-31	I-Dowell-02	I-Myers-01
O-SFPARKS-02	O-SFPARKS-32	I-Edelson2-02	I-Napoli-01
O-SFPARKS-03	O-SFPARKS-33	I-Englander-01	I-Pertcheck-01
O-SFPARKS-04	O-SFPARKS-48	I-Englander-02	I-Pertcheck-02
O-SFPARKS-05	O-SFPARKS-50	I-Englander2-02	I-Pertcheck2-01
O-SFPARKS-06	O-SFPARKS-53	I-Glichstern-01	I-Pinchuk-01
O-SFPARKS-07	O-SFPARKS-54	I-Hahn-03	I-Pinchuk-02
O-SFPARKS-08	O-SFPARKS-55	I-GoHoward-04	I-Pinchuk-03
O-SFPARKS-09	I-Barish-09	I-Hyde-02	I-Pinchuk-04
O-SFPARKS-10	I-Barish-11	I-Ivanhoe-07	I-Pinchuk-05
O-SFPARKS-11	I-Barish-12	I-Joaquin-Wood-02	I-Pinchuk2-01
O-SFPARKS-12	I-Barish-13	I-Jungreis2-03	I-Schultz-04
O-SFPARKS-13	I-Barish-17	I-Jungreis2-04	I-Schultz-05

O-SFPARKS-14	I-Barish-23	I-Jungreis2-09	I-Schultz-06
O-SFPARKS-15	I-Barish-27	I-Khan-01	I-Sherman-01
O-SFPARKS-16	I-Barish-28	I-Kohn-01	I-Stein-03
O-SFPARKS-17	I-Barish-29	I-Koivisto-64	I-Thomashefski-01
O-SFPARKS-18	I-Barish-32	I-Koivisto-66	I-GThompson-02
O-SFPARKS-19	I-Bartley-09	I-Koivisto-67	I-GThompson2-01
O-SFPARKS-20	I-Brant-02	I-Koivisto-69	I-Watts-01
O-SFPARKS-23	I-Browd-03		

“I think what’s really challenging in the area around turf that we have is it’s sort of like the cell phone antenna problem we have, right? The research is conflicting and you can find good data that says both sides, and we probably won’t know the real impact for quite a long time, not for another 60 days or another six months. We’ll never truly know.” (*Gwyneth Borden, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Borden -01]*)

“The primary source cited in the DEIR is a 2008 report by the San Francisco Recreation and Park Department’s Task Force set up to review that issue. The data cited in that report were derived only from a report written by the artificial turf industry. Several healthcare professionals testified at the December 1st public hearing that there are numerous independent studies from impartial sources that are available and that should be consulted and used instead.

In its comments of March 4th of this year, PAR noted that a study of synthetic turf was undertaken by a unit of the State of California several years ago and its results were published for all public school playing fields in the state about a year ago. If those study results were cited in the DEIR, they could not be located in the limited time provided.

PAR requests that impartial professional sources be used for a proper analysis of all of the environmental impacts associated with the artificial turf being proposed.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-05]*)

“Artificial Turf - We believe that the public concern regarding the safety this material is worthy of further study by the Department. We suggest that the Department considers a moratorium on turf conversion until the State of California completes its study.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-01]*)

“According to the DEIR for the soccer fields (3rd paragraph, page ES-1), ... little or no information is provided on how that turf ages or on the potential environmental impacts the plethora of contaminants in it would have on the aquifer beneath it when the turf has to be disrupted for

removal and replacement.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR4-02]*)

“...The DEIR does not disclose the wear and tear of 360 people per day using a field of 312,000 square feet of synthetic turf. As this usage wears down the turf, particles will break off into the soil and water. Sunlight and heat also break down synthetic turf. These effects are completely missing from the DEIR and needs to be analyzed.

The DEIR also does not analyze the impacts under various weather and age conditions. It also does not state have often the cited studies that it cites conducted.

Dust is also created as the synthetic turf ages, as noted by the California Attorney General’s office. In 2008, the California Attorney General, the City of Los Angeles, and Solano County sued three manufacturers of synthetic turf, accusing the manufacturers of violating California’s Proposition 65 by knowingly failing to disclose that their products contain lead. The defendants were Beaulieu Group, AstroTurf, and FieldTurf USA Inc., the vendor that the Recreation and Parks Department plans to use for the proposed project.

Deputy Attorney Gen. Dennis Ragen, the state’s lead attorney on the lawsuit, was quoted in the LA Times:

‘As it ages, it forms more dust,’ he said, and could contain levels of lead that are more than 20 times what’s allowed by Proposition 65. ...The dust analysis mentioned on page IV.H-18 was performed on relatively new fields. It does not consider any data on aged fields that the Attorney General had.” (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-14]*)

“Failure to identify dangerous substances listed by Proposition 65. Independent studies have should that artificial turf fields contain other dangerous chemicals, including carcinogens. The DEIR fails to identify many of them. Nor does it indicate that there was any attempt to identify them. Many of these substances were identified in studies done by the Connecticut Department of Environment. ...

The DEIR references some of these studies, but not many of the chemicals identified in them. One report, funded by the State of Connecticut, is entitled 2009 Study of Crumb Rubber Derived from Recycled Tires, (Revised 5/4/10) by the Department of Analytical Chemistry, Connecticut Agricultural Experiment Station. It found chemicals leached by aqueous solution and offgassing.

This table is from the this report:

Table 1. Compounds Volatilizing from Crumb Rubber Samples Analyzed at CAES
Compound Name Abbreviation

- 1 1-methylnaphthalene (PAH) 1-MeNaph
 - 2 2-methylnaphthalene (PAH) 2-MeNaph
 - 3 4-t-(octyl)-phenol 4-t-OP
 - 4 Benzothiazole BT
 - 5 butylated hydroxytoluene. BHT
 - 6 naphthalene (PAH) Naph
 - 7 butylated hydroxyanisole BHA
 - 8 fluoranthene (PAH)* Flu
 - 9 hexadecane* Hex
 - 10 phenanthrene (PAH)* Phen
 - 11 pyrene (PAH)* Pyr
- *Identified but not quantified.

The DEIR does discuss benzothiazole, but not the others.

Butylated hydroxyanisole is a recognized carcinogen, suspected endocrine toxicant, gastrointestinal toxicant, immunotoxicant, neurotoxicant, skin and sense-organ toxicant. n-hexadecane is a severe irritant based on human and animal studies. 4-(t-octyl) phenol is corrosive and destructive to mucous membranes.

By failing to identify these and other Proposition 6S-listed chemicals, the OEIR fails to determine the impact of these chemicals on the environment, or the accumulative impact of additional chemicals. What is the affect if any of chemical rxns of additional toxins from the turf into the soil and water?

We also don't know if the leachate is treatable in the city's treatment system for runoff. For instance, it can't treat the soil and groundwater for the leachate. The DEIR also doesn't discuss any potential toxins from the lining." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-25]*)

"Another issue we are researching is that portions of the project proposal appear to violate city code, specifically 1998's Proposition J. There is also a question of the applicability of the California Attorney General's Proposition 65 suit against providers of synthetic turf and resulting settlement! which the DEIR does not appear to address. In addition to these issues, there are several other areas we are also investing for the purposes of providing comments to the DEIR." (*Sierra Club San Francisco Bay Chapter, letter, no date [O-SCSFBC2-02]*)

"And we're also looking into the relevance of the attorney general's settlement with field turf and other artificial turf companies. The attorney general Brown at the time, sued these companies and they came to a settlement agreement. It was a Proposition 65 suit, so we're till looking into that as well." (*Sierra Club San Francisco Bay Chapter, public hearing comment [O-SCSFBC3-03]*)

“It is our position that the findings in the DEIR, and in the collective data cited by the DEIR, do not support such a finding or change in findings. It is also our position that data contained in the DEIR, and in reports cited by the DEIR, supports the most significant finding available to the Lead Agency be applied, which is (**Potentially Significant Impact**)’.

It is therefore our position that Impact HZ-1 should be re-written to read; Impact HZ-1: The proposed project could create a significant hazard to the public or the environment through routine use, disposal, handling, or emissions of hazardous materials. (**Potentially Significant Impact**)

It is our intention with the following comments to point out, reinforce, enhance, and supplement relevant data to support a significant impact position.

The proposed Beach Chalet Conversion entails nearly a quarter of a million pulverized tires in the form of SBR Tire Crumb spread over 9 acres in an accessible public space.

The Beach Chalet DEIR reports, ‘SBR is known to contain a number of VOCs, SVOCs (including benzothiazoles, aniline, and phenols), and metals (including barium, chromium, lead, manganese, and zinc). Impacts related to the routine use of the synthetic turf would be significant if the use resulted in adverse health effects due to inhalation of vapors and particulates from the synthetic turf, ingestion of the synthetic turf, dermal contact with the synthetic turf materials, (DEIR page IV.H-27).

The Beach Chalet DEIR also reports; ‘**The SBR material also contains carbon black**, an industrial chemical used in the manufacturing of automobile tires and other plastic materials.’ (DEIR page IV.H-2)

The Beach Chalet DEIR also reports; ‘It, (Carbon Black), **is composed of nanoparticles** that are much smaller than PM10 and PM2.5 (nanoparticles vary in size from 1 to 100 nanometers, with a billion nanometers forming a meter).’ (DEIR page IV.H-2)” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-02])

“**CARBON BLACK AND NANOPARTICLES.** The proposed Beach Chalet Conversion entails nearly 2500 tons of SBR Tire Crumb spread over 9 acres in a public space in a loose, exposed, and uncontained manner.

The Beach Chalet DEIR reports; ‘The SBR material also contains carbon black, an industrial chemical used in the manufacturing of automobile tires and other plastic materials.’ (DEIR page IV.H-2)

Carbon Black is makes up to 40% to 60% of a tire and a synthetic field’s SBR tire infill. Carbon Black is a petroleum derivative.

In 1995, and more recently in February 2006, an International Agency for Research on Cancer, (IARC), panel of experts conducted a comprehensive review of carbon black. The IARC is part of the World Health Organization. They concluded that there was 'sufficient evidence' of carcinogenicity of Carbon Black in laboratory animals. Even in these early stages of research, IARC's overall classification placed Carbon Black in IARC's Group 2B as a 'possible human carcinogen.'

It is our position that this alone denotes 'a significant hazard to the public'.

Carbon Black was added to the California Office of Environmental Health Hazard Assessment (OEHHA) list of substances known to the State to cause cancer on February 21, 2003. The listing was triggered by the 'authoritative' body mechanism in the California Code of Regulations and is based on the IARC reclassification from 1995/96.

The DEIR reports; 'It, (Carbon Black), is composed of nanoparticles that are much smaller than PM10 and PM2.5 (nanoparticles vary in size from 1 to 100 nanometers, with a billion nanometers forming a meter).' (DEIR page IV.H-2)

The Digest Journal of Nanomaterials and Biostructures reported in 2008; Nanoparticles are able to cross biological membranes such as the blood-brain barrier and access cells, tissues and organs. Nanoparticles can gain access to the blood stream via inhalation or ingestion. At least some nanomaterials can penetrate the skin; even larger microparticles may penetrate skin when it is flexed. Turf burns, open wounds, even acne, or severe sunburn may accelerate skin uptake of nanoparticles. Once in the blood stream, nanoparticles can be transported around the body and be taken up by organs and tissues, including the brain, heart, liver, kidneys, spleen, bone marrow and nervous system.

'Nanomaterials have proved toxic to human tissue and cell cultures, resulting in increased oxidative stress, inflammatory cytokine production and cell death. Nanoparticles may be taken up by cell mitochondria and the cell nucleus. Studies demonstrate the potential for nanoparticles to cause DNA mutation and induce major structural damage to mitochondria, even resulting in cell death. Nanoparticles can activate the immune system inducing inflammation, immune responses, or allergies.'

The Beach Chalet DEIR reports; 'Fine particulates small enough to be inhaled into the deepest parts of the human lung can cause adverse health effects, and studies have shown that elevated particulate levels contribute to the death of approximately 200 to 500 people per year in the Bay Area. High levels of particulates have also been known to exacerbate chronic respiratory ailments, such as bronchitis and asthma, and have been associated with increased emergency room visits and hospital admissions.' (DEIR page IV.H-3)

'Laboratory research indicates that there can be health risks associated with the inhalation of these particles, (nanoparticles).' ... (DEIR page IV.H-3)

'Carbon black nanoparticles induce type II epithelial cells to release chemotaxins for alveolar macrophages.' Nanoparticles are considered a potential threat to the lungs and the mechanism of pulmonary response to nanoparticles is currently under intense scrutiny.' ...

NANOPARTICLE TOXICITY. Nanotoxicology is a sub-specialty of particle toxicology. It addresses the toxicology of nanoparticles (particles <100 nm diameter). Nanoparticles are often described as having the constituency of soot that forms on the inside of an oil lamp.

Calls for tighter regulation of nanotechnology have arisen alongside a growing debate related to the human health and safety risks associated with nanoparticles.

- In a Swedish study various nanoparticles were introduced to human lung epithelial cells. The results, released in 2008, showed that carbon nanoparticles caused DNA damage at low levels.
- The Royal Society of London identifies the potential for nanoparticles to penetrate the skin.
- Dr. Andrew Maynard, chief science advisor to the Woodrow Wilson Center's Project on Emerging Nanotechnologies reports that 'certain nanoparticles may move easily into sensitive lung tissues after inhalation, and cause damage that can lead to chronic breathing problems'.
- A major study published in Nature Nanotechnology suggests some forms of carbon nanoparticles could be as harmful as asbestos if inhaled in sufficient quantities.
- Carbon nanotubes are frequently likened to asbestos. In a recent study that introduced carbon nanotubes into the abdominal cavity of mice, results demonstrated that carbon nanotubes showed the same effects as asbestos fibers, raising concerns that exposure to carbon nanotubes may lead to pleural abnormalities such as mesothelioma. (Poland C, et al. (2008))
- Anthony Seaton of the Institute of Occupational Medicine in Edinburgh, Scotland said 'We know that some carbon nanoparticles probably have the potential to cause mesothelioma. So those sorts of materials need to be handled very carefully.'
- In October 2008, the California Department of Toxic Substances Control (DTSC), within the California Environmental Protection Agency, announced its intent to request information regarding analytical test methods, fate and transport in the environment, and other relevant information from manufacturers of carbon nanoparticles.

STUDIES OF THE TOXICITY OF CARBON NANOPARTICLES. 'Understanding the mechanism of toxicity of carbon nanoparticles in humans in the new millennium: A systemic review,' by Mukesh Sharma (Occupational Medicine Division, National Institute of Occupational Health, Meghani Nagar, Ahmedabad, India), in Indian Journal of Occupational and Environmental Medicine, vol. 14(1), 2010, web publication June 24, 2010 ...

Peter Gehr (Professor of Histology - the study of tissue - and Anatomy at the University of Bern, Switzerland, in interview with Kaspar Meuli, 'Nanoparticles can penetrate brain tissue,' on the website of the Federal Office for the Environment (FOEN) (also BAFU in German), March 2010,

...Brent Augustine, 'Nanomaterials,' a paper in relation to a course on nanosociety by Charles Tahan of the Laboratory for Physical Sciences at the University of Maryland, Collge Park, ...

Madler, and Ning Li, 'Toxic Potential of Materials at the Nanolevel,' in Science, 3 February 2006: 622- 627, ...

'Nanoparticle link to China deaths,' August 21, 2009, ...

'Their tiny diameter means that they can penetrate the body's natural barriers, particularly through contact with damaged skin or by inhalation or ingestion,' Song wrote.

'Nanoparticles Linked to Deaths in Chinese Factory,' August 21, 2009, ...

STUDIES OF THE TOXICITY OF CARBON NANOPARTICLES (in PubMed).

- Smith RG, Musch DC. Occupational exposure to carbon black: a particulate sampling study. ...
- Gardiner K, Trethowan WN, Harrington JM, Calvert IA, Glass DC. Occupational exposure to carbon black in its manufacture. ...
- Oleru UG, Elegbeleye OO, Enu CC, Olumide YM. Pulmonary function and symptoms of Nigerian workers exposed to Carbon black in dry cell battery and tire factories. ...
- Crosbie WA. The respiratory health of carbon black workers. ...
- Robertson JM, Diaz JF, Fyfe IM, Ingalls TH. A cross-sectional study of pulmonary function in carbon black workers in the United States. ...
- INGALLS TH, RISQUEZ-IRIBARREN R. Periodic search for cancer in the carbon black industry. ...
- Robertson JM, Ingalls TH. A case-control study of circulatory, malignant, and respiratory morbidity in carbon black workers in the United States. *Am Ind Hyg Assoc J.* 1989 Oct;50(10):510-515. [PubMed]
- Hodgson JT, Jones RD. A mortality study of carbon black workers employed at five United Kingdom factories between 1947 and 1980. ...
- Teta MJ, Ott MG, Schnatter AR. Population based mortality surveillance in carbon products manufacturing plants. ...
- MILLER AA, RAMSDEN F. Carbon pneumoconiosis. ...
- Valie F, Beritje-Stahuljak O, Mark B. A follow-up study of functional and radiological lung changes in carbon-black exposure.

- Wehr KL, Johanson WG, Jr, Chapman JS, Pierce AK. Pneumoconiosis among the activated-carbon workers.
- Gardiner K, Trethowan WN, Harrington JM, Calvert IA, Glass DC. Occupational exposure to carbon monoxide and sulphur dioxide during the manufacture of carbon black.
- Gardiner K, Hale KA, Calvert IA, Rice C, Harrington JM. The suitability of the urinary metabolite 1- hydroxypyrene as an index of poly nuclear aromatic hydrocarbon bioavailability from workers exposed to carbon black. ...

THE DEIR'S STATED 'EXPECTATION' REGARDING NANOPARTICIE EXPOSURE. It is our position that the expectation stated in the DEIR, **'it is expected that exposures to nanoparticles as a result of play on synthetic turf fields that use SBR infill would be minimal, if any at all.'**, (DEIR page IV,H-3), should be stricken,

It is our position that combinations of the multi-fold health risks associated with SBR tire crumb and the Carbon Black and nanoparticle exposure and bioavailability, that it should be considered an extremely significant potential hazard to the public,

The DEIR's stated rationale for the expectation seems to be based to a large part on;

- The expectation that the wind will blow particulates away and,
- the report, 'Evaluation of Health Effects of Recycled Waste Tires in Playground and Track Products' (2007), This report is about 'rubber tire shreds' which are intended to be poured-in-place along with a binder. The report is NOT about pulverized SBR Tire Crumb,

It is our position that this stated expectation is unsubstantiated by scientific research, medical research, or what the DEIR acknowledges, 'the limited available research' (DEIR page IV,H-3), It is not credibly supported in the literature and it is our position that it is an unacceptable assumption to include in this report.

It is our position that the paucity of data supporting such a claim makes it extremely irresponsible.

We strongly suggest that the potential risks and public health ramifications of including such an opinion that will surely be exploited are too significant." (SFPARKS, letter, December 12, 2011 [O-SFPARKS-03])

"PROBLEMS WITH DEPENDING ON GOVERNMENT & INDUSTRY GENERATED REPORTS RE: SBR TIRE CRUMB EXPOSURE. It is our position that the current medical research available on the short and long term effects of repeated exposure of the human body to the chemical combinations found in SBR tire waste and plastic turf is extremely limited and insufficient.

There is only fragmented reporting available on independent toxicity safety assessment studies (with peer review, not designed or funded by either the rubber or recycled rubber industry) concerning environmental and human safety interactions with SBR tire crumb products.

The currently available reports, including those cited by the DEIR, reflect the conflicts of interest derived from the opposing interests of SBR tire waste recyclers, local governments responding to financial incentives, local governments responding to liability concerns regarding pre-existing synthetic field installations, and local governments allaying fears regarding pre-existing synthetic field installations." (SFPARKS, letter, December 12, 2011 [O-SFPARKS-04])

"Dr. D. Barry Boyd, Oncologist at the Greenwich Hospital in Connecticut and the Yale Cancer Center, said about the available reports, 'While fear of raising concerns may be an understandable motive for limiting public information about risk, the long recognized goal of limiting childhood exposures to environmental hazards must take precedent. Because artificial turf playing fields are disproportionately used by children and adolescents, these childhood exposures to environmental carcinogens may add to lifelong risk of cancer as well as the exposures to the many respiratory irritants and toxicants found off-gassing from these fields.'

Environment and Human Health, Inc. reports that, The Connecticut Academy of Science and Engineering (CASE), which performed the States peer review, advised that the findings of the artificial turf study 'be softened' to avoid causing the public to be alarmed.' http://www.ehhi.org/turf/turf_pr_0710.shtml

The limited number of available reports tends to overlap by citing the same material or each other. Most reports on the health risks associated with artificial turf rely heavily on, risk assessments that have been conducted primarily by state agencies, consultants and industry groups. Many rely on extremely limited wipe samples and on-Sight air measurements. The sample sizes for all currently available studies are insufficient, (grams of infill material representing 1000s of tons of heterogeneous non-homogenized SBR infill or a few blades of plastic turf representing acres of plastic turf). Many of the studies involve a few fields or less. As such it is our position that the vast majority, (if not all), of the tests cited do not offer a reliable statistical power for making decisions that affect the public health." (SFPARKS, letter, December 12, 2011 [O-SFPARKS-05])

"It is our position the following notations about the following Beach Chalet DEIR cited reports fit the definition and intent of that a lead agency 'use its best efforts to find out and disclose all that it reasonably can' and that an fiR reflect 'a good faith effort at full disclosure.' Guidelines §§ 15144; 151

A SUMMARY OF LITERATURE REVIEW cited by this DEIR

- '2007 Integrated Waste Management Board Study', (CA)

- '2009 Office of Environmental Health Hazard Assessment Study', (CA)
- '2010 California Department of Resources Recycling and Recovery Study'
- '2009 'New York State Studies'
- '2010 'Connecticut Studies'
- 'Bainbridge Island Evaluation', (WA)
- '2007 Leachate Study' by ALiAPUR
- '2008 San Francisco Synthetic Playfields Task Force Report', (CA)

2007 INTEGRATED WASTE MANAGEMENT BOARD STUDY - (CA)

'Evaluation of Health Effects of Recycled Tires in Playground and Track Products' ... Authored by Charles Vidair, Ph.D., Robert Haas, Ph.D. and Robert Schlag, M.Sc.

The California Integrated Waste Management Board (CIWMB) is a defunct state agency of California which used incentive grants and loans to spur the private sector into developing new markets for recycled materials with an emphasis on waste tire disposal sites. CIWMB provided for the 'Waste Tire Playground Grant Program' to promote markets for recycled-content products derived from waste tires. The Board was dissolved in 2009.

This report examined 'rubber tire shreds that are poured-in-place along with a binder, hardening into a permanent surface,' (page 4). It did NOT look into SBR Tire Crumb which has a completely different constituency and completely different ingestion, inhalation, and dermal interaction properties and dynamics.

The gastric simulation was based on a tire shred. SBR Tire Crumb and Dust have a quantum difference in surface area compared to a tire shred. Tissue and human organ absorption of the nanoparticles, metals, and chemicals would be dramatically different.

The report used as its basis of analysis 'a one-time ingestion of a 10-gram piece of shredded tire'. This does not account for the ingestion of tire crumb and dust. It does not account for cumulative effects of the inhalation of tire crumb and dust. It does not account for the cumulative effects of dermal uptake of tire crumb and dust. It does not account for preexisting levels within the body. It does not account for the life span of metals accumulated in the blood stream. 'Lead has a half-life of approximately 30 days in the blood.' (Barnard - 2009 'Determining the Concentration of Lead in MIT Athletic Facilities and Estimating Student-Athlete Exposure to Lead', page 16)

This report never mentions that Carbon Black was added to the California Office of Environmental Health Hazard Assessment (OEHHA) list of substances known to the State to cause cancer on February 21, 2003.

Excerpts from the 2007 Integrated Waste Management Board Study: 'Disclaimer: The statements and conclusions contained in this report are those of the contractor, (OEHHA), and not

necessarily those of the California Integrated Waste Management Board, its employees, or the State of California and should not be cited or quoted as official Board policy or direction. The State makes no warranty, expressed or implied, and assumes no liability for the information contained in the succeeding text. ‘

Evaluation of toxicity due to ingestion of tire shreds based on the existing literature ‘Overall, we consider it unlikely that a onetime ingestion of tire shreds would produce adverse health effects. Seven of the chemicals leaching from tire shreds in published studies were carcinogens.’ (1)

Evaluation of toxicity due to ingestion of tire shreds based on gastric digestion simulation ‘Five of the chemicals released by tire shreds in the gastric digestion experiment were carcinogens.’ (1) ‘The assumption that the risk from a onetime exposure is equivalent to the risk from the same dose spread over a lifetime is uncertain, and may overestimate or underestimate the true risk.’ (1)

Evaluation of toxicity due to chronic hand-to-surface-to-mouth activity ‘From among the five chemicals identified by wipe sampling, the PAH chrysene is a carcinogen.’ ... ‘This risk is slightly higher than the de minimis risk level of 1×10^{-6} (one in one million), generally considered an acceptable cancer risk due to its small magnitude compared to the overall cancer rate (OEHHA, 2006). Calculation of the 2.9×10^{-6} (2.9 in one million) value does not account for many uncertainties, some of which would decrease the risk while others would increase the risk.’ (2)

Evaluating the potential for damage to the local environment and ecology ‘Groundwater in contact with tire shreds contained elevated levels of many chemicals’ ‘... published studies indicate that concentrated leachate produced in the laboratory from tire shreds, crumb rubber or whole tires was toxic in 19/31 studies to a variety of organisms including bacteria, algae, aquatic invertebrates, fish, frogs and plants ... ‘ (2)” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-06])

“2009 OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT STUDY” - (CA). Chemicals and Particulates in the Air above the New Generation of Artificial Turf Playing Fields, and Artificial Turf as a Risk Factor for Infection by Methicillin-Resistant Staphylococcus Aureus (MRSA), July, 2009 - Author Charles Vidair ...

In the introduction, this report states, ‘The California Tire Recycling Act (Public Resources Code 42870 et seq.) requires the California Integrated Waste Management Board (CIWMB) to develop new markets for recycled tires.’

Some of the 41 data gaps that the author lists that prevent an ‘accurate safety assessment’ of synthetic fields are;

- No study has measured the metals content of the particulates released by artificial turf fields. In addition, it is not known if field use increases particulate release.
- The variables of field age and field temperature should be monitored to determine whether they influence the release of chemicals and particulates into the air above these fields.

- Data are needed for the amount of time athletes spend on artificial turf playing fields. Data are needed for a variety of sports, age groups, and for both men and women. Other subgroups with potentially heavy exposure to fields include coaches, referees, and maintenance workers.
- Only a single study was located that compared the rate of skin abrasions on the new generation of artificial turf to natural turf. This was for high school football. Similar studies are needed for other sports, age groups, and for both male and female athletes.
- No data were located on the seriousness of the skin abrasions suffered by athletes on the new generation of artificial turf compared to natural turf.
- The bacterium MRSA has not been detected in artificial turf fields. However, fields in California have not been tested. Therefore, fields from different regions of the state should be tested to verify that the new generation of artificial turf does not harbor MRSA or other bacteria pathogenic to humans.
- Approximately 200 of the 300 VOCs (13 to 16 percent by weight) detected by Dye et al. (2006) were not identified, but were only reported as peaks on a graph. Therefore, potential health risks posed by these chemicals cannot be estimated.
- Many of the chemicals identified in the study of Dye et al. (2006) have no associated health-based screening levels, so that their health risks cannot be estimated. Thus, any attempt to classify these chemicals as carcinogens or developmental/reproductive toxicants will be an underestimate.
- Dye et al. (2006) did not measure the metals content of the airborne particulate matter (PM_{2.5} and PM₁₀). Thus, the health risks posed by inhaled particulates and the metals they contain, such as lead, cannot be determined.
- The effect of temperature on chemical and particulate levels has not been measured.
- The contribution of field age to chemical and particulate levels has not been measured.
- The effect of field use on the levels of either VOCs or particulates has not been measured. Thus, it is possible that air sampling before or during games would give different results.
- Determine if levels of respirable particulates (PM_{2.5} and PM₁₀) vary with field use; i.e., are the levels in the air higher during games compared to periods when the fields are idle?
- Tire-derived flooring, (SBR), emitted hundreds of low-level VOCs that were not identified, while other identified chemicals had no associated health-based screening levels. Therefore, the health risks posed by these chemicals cannot be estimated.
- Total VOCs (TVOCs) emitted by tire-derived flooring exceeded one mg/m³. Similar measurements of TVOCs should be made above artificial turf fields, since breathing low levels of a mixture of many VOCs may pose a health risk.

The '2009 Office of Environmental Health Hazard Assessment Study' report makes estimates on the risk of cancer or developmental/reproductive toxicity based on 'lifetime soccer play scenarios

that are ', (page 32). In a section in the report subtitled 'Is the Air Above Artificial Turf Fields Hazardous to Human Health?', Vidair summarized in response to the reliability of the cancer risk calculations, 'Data gaps exist that could lead to overestimates or underestimates of these risks.' (page 5)

'From among the 20 chemicals detected at the highest levels by Dye et al. (2006), seven were also detected in the New York State (2009) study. Concentrations of these seven chemicals were from 5- to 53-fold higher in the air above indoor fields (Dye et al., 2006) compared to the air above outdoor fields (New York State, 2009). Concentrations of particulates were also higher in the indoor study.' (page 52)

'Lastly, 'it should be noted that most of the VOCs detected above artificial turf fields in the Dye et al. (2006) study were never identified. For example, for the field yielding the highest level of total volatile organic compounds (TVOCs, 716 ug/m³, 85 percent of the individual chemicals (representing about 20 percent of the mass of TVOCs) were not identified. This remains a significant source of uncertainty in assessing the health risks posed by these fields.' (page 33)

In his conclusion Vidair states,

- 'Dye et al. (2006) quantified eight chemicals that appear on the California Proposition 65 list of chemicals known to the state to cause cancer.
- Estimated inhalation exposures of soccer players to five of these (benzene, formaldehyde, naphthalene, nitromethane and styrene) gave theoretical increased lifetime cancer risks that exceeded the insignificant risk level of 10.6 (OEHHA, 2006).

(note - Dye, c., Bjerke, A., Schmid bauer, N. and Mano, S. (2006) Measurement of air pollution in indoor artificial turf halls. Norwegian Pollution Control Authority, Norwegian Institute for Air Research, Report No. NILU OR 03/2006, TA No. TA-2148/2006" (SFPARKS, letter, December 12, 2011 [O-SFPARKS-07])

"2009 OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT STUDY" - (CA). Chemicals and Particulates in the Air above the New Generation of Artificial Turf Playing Fields, and Artificial Turf as a Risk Factor for Infection by Methicillin-Resistant Staphylococcus Aureus (MRSA), July, 2009 - Author Charles Vidair

<http://www.calrecycle.ca.gov/tires/products/bizassist/health/turfstudy/litreview.htm>

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“‘**NEW YORK STATE STUDIES**’ 2008 (literature review). The analysis is a review of previous scientific studies and included no original research. The study was conducted by TRC Companies, an engineering, consulting and construction management company.

The NYC Department of Parks and Recreation (DPR) began installing synthetic turf playing fields in 1997 with a total of 94 installations. Concerns were raised by the public about the potential for exposure to chemicals found in the crumb rubber. This resulted in New York City department of Parks and recreation (NYC DPR) and the NYC Department of Health and Mental Hygiene (DOHMH) contracting a private consultant to lead a literature review. They hired TRC Solutions who according to their web site, ‘actively provides services to large chemical and petrochemical clients’.

In 2009 Charles Vidair wrote about the New York State Studies; ‘Only two outdoor artificial turf fields were evaluated in the New York State (2009) study. The same two fields comprised the TRC (2009) study.’ ‘A comparison of the chemicals detected in the air above the same two artificial turf fields that comprised the studies by New York State (2009) and TRC (2009) shows that chemical concentrations were consistently higher in the New York State (2009) study, ranging from 1.7-fold to 85-fold higher. The reasons for these differences are unknown. These variable results highlight the difficulties faced in obtaining consistent results from potential point sources of outdoor air pollution.’

‘The air above fields was not tested for airborne metals. The previously reported finding of lead in dust sampled from some artificial turf fields indicates a potential for lead and other metals to become suspended in the air and possibly inhaled. Testing field air samples for metals is warranted.’

‘In the study by New York State (2009), the relatively large number of TICs with peak match qualities below 85 percent indicates that these fields release many unidentified VOCs and VOCs (‘unknowns’). Some of these were at [$\mu\text{g}/\text{m}^3$] levels (Table 11). It is likely that the health risks posed by these chemicals, if any, will not be known for the foreseeable future. The presence of a relatively large number of unidentified organic chemicals in the air over these fields is a potential health risk that cannot be evaluated at present.’ - Charles Vidair (Addendum, July 2009)

New York City along with the Los Angeles Unified School District have since banned SBR infill. <http://www.usatoday.com/sports/2009-06-10-artificial-turfN.htm>” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-09])

“‘**CONNECTICUT STUDIES**’ (2010). The Connecticut Studies were conducted by four state agencies.

The 2010 ‘Connecticut Studies’ found, ‘The field investigation detected a variety of compounds that were present above the fields at concentrations greater than the range seen in background samples. Based upon the pattern of detection, it is considered likely that benzothiazole, acetone,

toluene, methyl ethyl ketone, methyl isobutyl ketone, butylated hydroxy toluene, naphthalenes and several other [polycyclic aromatic hydrocarbons] PAHs were field-related’.

‘The laboratory studies showed offgassing of numerous compounds including polycyclic aromatic hydrocarbons (particularly naphthalenes), VOCs (e.g., benzene, hexane, methylene chloride, styrene, toluene), and rubber-related SVOCs (benzothiazole, tert-octylphenol, butylated hydroxy toluene). The primary constituent detected by both laboratories was benzothiazole.

The stormwater sampling detected ‘Three samples exhibited acute toxicity for both *Daphniapulex* and *Pimephales promelas*. The only analyte in the stormwater detected in concentrations exceeding acute aquatic toxicity criteria for surface waters was zinc. Zinc exceedences of the acute criteria were detected in the same three stormwater samples that exhibited acute toxicity for both *Daphnia pulex* and *Pimephales promelas*. These results showed that there is a potential risk to surface waters and aquatic organisms associated with whole effluent and zinc toxicity of storm-water runoff from artificial turf fields.’” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-10])

“According to Environment and Human Health, Inc., ‘The Connecticut Academy of Science and Engineering (CASE), which performed the study’s peer review, advised that the findings ‘be softened’ to avoid causing the public to be alarmed. The CASE report urged the DPH to change its press release headline from ‘The Results Indicate Cancer Risks Slightly Above De Minimis Levels for All Scenarios Evaluated’ to the more reassuring headline, ‘Result of State Artificial Turf Study: No Elevated Health Risk.’

Environment and Human Health, Inc. in a review of the Connecticut studies wrote, “The, (Connecticut) health assessment looked at one chemical at a time for the artificial turf’s affect on people’s health - despite the fact that their data indicates that children are being exposed to a soup of toxins from these fields, and these exposures are experienced all at the same time. The data also shows that the more people who are playing on a field the more toxins are released - and thus the greater the exposures to students.

The study indicates a very high variability of the levels of toxins found in each field. Since there are 40,000 used tires in each field, enormous variability of toxins would be expected. The actual field testing took place last summer when temperatures were unusually cool, between 70 and 80 degrees.’ (see Charles Vadair’s 2010 OEHHA California study)

(Environment and Human Health, Inc. (EHHI) is a nine-member, non-profit organization composed of doctors, public health professionals and policy experts. ...)” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-11])

“**BAINBRIDGE ISLAND EVALUATION**’ (2008), (literature review only). Bainbridge is an island town in Washington state with a population of 23,000. This 12 page report is written by Michael Johns, PhD, an aquatic scientist, who used ‘available scientific literature’. Mr. Johns is an employee of Winward Environmental, L.L.C.. According to its web site, Dr. Johns provides technical support to clients involved in litigation regarding mining sites, petrochemical facilities, and heavy industrial sites. Tim Goodlin (a Bainbridge Island resident’s) name was attached to the report later ...

The ‘Bainbridge Island Evaluation’ is primarily a leachate study.

It cites only 7 reports;

- One is from ALiAPUR, (a tire industry organization)
- One is a geological map
- One is a power point presentation.
- It relies heavily on the 2007 INTEGRATED WASTE MANAGEMENT BOARD STUDY, ‘Evaluation of Health Effects of Recycled Tires in Playground and Track Products’. This 2007 report explored ‘rubber tire shreds that are poured-in-place along with a binder, hardening into a permanent surface,’ (page 4). It did NOT look into loose SBR Tire Crumb which has a completely different constituency and completely different dynamics regarding leachate, ingestion, inhalation, and dermal uptake.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-12])

“**2007 LEACHATE STUDY**’. In the Draft EIR, ALIAPUR is described as a ‘French governmental agency responsible for regulating the use of used tires’. (DEIR page IV.G-8)

It is our position that description of ALIAPUR should be amended to include;

It was founded in 2003 by an international consortium of tire manufacturers, (Bridgestone, Continental, Dunlop, Goodyear, Kleber, Michelin and Pirelli), in response to their public relations problems regarding their responsibility for the mountains of accumulating tire waste. Over 1 billion tires are discarded annually.

It is our opinion that this study was designed to promote the recycling of tire waste and enable their continued business plan of planned obsolescence which was to continue to take precedence over implementing the technology of the production of tires with a longer life span.

It was only In 2009 that Aliapur implemented the French Ministry of Ecology Environmental Code, under the environmental obligations of manufacturers and importers of tires.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-13])

“**SYNTHETIC PLAYFIELDS TASK FORCE REPORT**, (literature review only). ...The following notations are not meant to impugn the reputation of any group or individual but simply to fit the definition and CEQA requirements and intent that a lead agency ‘use its best efforts to find out and disclose all that it reasonably can’ and that an EIR reflect ‘a good faith effort at full disclosure.’ Guidelines § 15144; 151.

Synthetic Playfields Task Force Findings and SFRPD Recommendations (page DEIR, IV.G-4). The DEIR states that ‘The proposed synthetic turf would meet or exceed all parameters established by the San Francisco Recreation and Park Department Synthetic Playfields Task Force Findings and Department Recommendations’. ‘ (page 11-14 DEIR)

It is our position that for Synthetic Playfields Task Force Report to be given appropriate credence, the following context needs to be included in the EIR;

On page 5 of the DEIR ‘Initial Study, the Synthetic Playfields Task Force is described in a footnote as having ‘met for five months in 2008 from June through October’. This is incorrect and gives a misleading impression of the extensiveness and quality of the research. The correct description should read that the Synthetic Playfields Task Force was scheduled for a total of 5 times for 2 hours at a time, (May 12th to July 31’). The first meeting involved a City Fields Foundation presentation by Dan Mauer, (a City Fields Foundation Board member), and the assignment of topics. The final meeting was a review of the task force draft report whose writing was managed by the San Francisco RPD. Only 3 of the 5 meetings involved topic presentations and discussion, (a total of 6 hours). In that six hours they were to cover 11 complex health topics. Subtracting roll calls, discussions of procedure, and general small talk they averaged approximately a little over 20 minutes per topic. (<http://sf-recpark.org/index.aspx?page-2307>)

The same footnote goes on to say; ‘The Task Force was comprised of 16 members from various city agencies including other experts’ This is incorrect and gives a misleading impression of the backgrounds of the members. Nearly half of the members were simply ‘park users’, ‘neighbors’, etc., with no expertise or background on the subject. Very few members had knowledge or experience with their aspect of the subject matter.

Without an official ‘agendizing’ by the RPD, the San Francisco Recreation and Parks Commission (Commission) established the Task Force. So few people heard about the Task Force that Jeanne Darrah, (who is listed on the City Fields Foundation web site as a volunteer and supporter), and is a member of the Park, Recreation and Open Space Advisory Committee, (PROSAC), was selected to fill a ‘citizen seat’. PROSAC is a politically appointed position and is listed on the City Fields Foundation web site as a supporter. PROSAC was already officially represented by Mary Lipian on the Task Force. Ms. Darrah never disclosed her affiliation with PROSAC or City Fields Foundation and is never listed as such. Patrick Hannan of City Fields Foundation is the past Chairman of PROSAC. Other seats were filled with groups listed on the City Fields Foundation web site as supporters.

As per Dawn Kamalanathan, 5 citizens were rejected as members, including a neighborhood association president and a citizen with a medical background who was asked to serve as the

proxy for 5 different neighborhood associations. All 5 of the rejected citizens had in common that they had questioned the actions of the Playfields Initiative at the Parks Commission and had encouraged the formation of a Task Force.

Dan Mauer was designated by Dawn Kamalanathan, (the 'Task Force Organizer'), to be considered by the task force as 'the expert'. Dan was never introduced as, or revealed that he was, a City Fields Foundation Board member. As the designated 'expert', Mr. Mauer was allowed the special privilege of unlimited comment time. Dan Mauer is a Beach Chalet EIR project sponsor along with Dawn Kamalanathan and the City Fields Foundation.

City Fields Foundation's Susan Hirsch and Patrick Hannan, (a Beach Chalet Project Sponsor), were allowed by meeting organizer Dawn Kamalanathan to serve the Task Force Members with a catered buffet at each meeting which was consumed during meeting time. It is our position that this created a general distraction from thoughtful attention by participants if not create a potential bias.

The 'representative from California Environmental Protection Agency' was Charles Vidair, an OEHHA proponent of the tire recycling industry.

It is our position that the Synthetic Playfields Task Force Report is filled with City Fields Foundation propaganda, unfulfilled promises, and red herrings such as coconut/cork infill.

It is our position a more fair and accurate description of the Task Force is; the Synthetic Playfields Task Force involved mostly non-experts doing web searches on complex topics with which they had very limited experience. We feel that the transcripts bear this assessment out. ...

Additionally, the Task Force was called a joke even by some of its participants. The 'citywide advocacy' member never returned after the first meeting. Participation was lack luster, (one member never spoke). By the time of the last presentation meeting, barely half of the members showed up. A . role was not even taken for the Task Force Report approval meeting.

Guive Mirfendereski, Managing Editor of SynTurf.org, described the Task Force report as, 'a masterpiece of obfuscation. It defends the use of artificial playfields and promotes the continued installation of artificial turf fields in the San Francisco area for some time to come. The Report's tone is defensive of Recreation and Park Department's long-held view that the turf fields are fine and the answer to increasing need for playing surfaces. With a few exceptions, there is not much critical thinking or even adequate research into the topics that the Task Force has addressed.'

We suggest that this Task Force was simply a symbolic, if not cynical, exercise by the City Fields Foundation and the RPD toward the appearance of due diligence. We suggest its report merely served the City Fields Foundation and RPD in promoting their 'Playfields Initiative' agenda. We suggest that the 'Synthetic Fields Task Force Report' it generated bears this out. ..." (SFPARKS, letter, December 12, 2011 [O-SFPARKS-14])

“PROBLEMS WITH DEPENDING ON GOVERNMENT & INDUSTRY GENERATED REPORTS RE: SBR TIRE CRUMB EXPOSURE (SUMMARY). It is our position that the current research on the interaction of the many tire chemicals and the human body is insufficient to draw conclusions or well informed opinions. Chemicals that include but are not limited to polynuclear aromatic hydrocarbons (PAHs), phthalates, volatile organic compounds (VOCs), zinc, iron, manganese, nickel, PCB, copper, mercury, lead, cadmium, volatile nitrosamines, benzothiazole, isononylphenol, Carbon Black, nanoparticles)

Tires involve a complex blend of materials and chemicals to manufacture. A typical tire uses over one hundred primary raw materials. More than 50 different chemicals used in making tires have been noted in the Draft EIR. The most complete dataset was published by Dye et al. (2006) . They identified almost 100 different chemicals and particulates. Another 200 chemicals were detected but not identified. The materials used in tire production have not been fully characterized in terms of their chemical and/or biological properties. ...

Concerns over high cancer rates in the rubber tire industry have been surfacing for over 50 years. Furthermore, suspicions have also arisen that other and hitherto unsuspected excesses of cancer might be occurring.

According to the Rubber Industry (International Agency For Research On Cancer, (IARC), Summary & Evaluation 1982; ‘Many materials involved in the manufacture of tires are experimental chemicals that can induce or increase the frequency of mutation in an organism (mutagens), or substances or agents that tend to produce a cancer (carcinogens). These include mineral oils, carbon black (extracts), curing fumes, some monomers, solvents, nitroso compounds and aromatic amines, thiurams and dithiocarbamate compounds, ethylenethiourea, di(2-ethylhexyl) phthalate, di(2-ethylhexyl) adipate and hydrogen peroxide.

Experimental toxicological information on chemicals that are used or formed in the rubber tire making process is restricted to a small fraction of all chemicals used: most compounds have not been investigated for their possible mutagenic or carcinogenic effects. Studies involving workers with a high exposure rate to tires have been carried out using exposure indicators, such as mutagenic activity in urine, thioether excretion and sister chromatid exchange, point to the possibility of exposure to mutagens ...)

‘A large number of studies have been conducted on the rubber industries in Canada, China, Finland, Norway, Sweden, Switzerland, the UK and the USA [ref: 1-19]. Workers employed in the industry before 1950 have a high risk of bladder cancer, probably associated with exposure to aromatic amines. Leukaemias have been associated with exposure to solvents and with employment in back processing, tyre curing, synthetic rubber production and vulcanization. Excess mortality from lymphomas has been noted among workers exposed to solvents in such departments as footwear and in tyre plants [ref: 20]. Other cancers, including those of the lung, renal tract, stomach, pancreas, oesophagus, liver, skin, colon, larynx and brain, have been reported as occurring in excess in various product areas and departments, but no consistent excess of any of these cancers is seen across the various studies.’ ...

A study by The National Institute for Occupational Safety and Health (NIOSH) compared the number of bladder cancers among workers at a tire and rubber manufacturing plant from 1973 to 1988 with the number that would be expected in a similar population of New York State residents. NIOSH particularly examined a relationship between exposure of two suspicious chemicals involved in the tire making process; aniline and o-toluidine and human carcinogenic effect. One of those chemicals, o-toluidine, is known to cause bladder cancer in animals. Therefore, this chemical is thought to be the most likely cause of bladder cancer in workers. Another chemical, aniline, causes cancer in rats. In this study, 8 cases of bladder cancer were found among workers 'definitely exposed' to o-toluidine and aniline, while only 1.2 were expected. Among workers who were 'possibly exposed' to these chemicals there were 4 bladder cancer cases observed and 1.05 expected. ..." (SFPARKS, letter, December 12, 2011 [O-SFPARKS-15])

"CONSUMER PRODUCT SAFETY COMMISSION'S TESTING FOR LEAD ON SYNTHETIC TURF FIELDS. The following is a synopsis of USCPSC testing by David Brown, Sc.D., Public Health Toxicologist for Environment and Human Health, Inc. ...

- The USCPSC report performed only 10 tests on four fields. There were three samples on three fields and one sample on one other field. This was presented as a sufficient representation of all fields from all sources.
- The table is padded with other turf data (less than 10) from unspecified sources with no relevancy to the fields in actual use. They wiped an area 50 cm long and 8 cm wide (18 inches long and 3 inches wide). Your hand is about 4 inches wide and 8 inches long.
- They divided the amount of lead found by 5 -- because they assumed that the hand is not as efficient at picking up lead as their wipe. They then divided that number obtained again by 2 -- because they assumed that only half of the lead could be taken from one's hand and become ingested.

The USCPSC's determination of a safe reference exposure:

- They compared the exposure to a blood level of 10 ug/dl as their level of concern - although current peer reviewed literature demonstrate health effects in children below that level.
- They then reference a position that chronic ingestion of lead should not exceed 15 ug/day. They then incorrectly assumed that the 'not to be exceeded' level was an acceptable exposure level, which it is not.

The USCPSC's rationale makes no sense because of the following incorrect assumptions:

- Assumption 1. The child has no other exposures to lead each day. The assumption is incorrect based on population studies published by the centers for Disease Control and Prevention.
- Assumption 2. During an athletic activity the child only touches the surface with one hand one time each day.

- Assumption 5. Most of the lead on the surface is not released on the first pass over the surface. While there may be multiple passes over the surface there is no basis for a division by 5 or any other number, most of the lead is released by the first touch although additional lead is picked up with further wipes. If the CPSC had wiped the field 100 times would they have divided the amount obtained on their sample wipe by 100?" (SFPARKS, letter, December 12, 2011 [O-SFPARKS-16])

"SAN FRANCISCO SYNTHETIC TURF STANDARDS. ...The DEIR states;

'As discussed in Section IV.H, Hazards and Hazardous Materials and Air Quality, the synthetic turf standards specify that the vendor must submit a product analysis with their project bids, quantifying the content of their product.' (DEIR page IV.G-16)

'These standards were used to purchase synthetic turf for the Kimbell Playground in 2010 and Mission Playground field renovations in 2011.' (DEIR page IV.H-1S)

The San Francisco Synthetic Turf Standards stipulate;

'All synthetic turf vendors will conduct and submit product analysis with the project bid. Analysis will be presented in the form of certified laboratory results using specified standards and processes,'

'Analytical Methodologies: Representative samples of the turf fibers, turf backing, and infill material shall be analyzed for total metals content and semi-volatile organic compounds (SVOCs), as well as select analysis for leachable metals concentrations.'

I made several attempts to access this report as a citizen of San Francisco to be able to refer to in my DEIR comments. Beginning in November 2011, I made 5 'Immediate Disclosure Requests', (as per section 67.29-S of the Sunshine Ordinance), to San Francisco City Agencies for a copy of this report for the Kimbell Playground, (2 requests to the SF Department of the Environment and 3 to SF-RPD).

When I heard back from the SF Department of the Environment, they said that they did not have the reports.

When I heard back from the RPD they said, (in reference to the date of my last request),

'Your request dated Dec 6-2011, is not a 'simple, routine or otherwise readily answerable' and does not meet the criteria for 'immediate disclosure' under the San Francisco Sunshine Ordinance. (S.F. Adm. Code Sec. 67.25(a).) Accordingly, it is a standard public records request not subject to the expedited time limit for response that applies to an immediate disclosure request. Further, we must invoke an extension of 14 days because we will have to search for and collect the requested records from facilities separate from the office processing the request.'

In lieu of having the report we would still like to say that, It is our position that the tests stipulated, (and all tests cited by this report), including those presumably utilized by to address the San Francisco Synthetic Turf Standards are not sufficiently indicative of the heterogeneous non-homogenous mixture that is SBR Tire Crumb, especially in the quantities that are used and from the variety of manufacturing sources, (around 450 tire factories in the world).” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-17])

“**SAN FRANCISCO ORDINANCE 53-07-USE OF RECYCLED MATERIALS.** ‘City and County of San Francisco departments that award building contracts must include information on recycled content material used on public works projects in annual reports to SFE.’ (DEIR Page IV.H-2S)

It is our position that In the case of recycled tires pulverized into SBR Tire Crumb and exposed in a public space, (as is the case for synthetic fields), the of San Francisco departments that awards the building contract should submit this report for an appropriate review for Public Health scrutiny. It is our position that in the case of conflicts, the Precautionary Principle should prevail.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-18])

“**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROP 65).** ... Proposition 65 requires businesses to notify Californians about significant amounts of chemicals in the products that are released into the environment. By providing this information, Proposition 65 enables Californians to make informed decisions about protecting themselves from exposure to these chemicals.

It is our position that heterogeneous non-homogenous SBR tire crumb and plastic synthetic fields fall under the guidelines of Prop 65 Chemical Reduction Act because;

- ‘Approximately 300 of 400 VOCs detected by Dye et al. (2006) on synthetic SBR tire crumb fields were not identified, so that their health risks cannot be determined.’ - Vidair (2009)
- ‘From among the chemicals identified by Dye et al. (2006), eight appear on the California Proposition 65 list of chemicals known to the state to cause cancer. Exposure to five of these via inhalation (benzene, formaldehyde, naphthalene, nitromethane, styrene) gave increased lifetime cancer risks that exceeded one in one million (10⁶).’ - Vidair (2009)
- ‘more than one cancer case could be expected to occur in a hypothetical population of one million people regularly playing soccer on these artificial turf fields between the ages of 5 and 55. The highest risk was from nitromethane, which could cause about nine cancer cases in a hypothetical population of one million soccer players.’ - Vidair (2009)
- ‘While most of the VOCs identified by Dye et al. (2006) do not have MADLs developed under Proposition 65, data exist indicating that some cause developmental/reproductive effects in

test animals. Thus, additional screening is required to more fully evaluate these risks.’ – Vidair (2009)

- ‘The SBR material contains carbon black, an industrial chemical used in the manufacturing of automobile tires and other plastic materials. It is composed of nanoparticles that are much smaller than PM10 and PM2.5 (nanoparticles vary in size from 1 to 100 nanometers, with a billion nanometers forming a meter).’ (DEIR page IV.H-2)
- Carbon black makes up to 40% to 60% of a tire as well as a synthetic field’s SBR tire infill.
- In 1995, and more recently in February 2006, an International Agency for Research on Cancer, (IARC), panel of experts conducted a comprehensive review of carbon black. The IARC is part of the World Health Organization. They concluded that there was ‘sufficient evidence’ of carcinogenicity of carbon black in laboratory animals. IARC’s overall classification placed carbon black in IARC’s Group 2B as a ‘possible human carcinogen.’ ...
- ‘Particulate matter, also considered in risk evaluations related to inhalation, is a class of air pollutants ... Fine particulates small enough to be inhaled into the deepest parts of the human lung can cause adverse health effects, and studies have shown that elevated particulate levels contribute to the death of approximately 200 to 500 people per year in the Bay Area. High levels of particulates have also been known to exacerbate chronic respiratory ailments, such as bronchitis and asthma, and have been associated with increased emergency room visits and hospital admissions.’ (DEIR page IV.H-3)
- ‘Laboratory research indicates that there can be health risks associated with the inhalation of these particles. (DEIR page IV.H-3)

Dye, c., Bjerke, A., Schmidbauer, N. and Mano, S. (2006) Measurement of air pollution in indoor artificial turf halls. Norwegian pollution Control Authority, Norwegian Institute for Air Research, Report No. NILU OR 03/2006, TA No. TA-2148/2006” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-19])

“**CUMULATIVE IMPACTS & DEIR ‘IMPACT C-HZ’**. In regards to,

‘Impact C-HZ: The proposed project in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would not have a cumulatively considerable contribution to impacts related to hazards and hazardous materials. (Less than Significant)’ (DEIR page IV.H-32)

Part of the basis of the finding of (Less than Significant) was stated as being ‘None of the studies discussed under ‘Setting,’ above, identified public health risks resulting from exposure to hazardous materials at outdoor synthetic turf fields.’ (DEIR page IV.H-32)

It is our position that studies discussed under ‘Setting’ do identify public health risks that could result from exposure to hazardous materials at outdoor synthetic turf fields. More importantly

the discussed studies identify an abundance of data gaps regarding exposure to hazardous materials at outdoor synthetic turf fields.

For example, in the '2009 Office of Environmental Health Hazard Assessment Study'; ... 41 data gaps that are listed that the author writes, 'prevent an accurate safety assessment', i.e.;

- 'Approximately 200 of the 300 VOCs (13 to 16 percent by weight) detected by Dye et al. (2006) were not identified, but were only reported as peaks on a graph. Therefore, potential health risks posed by these chemicals cannot be estimated.' (page 17)
- 'Many of the chemicals identified in the study of Dye et al. (2006) have no associated healthbased screening levels, so that their health risks cannot be estimated. Thus, any attempt to classify these chemicals as carcinogens or developmental/reproductive toxicants will be an underestimate.' (page 17)
- 'No study has measured the metals content of the particulates released by artificial turf fields. In addition, it is not known if field use increases particulate release.' (page 6)
- 'Dye et al. (2006) did not measure the metals content of the airborne particulate matter (PM_{2.5} and PM₁₀). Thus, the health risks posed by inhaled particulates and the metals they contain, such as lead, cannot be determined.' (page 17)
- Determine if levels of respirable particulates (PM_{2.5} and PM₁₀) vary with field use; i.e., are the levels in the air higher during games compared to periods when the fields are idle?' (page 27)
- 'Tire-derived flooring, (SBR), emitted hundreds of low-level VOCs that were not identified, while other identified chemicals had no associated health-based screening levels. Therefore, the health risks posed by these chemicals cannot be estimated.' (page 19)

In the conclusion of the study it states;

- 'Dye et al. (2006) quantified eight chemicals that appear on the California Proposition 65 list of chemicals known to the state to cause cancer. (page 33)
- Estimated inhalation exposures of soccer players to five of these (benzene, formaldehyde, naphthalene, nitromethane and styrene) gave theoretical increased lifetime cancer risks that exceeded the insignificant risk level of 10.6 (OEHHA, 2006). (page 33)

'Lastly, it should be noted that most of the VOCs detected above artificial turf fields in the Dye et al. (2006) study were never identified. For example, for the field yielding the highest level of total volatile organic compounds (TVOCs, 716 ug/m³), 85 percent of the individual chemicals (representing about 20 percent of the mass of TVOCs) were not identified. This remains a significant source of uncertainty in assessing the health risks posed by these fields.' (page 33)

In the 2010 California Department of Resources Recycling and Recovery Study the author identifies 47 data gaps that 'prevent an accurate safety assessment' of synthetic fields.

The 2010 'Connecticut Studies' found 'The field investigation detected a variety of compounds that were present above the fields at concentrations greater than the range seen in background samples. Based upon the pattern of detection, it is considered likely that benzothiazole, acetone, toluene, methyl ethyl ketone, methyl isobutyl ketone, butylated hydroxy toluene, naphthalenes and several other [polycyclic aromatic hydrocarbons] PAHs were field-related ...'

'The laboratory studies showed offgassing of numerous compounds including polycyclic aromatic hydrocarbons (particularly naphthalenes), VOCs (e.g., benzene, hexane, methylene chloride, styrene, toluene), and rubber-related SVOCs (benzothiazole, tert-octylphenol, butylated hydroxy toluene). The primary constituent detected by both laboratories was benzothiazole. Preweathering the crumb rubber outdoors for ten weeks decreased the volatile emissions 20-80%.'

The stormwater sampling detected 'Three samples exhibited acute toxicity for both *Daphniapulex* and *Pimephales promelas*. The only analyte in the stormwater detected in concentrations exceeding acute aquatic toxicity criteria for surface waters was zinc. Zinc exceedences of the acute criteria were detected in the same three stormwater samples that exhibited acute toxicity for both *Daphnia pulex* and *Pimephales promelas*. These results showed that there is a potential risk to surface waters and aquatic organisms associated with whole effluent and zinc toxicity of storm-water runoff from artificial turf fields.'

In reference to elevated lead levels found at some New Jersey artificial fields, New Jersey epidemiologist Dr. Eddy Bresnitz said the lead levels were not high enough to cause poisoning in people who play on the fields. However, he said the levels could cause more damage in children already exposed to lead.

Environmental Working Group says regarding children's exposure to toxic chemicals, 'Our children are being born pre-polluted.'

It is our position that it is reasonable to assume that if a project has impacts related to hazards and hazardous materials that could be found as having a 'potentially significant impact', then in combination with past, present, and reasonably foreseeable future projects in the site vicinity, it would also have a cumulative contribution to impacts related to hazards and hazardous materials.

It is our position that the Impact C-HZ: rating should be changed to (Potentially Significant Impact)." (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-20]*)

"SAFE CHEMICALS ACT OF 2011. Earlier this year in the U.S. Senate - Senator Frank Lautenberg introduced the Safe Chemicals Act of 2011. This landmark legislation would require the chemical industry to test its products and prove that they're safe for vulnerable groups like children and senior citizens.

Research has found hundreds of chemicals in the umbilical cord blood of newborns. It indicates that babies being born every day have already been exposed to toxic chemicals.

The Safe Chemicals Act of 2011 would require the chemical industry to prove that its products are safe before they are sold. Under this bill, chemicals would have to be tested against a strong standard that protects the most vulnerable among us, especially children. The same safety standard has already been shown to be effective and feasible when used for determining the safety of pesticides. This bill would give the Environmental Protection Agency the authority to restrict or prohibit chemicals already known to be dangerous. It would also protect the public from smoke-screening secrecy claims.

It is our position that the proposed Safe Chemicals Act of 2011 should be mentioned in the EIR.”
(SFPARKS, letter, December 12, 2011 [O-SFPARKS-23])

“PROBLEMS WITH USING DE MINIMIS LEVELS FOR HEAVY METALS SUCH AS LEAD.
The DEIR uses various reports and studies that choose various de minimis standards to determine acceptable levels of chemicals and metals in the human body to determine cancer risks and toxicity. Often they are very narrow in scope, (i.e. ‘3-year-old child’, ‘one-time ingestion’)

The EIR quotes from a study regarding runoff from synthetic fields; ‘The predominant metals identified in the leachate from the crumb rubber material were zinc, followed by copper, manganese, and lead.’ (DEIR page IV.G-9)

In her 2009 paper at Massachusetts Institute of Technology, ‘Determining the Concentration of Lead in MIT Athletic Facilities and Estimating Student-Athlete Exposure to Lead’, Alison M. Barnard wrote, ‘Lead has a half-life of approximately 30 days in the blood.’ (page 16) ...Additionally Ms. Barnard found that, ‘The two ways in which lead can enter the body are through absorption in the lungs or absorption in the gastrointestinal tract (Goldman 2008). Inhalation of lead through the respiratory tract is the dominant method by which lead enters the adult body. Approximately 40% of the lead that is inhaled is absorbed (Fischbein 2007).

In contrast, the main route of exposure in children is through GI absorption, and absorption is estimated to be as high as 50% (Fischbein 2007).

In adults and children, once lead is absorbed, 99% of the lead binds to red blood cells known as erythrocytes, and the rest can enter the brain, bone marrow, and kidney.

It is our position that, since lead has been found to have a half-life of 30 days in the blood, then to determine a users cumulative exposure after 30 days of daily exposure would require multiplying the daily exposure by 30.

Lead and Human Physiology;

‘A clinical study used a ^{204}Pb isotopic tracer to estimate the amount of lead absorbed during exposure to air of known lead concentration. It was found that 1411g/day of lead was absorbed by

men exposed to ambient air containing 2 $\mu\text{g}/\text{m}^3$ of lead. ('Magnitude of Lead Intake from Respiration by Normal Man.' ...).

In reference to elevated lead levels found at some New Jersey artificial fields, 'New Jersey epidemiologist Dr. Eddy Bresnitz said the lead levels were not high enough to cause poisoning in people who play on the fields. However, he said the levels could cause more damage in children already exposed to lead.'

'absorption of lead is higher in an empty stomach than after a large meal (Rabinowitz 1980).' ('Effect of Food Intake and Fasting on Gastrointestinal Lead Absorption in Humans.' American Journal of Clinical Nutrition 33 (1980)).

'Overexposure to lead and lead poisoning can be difficult to diagnose due to the nonspecific symptoms of overexposure. In children, who are most susceptible to lead poisoning, symptoms range from mood changes such as irritability to gastrointestinal problems such as vomiting and constipation (Mayo Clinic 2007). Although lead poisoning is more rare in adults, they are still at risk especially if they have occupational exposure. The symptoms of overexposure for adults are even more nonspecific than those displayed by children. Symptoms include headaches, abdominal pain, and memory loss (Mayo Clinic 2007).'

'In order to test for lead poisoning that is ongoing or occurred in the previous three weeks, doctors routinely conduct a blood lead level test (Hu 2007). When testing for more chronic lead exposure, tests of free erythrocyte protoporphyrin (FEP) levels are accurate indicators of lead exposure that has taken place in the previous three months (Hu 2007).'

'Lead contamination is of particular concern because lead has no useful function in the body but it harms children's intelligence at quite low concentrations in the body. Since 1973, the action level of lead in children's blood (the point at which exposure reduction is recommended) has been lowered from 40 to 10 $\mu\text{g}/\text{deciliter}$, and the argument has been made that it should be lowered even further to 2 $\mu\text{g}/\text{deciliter}$. Toxicologist Steven Gilbert notes, 'Currently, there appears to be no safe level of lead exposure for the developing child.' Lead is listed as a carcinogen and developmental toxicant by the State of California.' Philip Dickey, ('Occurrence of Bromine, Lead, and Zinc in Synthetic Turf Components', page 7-8), (In reference San Francisco Department of the Environment's (SFE's) evaluation of synthetic turf products (PDF from SFEnvironment) <http://sf-recpark.org/ftp/uploadedfiles/wcmrecpark/SPTF/rptsyntheticurftesting1007.pdf>

'Although bromine was the main focus of this investigation, several other elements of concern were apparently found in some samples at quite high concentrations. These included arsenic, mercury, lead, and zinc.' (pages 4-5) 'Occurrence of Bromine, Lead, and Zinc in Synthetic Turf Components' Philip Dickey, (In reference San Francisco Department of the Environment's (SFE's) evaluation of synthetic turf products ...

Adam K Rowden, DO (Director, Division of Toxicology, Department of Emergency Medicine, Albert Einstein Medical Center) said about pediatric lead poisoning, 'Lead poisoning is probably the most important chronic environmental illness affecting modern children.' 'In children,

virtually no organ system is immune to the effects of lead poisoning. Perhaps the organ of most concern is the developing brain. Any disorganizing influence that affects an individual at a critical time in development is likely to have long-lasting effects. Such is the effect of lead on the developing brain. Effects on the brain appear to continue into the teenaged years and beyond. The literature suggests that significant insult to the brain of children occurs at very low levels and that medical intervention with chelation fails to reverse [http://\(medicine.medscape.com/article/1174752-overview](http://(medicine.medscape.com/article/1174752-overview)" (SFPARKS, letter, December 12, 2011 [O-SFPARKS-24])

"SYNTHETIC TURF FIBERS. The 'Conestoga-Rovers & Associates report, 'Results of Laboratory Analytical Testing Artificial Turf Field City Fields Foundation. August 26,2009', stated, 'Sampling at each field included collection of two wipe samples each from green and white turf materials; one turf fiber sample each from green and white striped turf;' (DEIR page IV.H-18)

The Crocker Amazon testing report C-R & Assoc. for Sportex, (synthetic turf manufacturer), as supplied by City Fields Foundation to DEIR authors stated, 'Area with painted markings were avoided.'

It is our position that City Fields Foundation and Sportex supplied a turf sample analysis that minimized the chances of a high lead level reading. It is well known in the industry that 'Lead chromate' or 'chrome yellow' is the main source of elevated lead in turf fibers. By selecting the white and green fibers, and avoiding the yellow and brownish fibers used on City Fields/San Francisco installations, they provided a potentially skewed result.

Independent XRF screening of the yellow lines at San Francisco's Crocker Amazon & South Sunset fields came up 1% lead in 2011.

'The Consumer Product Safety Commission (CPSC), found in its study that red, yellow, and green blades had different levels of lead related to the different pigments used (CPSC 2008). Important outcomes of the CPSC study were the quantification of lead concentrations in turf samples and typical exposure and bioavailability of the turf for estimates of the daily ingestion of lead from turf fields. Ingestion of turf fiber fragments was assumed to be the main route of exposure, and that during field use; a certain number of fibers could collect on the hands of the user and be subsequently accidentally ingested. '(Barnard, page 38) ...

'At MIT, it was found that the concentration of lead in turf from Jack Barry field varied widely from location to location with the four different samples registering 44.7, 328.0, 3758, and 6007 ppm. The wide range in lead concentrations could be a result of small samples from a heterogeneous source that produced apparent variations in lead concentration' (Barnard, page 39) ...

In reference to elevated lead levels found at some New Jersey artificial fields, 'New Jersey epidemiologist Dr. Eddy Bresnitz said the lead levels were not high enough to cause poisoning in

people who play on the fields. However, he said the levels could cause more damage in children already exposed to lead.'

The DEIR states, 'Because turf fibers are not expected to be directly ingested by field users, wipe samples were used to evaluate the amount of lead in dislodgeable dust that could be picked up by children's hands and inadvertently digested.' (DEIR IV.H-18)

It is our position that, the expectation that users, (including children and animals), are not expected to ingest turf fibers is not based in our common experience of their behaviors and should be eliminated, and all considerations based on this expectation be reconsidered.

Other chemicals of concern in synthetic turf fiber that are not mentioned in this DEIR; Phthalates, Quaternary Ammonium Biocides, Oleamide, Bisphenol A, Acetone, Urethane, synthetic rubber (and Latex). (The various forms of synthetic rubber includes elastomers, ethylene propylene rubber (EPM) and ethylene propylene diene (EPDM) rubber. An elastomer is a polymer with the property of elasticity; thermoplastic elastomers (TPE) is used in making the turf granules or crumb pellets, as are EPM and EPDM.)" (SFPARKS, letter, December 12, 2011 [O-SFPARKS-25])

"INGESTION OF SYNTHETIC TURF PRODUCTS' (DEIR IV.H-29). Conclusions and opinions were formed in this DEIR based on only 2 studies.

One was the 2007 OEHHA study which 'assessed the health risks resulting from ingestion of shredded tires, which are similar to tire-derived SBR material.' (page IV.H-29)

It is our position that there are many crucial differences between shredded tires used for playground padding as explored in the report and the SBR tire crumb used on synthetic fields. This report explored 'rubber tire shreds that are poured-in-place along with a binder, hardening into a permanent surface,' (page 4). It did NOT look into loose SBR Tire Crumb which has a completely different constituency and completely different ingestion, inhalation, and dermal uptake dynamics.

This report used as its basis of analysis 'a one-time ingestion of a 10-gram piece of shredded tire'. This does not account for the ingestion of tire crumb and dust. It does not account for the inhalation of tire crumb and dust. It does not account for the dermal uptake of tire crumb and dust.

The gastric simulation was based on tire shreds. SBR Tire Crumb and Dust have a quantum leap difference in surface area compared to a tire shred. Tissue and human organ absorption of the tire chemicals would be dramatically different.

The other study was The Bainbridge Island evaluation, (2008), which is a limited literature review which relied heavily on the above 2007 OEHHA study.

The DEIR found that; ‘impacts related to ingestion of synthetic turf would be less than significant.’ IV.H-29

It is our position that

- based on the limitations of the cited studies,
- and the developing data being produced since these reports were produced regarding the carcinogenic nature of SBR tire crumb,

that impacts related to ingestion of synthetic turf would be potentially significant.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-26])

“DERMAL CONTACT WITH SYNTHETIC TURF PRODUCTS’ (page IV.H-29). Used the same two studies as the above ‘Ingestion of Synthetic Turf Products’.

One was the 2007 OEHHA study which ‘assessed the health risks resulting from ingestion of shredded tires, which are similar to tire-derived SBR material.’ (page IV.H-29)

It is our position that there are many crucial differences between shredded tires used for playground padding as explored in the report and the SBR tire crumb used on synthetic fields. This report explored ‘rubber tire shreds that are poured-in-place along with a binder, hardening into a permanent surface,’ (page 4). It did NOT look into loose SBR Tire Crumb which has a completely different constituency and completely different ingestion, inhalation, and dermal uptake dynamics.

The other study was The Bainbridge Island evaluation, (2008), which is a limited literature review which relied heavily on the above 2007 OEHHA study.

The DEIR found that; ‘impacts related to dermal contact of synthetic turf would be less than significant.’ IV.H-29

It is our position that

- based on the limitations of the cited studies,
- and the developing data being produced since these reports were produced regarding the carcinogenic nature of SBR tire crumb,

that impacts related to ingestion of synthetic turf would be ‘potentially significant.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-27])

“SBR TIRE CRUMB SAMPLING LIMITATIONS. SBR Tire Crumb is a heterogenous, non-homogenous mixture and as such cannot be accurately sampled or tested as if it were consistent.

It is our position that as such, no sample taken is a true indicator and cannot be taken as an accurate representation of the whole.

- Because SBR Tire Crumb is derived from a variety of manufacturers from around the world, (There are around 450 tire factories in the world.)
- Because SBR Tire Crumb is derived from tires from a broad range of production dates, (decades), (Only since 2000 have tire production dating followed a uniform code regulated by the U.S. DOT.)
- Because SBR Tire Crumb is derived from various parts of the tire which have different constituents and manufacturing processes, (i.e. side wall, tread, inner lining, ply, tread lug, etc.), and construction types, (bias, belted bias, solid, semi-pneumatic),
- Because SBR Tire Crumb includes 'Tire Wear Particles', (TWP are agglomeration of material from the tire along with material from the road, vehicles, and the uptake of diesel incorporated through exhaust fumes bonding to the tires.
- Because SBR Tire Crumb is derived from a process that bags the material after shredding/pulverizing,
- Because SBR Tire Crumb spread on the field directly from the bag,

It is our position that as a heterogeneous, non-homogenous mixture, no SBR Tire Crumb sample taken is a true indicator and cannot be taken as an accurate representation of the whole.

Because the amount of unregulated heterogeneous, non-homogenous mixture introduced at only a single football field is in the tons. (Beach Chalet and alternative 2 / West Sunset would be in the 100s of tons.), and, because the sample size utilized to test this unregulated variegated, non-heterogeneous, non-homogenous is in grams, it is our position that majority of tests cited by this DEIR are inherently insufficient.

It is our position that the state of the art for accurate and quality sampling and data interpretation of SBR tire crumb and plastic synthetic fields has inherent and profound flaws and weaknesses. It is our position that 100% of the cited reports utilized a methodology that is insufficient for the task of determining the makeup of 1000s of tons of multi-sourced, non-heterogeneous, nonhomogenous material used in a SBR based synthetic field. It is our position that in considering the many constituents and types of constituents, that the unknown factors create a significant hazard. Despite that, reports evaluating Synthetic fields, including those cited by the Draft EIR for the Beach Chalet, report their findings as sufficient and conclusive.

'A comparison of the chemicals detected in the air above the same two artificial turf fields that comprised the studies by New York State (2009) and TRC (2009) shows that chemical concentrations were consistently higher in the New York State (2009) study, ranging from 1.7-fold to 85-fold higher. The reasons for these differences are unknown. These variable results highlight the difficulties faced in obtaining consistent results from potential point sources of

outdoor air pollution.’ (2009) New York City Department of Health and Mental Hygiene, ‘Air Quality Survey of Synthetic Turf Fields Containing Crumb Rubber Infill’ ...

In 2009 ‘A Scoping-Level Field Monitoring Study of Synthetic Turf Fields and Playgrounds’, (EPA/600/R-09/135 November 2009 www.epa.gov/ord - Prepared by the National Exposure Research Laboratory Office of Research and Development U.S. Environmental Protection Agency with contributions from the Agency’s Tire Crumb Science Workgroup ...

The following are some excerpts from their report;

- ‘There is evidence that the material is not homogeneous with regard to some constituents (Pb for example). Future site characterization studies should be considered to evaluate the issue of sample heterogeneity and the impact on data interpretation.’ Page 5
- ‘No evaluated method was available for assessing dermal and indirect ingestion from tire crumb constituents in turf field or playground surfaces. A standard surface wet wipe sample collection method for residential lead (Pb) measurement was used at the synthetic turf fields.’ Page 5
- ‘The in vitro Pb bioaccessibility method was judged not appropriate for the surface wipe samples. Because the in vitro method has been validated only for soil samples, additional validation studies would be required to fully demonstrate the relevance of the method for tire crumb and turf blade materials.’ Page 5
- ‘Although the methods appeared to perform reasonably well, a number of sample handling, size, and heterogeneity issues were discovered that may affect method performance and data interpretation.’ Page 5
- ‘There is a lack of appropriate QC/OA materials and spiking methods. QA/QC materials and procedures need further development for the methods as applied to these materials.’ Page 5
- ‘The wipe, tire crumb, and turf blade data identified a potentially significant variability in source contribution based on turf field blade color and type, along with the tire crumb fraction being analyzed. Additional research is needed to understand the factors influencing the reported variability before future studies are designed and conducted. Understanding the variability is important in developing improved approaches for site characterization.’ Page 5
- ‘Methods for analysis of metals in synthetic turf field and playground components showed good precision, but the assessment of recovery for some metals was difficult because of the non homogeneity of the bulk materials.’ Page 5,6
- ‘Additional validation efforts may be needed to interpret measurement results, particularly with regard to bioaccessibility of metals in synthetic turf field and playground components.’ Page 6
- ‘Research is needed to better understand relative source contributions, in particular for the wipe and air particle samples.’ Page 6
- ‘Testing and application of personal sampling methods would provide a more complete understanding of how environmental concentrations translate into potential exposures.’

Methods for collection and analysis of SVOCs were not tested in this scoping study but would be needed for a full characterization.’ Page 6

It is our position that these findings have a significant impact on the validity and interpretation of the reports cited in the Draft EIR for the Beach Chalet renovation.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-28])

“**TIRE WEAR PARTICLES (TWP).** Tire wear particles (TWP) are agglomeration of material from the fire along with material from the road and vehicles.

The uptake of diesel is incorporated through exhaust fumes bonding to the tires. Diesel exhaust contains over 40 organic chemicals identified by the EPA as Hazardous Air Pollutants (HAPs), also called air toxics, which are either suspected to cause cancer or create other serious health risks.

The organic chemicals that are of special concern include aldehydes, benzene, 1,3-butadiene, and polycyclic aromatic hydrocarbons (PAHs). It is the PAH’s that are believed to create much of the cancer risk posed by diesel exhaust. In fact, because diesel exhaust contains so many substances that contribute to both a cancer and noncancer health risks in humans, the EPA considers diesel exhaust to be a mobile source air toxic.

Tests are of limited use because of concerns about the techniques used to identify the particles, a lack of standards in analytical techniques, a lack of standard collection methods, as well as seasonal effects.

It is our position that the lack of study available on the effect of TWP on users exposed to SBR Tire Crumb infilled athletic fields constitutes a potential health risk and ‘potentially significant impact’.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-29])

“**NITROSAMINES.** In the manufacture of tires nitroso compounds and aromatic amines are used. One nitrosamines study from the Netherlands in 2006 is mentioned in this Draft EIR.

It is our position that the lack of credible studies available on the effect of nitrosamine exposure to users of tire crumb infilled athletic fields constitutes a potential health risk and ‘potentially significant impact’.

In retail shops and storage rooms of tires, N-Nitrosodimethylamine (NOMA) and Nnitrosomorpholine (NMOR) have been found in air concentrations. Nitrosamines are a class of chemical compounds that have been found to produce liver tumors in rats. (The Linus Pauling Institute) and are listed in this Draft EIR as a carcinogen.

Approximately 300 of these compounds have been tested and 90% of them have been found to be carcinogenic in a wide variety of experimental animals. Most nitrosamines are mutagenic and a number are transplacental carcinogens, being able to journey across or passing through the placenta. Most are organ specific. For instance, dimethylnitrosamine causes liver cancer in experimental animals.

Since nitrosamines are metabolized the same in human and animal tissues, it seems highly likely that humans are susceptible to the carcinogenic properties of nitrosamines. (The Linus Pauling Institute) To determine the role of N-nitrosamines in air concentrations around tire factory workers, 19 factories were measured by area sampling or personal monitoring. N-Nitrosodimethylamine (NOMA) and N-nitrosomorpholine (NMOR) were found regularly, the air concentrations varying between 0.1 and 380 $\mu\text{g}/\text{m}^3$ in personal monitoring. An environmental guideline for N-Nitrosamines in the tire rubber industry states that the total amount of N-Nitrosamines in the atmosphere must be below 1 $\mu\text{g}/\text{m}^3$. The mean concentration was usually in the range of 1-10 $\mu\text{g}/\text{m}^3$." (SFPARKS, letter, December 12, 2011 [O-SFPARKS-30])

"INGESTION OF CHEMICALS OF POTENTIAL CONCERN (COPC). Direct and indirect methods have been used in studies to determine the presence of Chemicals of Potential Concern COPCs in the crumb rubber.

These studies have found polycyclic aromatic hydrocarbons (PAHs), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), benzothiazole, and metals in crumb rubber. They found crumb rubber, or the dust generated from crumb rubber, may be accidentally ingested by placing fingers in the mouth or not washing hands before eating and after playing on the fields. Young children on the fields may eat the crumb rubber itself. Dust may be breathed in from playing on the field, or vapors that volatilize from the turf may also be inhaled. Some COPCs may also be absorbed through the skin by direct contact.

Some individuals such as soccer goalies, catchers, or assertive athletes would tend to have more material kicked into their face. Neighbors living next to a field would have a prolonged exposure to off gassing and dust. Surface proximate infants, children, or adults sleeping on SBR tire crumb would tend to have more intimate exposure. The cumulative daily dose of chemicals need to be considered.

'...the available but limited data on chemicals and particulates in the air above artificial turf are used to estimate the risk of cancer or developmental toxicity to soccer players using these fields. This screen only addresses the inhalation route of exposure. As mentioned above, since Dye et al. (2006) did not measure the metals content of inhalable particulates, this screen does not address the hazards posed by the inhalation of heavy metals such as lead.' - OEHHA (2009)

'Based on the concentration of lead and the estimated amount of turf fibers ingested, the CPSC estimated daily ingestion amounts of around 0.1 μg per day (however, one older field was found to have ingestion levels of 9.9 μg per day). ' - Consumer Product Safety Commission

'It should be noted that although one study discussed in this report did analyze the particulates in the air over these fields (Dye et al., 2006), the particulates were not analyzed for heavy metals, including lead. Therefore, there are no data with which to estimate the health risks from inhalation exposures to heavy metals emitted by these fields via airborne particulates.' - OEHHA (2009)" (SFPARKS, letter, December 12, 2011 [O-SFPARKS-31])

"CHILDREN AND CRUMB RUBBER EXPOSURE. Children, especially very young children, have many characteristics which make them vulnerable to environmental exposures. Children breathe more air per pound of body weight than adults in the same environment and physical activity adds an additional factor to exposure through inhalation.

Children also engage in hand-to-mouth behavior and very young children may eat nonfood items, such as rubber crumbs while on the fields. The protective keratinized layer of the skin is not as well developed in children and increases dermal absorption of COPCs as well as increasing evaporative loss of water on hot days. Children also have many more years to develop diseases with long latency periods after exposure.

To date, eleven human health risk assessments were identified that evaluated exposure to the constituents in crumb rubber.

In 2009 the New York City Department of Parks and Recreation decided that any new artificial fields they purchase must use a different material as its base, or infill layer. So has the Los Angeles Unified School District. 'The health of our students is more important than any other issue,' says LAUSD board member Marlene Canter, 'You should never equate economics with health. In no way should we be skimping on something like this that could affect our kids.' ('Cities Spurn Crumb Rubber in Artificial Fields')" (SFPARKS, letter, December 12, 2011 [O-SFPARKS-32])

"SAN FRANCISCO AND EXPOSURE TO SBR TIRE CRUMB SYNTHETIC FIELDS. 'Synthetic turf products are known to contain metals and volatile organic compounds (VOCs) that have potential for human health toxicity. Possible routes of exposure to chemicals are inhalation, ingestion, and skin absorption. VOCs are released into the air (called off-gassing)' (DEIR Initial Study page 25)

In regards to user exposures to particulates OEHHA wrote, (2009), 'Data are needed for the amount of time athletes spend on artificial turf playing fields. Data are needed for a variety of sports, age groups, and for both men and women. Other subgroups with potentially heavy exposure to fields include coaches, referees, and maintenance workers.'

Additional heavy exposure risks include; specific sports positions, (soccer goalies, catchers), or passive users, (individuals sleeping or napping on field, neighbors living adjacent to fields).

Children find the warm tire crumb to be soothing and tend to place their face on the crumb. This exposes them to intimate doses of particles, dust, bacteria, and off gasses. ..." (SFPARKS, letter, December 12, 2011 [O-SFPARKS-33])

"California Environmental Protection Agency (Cal/EPA). California Integrated Waste Management Board and Office of Environmental Health Hazard Assessment (OEHHA)

The following notations are not meant to impugn the reputation of any group or individual but simply to fit the definition and CEQA requirements and intent that a lead agency 'use its best efforts to find out and disclose all that it reasonably can' and that an EIR reflect 'a good faith effort at full disclosure.' Guidelines § 15144; 151.

CAL/EPA finds itself involved with competing interests. On one hand it engages reputable scientists while at the same time it works with industries and groups with political and commercial agendas.

- Cal/EPA California Environmental Protection Agency is a state cabinet-level agency and is not part of the US Environmental Protection Agency, (EPA).
- OEHHA is a department within Cal/EPA. (California's Office of Environmental Health Hazard Assessment)
- CIWMB was a state agency under Cal/EPA. (California Integrated Waste Management Board) (abolished), (now CalRecycle)

CIWMB used incentive grants and loans to spur the private sector to market California's recycling industry with an emphasis in tire waste. CIWMB provided for the Waste Tire Playground Grant Program to promote markets derived from waste tires.

Charles Vidair (staff toxicologist at Cal/EPA - OEHHA) dominates the national, and possibly the world's, narrative regarding the toxicology of synthetic fields. He is the author of many of the reports most often cited in this Draft EIR as well as in the other government produced reports that are cited in this Draft EIR.

- 2007 INTEGRATED WASTE MANAGEMENT BOARD STUDY 'Evaluation of Health Effects of Recycled Tires in Playground and Track Products' Authored by Charles Vidair, Ph.D., Robert Haas, Ph.D. and Robert Schlag, M.Sc.
- 2008 SAN FRANCISCO SYNTHETIC PLAYFIELDS TASK FORCE REPORT Charles Vidair (author/member)
- 2009 Office of Environmental Health Hazard Assessment Study 'Chemicals and Particulates in the Air above the New Generation of Artificial Turf Playing Fields, and Artificial Turf as a Risk Factor for Infection by Methicillin-Resistant Staphylococcus Aureus (MRSA)', July, 2009 - Author Charles Vidair

- 2010 CALIFORNIA DEPARTMENT OF RESOURCES RECYCLING AND RECOVERY STUDY 'Safety Study of Artificial Turf Containing Crumb Rubber Infill Made from Recycled Tires: Measurements of Chemicals and Particulates in the Air, Bacteria in the Turf, and Skin Abrasions Caused by Contact with the Surface. Author Charles Vidair
- 2011 Tire Conference entitled 'Collaborating to Expand Market Opportunities, Making the Most of Your Product Marketing Opportunities' Speaker - Charles Vidair (also a speaker at the 2010 Tire Conference.)
- Mr. Vidair's reports listed above are cited in, the 'Connecticut Studies', the 'New York State Studies', the 'Bainbridge Island Evaluation', as well as this DEIR.
- Because Mr. Vidair's (OEHHA) reports and assessments have such a prominence we offer the following observations for context.
- Carbon Black was added to the California Office of Environmental Health Hazard Assessment (OEHHA) list of substances known to the State to cause cancer on February 21, 2003. This is never mentioned in any of Mr. Vidair's reports and studies, (2007, 2008, 2009, 2010), nor did he mention it at any of the 2008 San Francisco Synthetic Playfields Task Force Meetings.
- 'New Generation of Artificial Turf' is a promotional catch phrase used to promote and market FieldTurf synthetic fields. Mr. Vidair never once used that phrase in his Studies prior to 2010. In his 2010 report, Mr. Vidair almost completely replaces the phrase 'artificial turf' with 'New Generation of Artificial Turf', (67 times). (FieldTurf / Tarkett Group is the largest entity in the sports synthetic fields industry with over \$1 billion annual revenue.) (Similarly, the national Synthetic Turf Council markets with the phrase 'New Generation of Synthetic Turf')
- Only when pressed in a CBS 5 investigational report, (and after checking off-camera with his departments' press spokesperson). did Mr. Vidair admit to flawed testing with his '2010 California Department of Resources Recycling and Recovery Study' study. (YouTube - [http:\(...\).](http:(...).))

He admitted his department didn't hire contractors in time to conduct airborne tests during the hot summer months. He blamed the state budget crises and admitted that the results would be limited. He said, 'Of course, unless we measure under these different temperatures, we will never know the exact relationship between temperature and volatilization of chemicals,'

CA State Senator Abel Maldonado (R), who authored the bill which called for the research study, called the study 'unacceptable and incomplete'.

Vidair says in the state study: --'It is not known if the following variables influence (particulate) and VOC release from artificial turf fields containing crumb rubber infill: 1) field age; 2) processing of tire rubber at cryogenic vs. ambient temperatures; 3) source of tire stocks (auto vs. truck tires); 4) tire age at the time of processing.' --'The study only measured particle and VOCs above outdoor fields. Indoor fields have received much less attention. Since (particulates) and VOCs have the potential to accumulate in indoor venues, future testing indoors should be considered.' --'The skin abrasion rate for artificial turf may vary according to age group and type of sport.' --'The skin abrasion rate may be different for fields containing crumb rubber processed at cryogenic

temperatures compared to ambient temperatures.’ -’ The skin abrasion rate may vary with field age.’ --’It is not known if skin abrasions caused by artificial and natural turf heal at similar rates.’ --’Few data exist to evaluate whether the bacterial populations of artificial and natural turf vary according to the weather or season.’“(SFPARKS, letter, December 12, 2011 [O-SFPARKS-48])

“It is our position that the conversion of tire waste into SBR Tire Crumb and dust not only maintains its waste-like properties but increases its hazardous properties.

It is our position that this is analogous to removing lead based paint from a hazardous waste site and painting your house with it. You have in fact recycled it, but you have also created a potential hazard to human health and safety or to the environment.

It is our position that the rebranding of tire waste as a safe recycled material is a desperate attempt by government agencies and the Tire Industry to justify years of indulgences in a business model of planned obsolescence. We feel, like the auto industry, it is time to get serious about public health and safety and start prioritizing wise environmental policy over corporate business practices.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-50])

“It is our position that the limited research reported in this DEIR is inadequate to make well informed medical predictions regarding the impact on the complexities of human physiology as the result of exposure to SBR Tire Crumb. It is our position that the methodology utilized by reports cited in this DEIR to form opinions regarding the medical impact of SBR tire crumb and its constituents on the human body is unreliable and does not incorporate the cumulative and associative impact of all of its various chemicals and metals.

We suggest that the use of tests employed in the reports cited by this DEIR, (wipe tests, gastric simulations, air sampling, etc.), is analogous to trying to analyze the cumulative impact of ingesting cigarette tobacco into the human body simply by analyzing each of its chemical components in isolation.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-53])

“It is our position that SBR tire crumb and synthetic turf present a combination of impacts that taken together or separately contribute to significant unavoidable impacts, significant impacts, and/or cumulative impacts. It is our position that the artificial turf SBR tire crumb infill and plastic ‘turf’ present a significant hazard to the public and the environment.” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-54])

“THE SAN FRANCISCO PRECAUTIONARY PRINCIPLE. The San Francisco Precautionary Principle is never mentioned in this DEIR.

It is our position that it should be prominently entered into this report.

It is our position that the following are pertinent excerpts to include into the EIR from the City and County of San Francisco’s Precautionary Principle policy;

- ‘Based on the best available science, the Precautionary Principle requires the selection of the alternative that presents the least potential threat to human health and the City’s natural systems.’
- ‘Any gaps in scientific data uncovered by the examination of alternatives will provide a guidepost for future research, but will not prevent the City from taking protective action.’
- ‘Where there are reasonable grounds for concern, the precautionary approach to decisionmaking is meant to help reduce harm by triggering a process to select the least potential threat.’
- ‘There is a duty to take anticipatory action to prevent harm.’

...‘It’s a good idea to avoid using potentially harmful products if safer alternatives are available. And it isn’t right that everyday citizens bear the risk of harm from products or practices that might be hazardous. That’s why the city has adopted a Precautionary Principle Ordinance that doesn’t merely ask if a product is safe; it also asks if the product is necessary in the first place. The precautionary approach seeks to minimize harm by using the best available science to identify safer, cost-effective alternatives.’ – SFEnvironment” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-55])

“The discussion in the DEIR of the possible release of toxins and other harmful substances leached from synthetic fields raises a number of general issues, including the following:

- There is no discussion of harmful phthalates and other organic compounds found in synthetic turf, many of which are listed on California’s Proposition 65 list as possible carcinogens or endocrine disrupters.” (Jean Barish, letter, December 12, 2011 [I-Barish-09])

“The impact of a man-made or natural disaster that might increase the release of harmful or toxic materials into the environment needs to be considered.

Most of the research discussed in this section was not done in the field, but in the laboratory. That kind of research is less valid.” (Jean Barish, letter, December 12, 2011 [I-Barish-11])

“Please identify all substances that have been found in artificial turf and tire crumb infill, including but not limited to metals, phthalates, carbon black, and other substances that are known to be or are

believed to be harmful to human health and the environment. In what amounts are these substances released from artificial turf and tire crumb into water runoff and ground water per year and during the life of the synturf?" (*Jean Barish, letter, December 12, 2011 [I-Barish-12]*)

"The DEIR stated that the San Francisco Synthetic Playfields Task Force (the 'Task Force') did not find independent studies that specifically addressed the effect of synturf on the ecosystem. Please review Dworsky, C., et al., 'Runoff Water from Grass and Artificial Turf Soccer Fields: Which Is Better for the Soccer Player, the City and the Environment?'

The DEIR states that the synthetic turf will meet standards set by the SF RPD Synthetic Playfields Task Force. What other organizations have standards and how do the Synthetic Playfields Task Force standards compare to those of other organizations and jurisdictions?" (*Jean Barish, letter, December 12, 2011 [I-Barish-13]*)

"As the DEIR readily admits, there has been a great deal of public concern regarding health issues related to the use of synthetic turf with tire crumb infill. There is a wealth of information regarding these potential health hazards from all over the world, many of which conclude that the product raises significant health and environmental concerns. Unfortunately, the DEIR failed to consider many studies and papers that discuss these issues, and skewed the studies that it did consider. Some of these issues are discussed in section IV.G - Hydrology, above.

The studies that are referred to in this section of the DEIR state there is a need for additional information and research regarding the risks of artificial turf before it can be considered safe enough to use on athletic fields. These safety considerations are especially important since the proposed fields will be used by young children, who are known to be more vulnerable to environmental toxins.

In addition to concerns discussed above about the impact of artificial turf with tire crumb on hydrology and water quality, there are many other issues that must be considered when reviewing the environmental safety of artificial turf. These include:

- The effect of chemicals and particulate matter in tire crumb, including toxic metals, volatile organic carbons, phthalates, carbon black, allergens, other carcinogens and endocrine disrupters, that can be released into the air and water;
- The effect of chemicals and particulate matter in tire crumb, including toxic metals, volatile organic carbons, phthalates, carbon black, allergens, other carcinogens and endocrine disrupters, that can enter the body through ingestion, inhalation, skin contact, eye contact, and the like; ..." (*Jean Barish, letter, December 12, 2011 [I-Barish-17]*)

“None of these issues were thoroughly researched in the DEIR. Only a few studies were cited, each of which looked at only one of the many issues that must be considered. None of the research considered the long-term exposure to artificial turf, nor were the cumulative effects considered.

Following are comments on studies cited in the DEIR:

2007 OEHHA Study

The results of this study are not conclusive. This study estimated a one-time ingestion of tire crumb using a gastric simulation device. This is merely a simulation and should not be basis for any conclusion regarding the health impact of long-term exposure to tire crumb under in-use conditions. The report states: ‘However... we have not calculated the increased cancer risk for other than a one-time ingestion.’ Additionally, this study evaluated health risks based on wipe sampling. Results showed a slight increased cancer risk from chrysene, a known carcinogen.

Synthetic Playfields Task Force

The task force recommendation not to use zinc, when feasible, is unacceptable. Elevated levels of zinc can be toxic. According to Table IV.H-2 artificial turf leachate has up to 250mg/L of zinc, whereas the California drinking water standard is 5.0mg/L. Also, the study group ‘recommended further study evaluate whether recycled tire infill is a pollution source and if off-gassing from these materials could result in adverse health effects ...’ And there are no specific plans for how these fields will be recycled, despite the fact that the safe disposal of approximately 400 tons of debris per field must be properly recycled. Absent a careful recycling plan, it is not safe to install these fields.

2009 OEHHA Study

This study determined that the increased risk of cancer from off-gassing was above the *de minimus* level for five of the eight chemicals tested. Additionally, the study concluded that ‘further studies of the chemicals present above synthetic turf fields is warranted.’

2010 California Department of Resources Recycling and Recovery Study

This study measured the release of VOCs four feet above the fields. Since many young, small children play on these fields, this is not a realistic test. The test only measured the presence of VOCs above three Bay Area fields. Further, these limited studies ‘did not consider certain variables that could affect the generation of VOCs and particulates at synthetic fields, including field age, method of processing the tire rubber, and the source of the tire stocks. (IV. H-11-12)

Connecticut Studies

This study measured the concentrations of VOCs and the leaching of chemicals in laboratory conditions and in stormwater runoff. Air samples at only four outdoor fields were taken. Benzothiazole was measured at an unacceptably high level in an indoor field. The study

concluded that the cancer risks were above *de minimus* levels for cancer risk. The study had significant limitations, including that it did not study other routes of exposures, such as ingestion and contact; some chemicals of potential concern, such as natural rubber latex, were not included; the project had a potential for selection bias because participation was voluntary and self-selected; and, the sample size was small (4 outdoor fields and 1 indoor field).

Evaluation of San Francisco Synthetic Turf Installations

Infill samples were only analyzed for metals. Additionally, the cobalt and zinc levels exceeded the residential ESL. There is no indication of how many samples were taken or over what period of time. Additionally, there was no air sampling or sampling of water runoff or groundwater leachate.

In addition to the studies above there is a great deal of research the DEIR did not consider that states that synthetic turf fields with tire crumb infill poses a health hazard that should be considered. Many of these studies are at www.synturf.org. Additionally, the non-profit organization Environment and Human Health, Inc. published a survey of research on the safety of artificial turf called Artificial Turf. Their conclusion: *There is enough information now concerning the potential health effects from chemicals emanating from rubber tire crumbs to place a moratorium on installing any new fields or playgrounds that use ground-up rubber tires until additional research is undertaken.*

Most recently, and perhaps most significantly, the city of Piedmont, CA, in the East Bay published a DEIR reviewing environmental impacts of a proposed artificial turf soccer field complex in Moraga Canyon. (Public Review Draft Environmental Impact Report, Moraga Canyon Sports Fields Project, Piedmont, CA. ... Following their comprehensive review of the research, the DEIR concluded that: *...the installation of synthetic turf field surfaces ... has the potential to expose users and the environment to product constituents (e.g., heavy metals, polyaromatic hydrocarbons, volatile organic compounds, polychlorinated biphenols) that may have human and environmental health implications. Due to the lack of final consensus in the scientific community regarding the safety of synthetic turf, the implementation of the mitigation measures identified in Section 4.5 of this EIR would minimize the potential risk from the use of synthetic turf fields, but not to a less than significant level. **The installation of synthetic turf would result in a significant and unavoidable impact.*** (p. 351)

Precautionary Principle

On June 30, 2008, City Ordinance 113-08 officially adopted San Francisco's Environmental Code, which is guided by the Precautionary Principle, as follows:

SEC. 101. THE SAN FRANCISCO PRECAUTIONARY PRINCIPLE Based on the best available science, the Precautionary Principle requires the selection of the alternative that presents the least potential threat to human health and the City's natural systems... Simply put, the Precautionary Principle means 'Safety First.' More precisely, it stands for the proposition that when an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically. In this context the proponent of an activity, rather than the public, should bear the burden of proof.

Conclusion: Synthetic Turf with Tire Crumb Infill Has Significant Environmental Impacts that Cannot be Mitigated

When viewed in light of the Precautionary Principle, the hazardous impacts of the proposed project are clearly significant and cannot be mitigated. There is simply too much risk to human health to take a chance on an entire population of users. And, in accordance with the Precautionary Principle, when there is too much risk a project should not proceed. Tire crumb contains many compounds, including toxic metals, volatile organic carbons, phthalates, carbon black, allergens, and endocrine disrupters, that are carcinogenic or otherwise toxic. These toxins appear in water runoff, leachate and in the air. Rubber tire crumb gets attached to clothing, shoes, and skin. It should also be pointed out that the California EPA has very strict regulations on the disposal of rubber tires because they are toxic, yet does not regulate the disposal of rubber tire crumb. It is as though by grinding up the toxic material in tires and spreading it on artificial grass it becomes non-toxic.

Finally, and perhaps most important, the DEIR does not have any studies on the long-term, cumulative impacts of continuous exposure to artificial turf with rubber tire infill. Studying the short-term impacts of isolated components of artificial turf does not answer the critical question: *What are the health and environmental impacts of long-term exposure to all of the components in artificial turf with tire crumb infill?* Short-term studies of individual components does not provide valid and reliable data upon which to base a decision that will impact the health of users of these fields, especially young and vulnerable children, for years to come. Absent these studies and in view of the Precautionary Principle, the Environmental Impact Report should conclude that the Hazards and Hazardous Materials and Air Quality impacts of the project are significant and cannot be mitigated." (*Jean Barish, letter, December 12, 2011 [I-Barish-23]*)

"The Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65) requires the publication of a list once per year of chemicals known to the State to cause cancer or reproductive toxicity. Please identify all chemicals contained in artificial turf and tire crumb infill that are on the current list of chemicals listed under Proposition 65.

Volatile Organic Compounds. Volatile organic compounds (VOCs) are a class of carbon-based chemicals that vaporize at room temperature, releasing gases into the air. Human exposure routes of VOC's include inhalation, skin absorption and ingestion, which can easily occur during normal play activities. VOCs include but are not limited to compounds listed under Proposition 65. For this EIR please answer the following questions. Unless otherwise specified, all questions refer to effects under real-life/in-use conditions of the product:

Please identify all the VOCs that are in artificial turf and tire crumb infill." (*Jean Barish, letter, December 12, 2011 [I-Barish-27]*)

“What is the amount of off-gassing of these VOCs during the lifetime of the artificial turf and tire crumb infill?”

Please identify all VOCs in artificial turf and crumb rubber that have health effects, including but not limited to allergic effects, thyroid and other endocrine effect, neurological effects, skin, eye and/or respiratory irritation, and increased risk of cancer?

What is the amount of exposure to humans and animal life from inhalation, dermal contact, ingestion, and the like, of these VOCs during the lifetime of the fields?

What are all the risks to human health of exposure to these VOCs to those playing on the fields, spectators, and others not on the fields, including but not limited to the risk of allergic reactions, thyroid and other endocrine effects, neurological effects, skin, eye and/or respiratory irritation, and increased risk of cancer, during the lifetime of the fields? Please indicate if the risks vary by age and/or gender.

What are all the risks of exposure to these VOCs to human health, including but not limited to the risk of allergic reactions, thyroid and other endocrine effects, neurological effects, skin, eye and/or respiratory irritation, and increased risk of cancer, from artificial turf and tire crumb infill due to migration of artificial turf and/or tire crumb from the primary playing site to other sites during the lifetime of the fields? Please indicate if the risks vary by age and/or gender.

What are all the risks of exposure to these VOCs to plant and animal life during the lifetime of the fields?

What is the effect of VOCs on the odor of the surrounding environment?” (*Jean Barish, letter, December 12, 2011 [I-Barish-28]*)

“Toxic metals have been defined as metals that are not essential minerals, are in the wrong form, and/or have no known biological role. They are sometimes referred to as heavy metals. Toxic metals are known to bioaccumulate in the body and in the food chain. A common characteristic of toxic metals is the chronic nature of their toxicity. Toxic metals include, but are not limited to lead, cadmium, arsenic, and zinc. Unless otherwise specified, all questions refer to effects under real-life/in-use conditions of artificial turf with tire crumb infill:

- Please identify all the toxic metals that have been found in artificial turf and tire crumb infill.
- What toxic metals and in what amounts are these toxic metals released from artificial turf and tire crumb into ground water during the life of the product?
- What toxic metals and in what amounts will these toxic metals run off into San Francisco Bay, the Pacific Ocean, and the surrounding environment through storm drains and surface runoff during the lifetime of the fields?

- What toxic metals and in what amounts will these toxic metals migrate during the life of the product from the artificial turf and tire crumb infill as the result of tracking on shoes and clothes, leaching, wind transport, and the like?
- What is the amount of human and environmental exposure of these toxic metals, due either to direct exposure to artificial turf and tire crumb infill and/or due to migration of product due to tracking on shoes and clothes, leaching, wind transport, and the like?
- What are all the risks of exposure to these toxic metals to those playing on the fields, spectators, and others not playing on the fields, including but not limited to the risk of allergic reactions, thyroid and other endocrine effects, neurological effects, skin, eye and/or respiratory irritation, and increased risk of cancer, during the lifetime of the fields? Please indicate if the risks vary by age and/or gender.
- What are all the risks of exposure to these toxic metals including but not limited to the risk of allergic reactions, thyroid and other endocrine effects, neurological effects, skin, eye and/or respiratory irritation, and increased risk of cancer, due to migration of artificial turf and/or tire crumb from the primary playing site to other sites during the lifetime of the fields? Please indicate if the risks vary by age and/or gender.
- What are all the risks of exposure to toxic metals to plant and animal life in artificial turf and tire crumb infill during the lifetime of the fields?" (*Jean Barish, letter, December 12, 2011 [I-Barish-29]*)

"What are all the risks to plant and animal life of exposure to toxic metals in artificial turf and tire crumb infill during the lifetime of the fields?

Is artificial turf with tire crumb infill flammable? If so, under what conditions and what measures will be taken to minimize the risk that the turf will ignite?" (*Jean Barish, letter, December 12, 2011 [I-Barish-32]*)

"The use of carcinogenic chemicals used to produce the artificial turf" (*Eddie Bartley, letter, November 29, 2011 [I-Bartley-09]*)

"The EIR is obviously flawed and inadequate in its minimizing of the huge construction's effects on ... chemical pollution, ... for the whole western Sunset district." (*Michael Brant, letter, December 2, 2011 [I-Brant-02]*)

"I attended the Planning Commission meeting on Dec. 1 and heard speaker after speaker present lucid, compelling arguments refuting the DEIR's conclusions. They addressed the destruction of

... toxicity of the material used in the artificial turf," (*Gary Browd, letter, December 7, 2011 [I-Browd-03]*)

"Proponents of artificial turf advocate for it as a way of re-using discarded tires. Our natural world is experiencing a complete overload on waste from petroleum byproducts. Artificial turf is a non-biodegradable waste product made of toxic material.

Children playing, wildlife, casual users of the park, and park neighbors are not the beneficiaries of artificial turf--the artificial turf companies are.

Introduction of a toxic non biodegradable waste product into our park when San Francisco is in the forefront of recycling and clean energy is contrary to the positive direction the city is heading." (*Nancy Buffum, letter, December 12, 2011 [I-Buffum-07]*)

"Preserving the original intent of creating a natural setting has nothing to do with replacing the natural grass fields with a toxic field of rubber, heavy metals and petroleum by-products." (*Joseph Butler, public hearing comment [I-Butler-02]*)

"Artificial grass is made from unsustainable, environmentally unfriendly petrochemical plastic. This is inherently unhealthy for us, for our children, our grandchildren and for the earth." (*Flora Colao, letter, November 23, 2011 [I-Colao-01]*)

"The draft EIR states the following: 'This environmental impact report (EIR) analyzes potential environmental effects associated with the Beach Chalet Athletic Fields Renovation Project (proposed project or project), which includes various physical and operational changes at the existing Beach Chalet Athletic Fields, an approximately 9.4 acre public sports field facility located at 1500 John F. Kennedy Drive, along the western edge of Golden Gate Park.'

So the key wording above is 'analyzes potential environmental effects' - that's what it's supposed to do. This proposed project would be situation in Golden Gate Park so any valid EIR would consider the impact of putting over 300 tons of small oil-based tire particles.

(There's 2 - 3 lbs of tire infill per square foot and approximately 7 acres of field so if you multiply 2 lbs per square foot by 7 acres, you get over 300 tons of tire particles)." (*William Crowley, letter, December 10, 2011 [I-Crowley-01]*)

“As it turns out, the tire particles, being oil-based, contain several cancer-causing carcinogens. Thus common sense says that it would not be good to spread 300 tons of such carcinogens into the ecosystem. If the project sponsors think it is okay to do that, then it is up to them to prove that all those hundreds of tons of carcinogen-containing tire particles would do no harm. But they don’t and the EIR completely ignores the subject.

Carcinogens in the tire particles. The problem with putting oil-based particles in GG Park is that new findings are constantly being made about those particles. In November of 2008, a paper was published titled, Hazardous chemicals in synthetic turf materials and their bioaccessibility in digestive fluids.

This paper can be found at Pubmed.org - a site run by the NIH if the title is put in. Here is the heading for the paper:

... Hazardous chemicals in synthetic turf materials and their bioaccessibility in digestive fluids.

Zhang JJ, Han IK, Zhang L, Crain W.

School of Public Health, University of Medicine and Dentistry of New Jersey,...

This paper finds that the tire infill contains oil-based, cancer-causing ingredients at levels that, if it were in the ground, would require the ground to be dug up. Here’s is the abstract from the paper

Abstract

Many synthetic turf fields consist of not only artificial grass but also rubber granules that are used as infill. **The public concerns about toxic chemicals possibly contained in either artificial (polyethylene) grass fibers or rubber granules have been escalating** but are based on very limited information available to date. The aim of this research was to obtain data that will help assess potential health risks associated with chemical exposure. In this small-scale study, **we collected seven samples of rubber granules and one sample of artificial grass fiber from synthetic turf fields at different ages of the fields.** We analyzed these samples to determine the contents (maximum concentrations) of polycyclic aromatic hydrocarbons (PAHs) and several metals (Zn, Cr, As, Cd, and Pb). We also analyzed these samples to determine their bioaccessible fractions of PAHs and metals in synthetic digestive fluids including saliva, gastric fluid, and intestinal fluid through a laboratory simulation technique. **Our findings include: (1) rubber granules often, especially when the synthetic turf fields were newer, contained PAHs at levels above health-based soil standards. The levels of PAHs generally appear to decline as the field ages. However, the decay trend may be complicated by adding new rubber granules to compensate for the loss of the material.** (2) PAHs contained in rubber granules had zero or near-zero bioaccessibility in the synthetic digestive fluids. **(3) The zinc contents were found to far exceed the soil limit. (4) Except one sample with a concentrations of lead 53 p.p.m., according to soil standards. However, 24.7-44.2 % of the lead in the rubber granules was bioaccessible in the synthetic gastric fluid. (5) The artificial grass fiber sample showed a chromium content of 3.93 p.p.m., and 34.6% and 54.0% bioaccessibility of lead in the synthetic gastric and intestinal fluids, respectively.** (End of Abstract)

Here is a very important excerpt from the paper which can be found at the link above:

Start of Excerpt

In the absence of a better set of health-based standards as reference, we compared PAH concentrations in the rubber granule samples to the PAH concentration levels that the New York State Department of Environmental Conservation (DEC) considers sufficiently hazardous to require the removal from contaminated soil sites (DEC, 2006). Chrysene was found to be above the DEC residential contaminated soil limit of 1.0 p.p.m. in five of the seven rubber granule samples (1, 2, 5, 6, and 8). Dibenzo(a,h)anthracene was also found above the DEC limit of 0.33 p.p.m. in five of the seven samples (1, 2, 5, 6, and 7). Benzo(b)fluoranthene and benzo(k)fluoranthene were each at or above the DEC limit of 1.0 p.p.m. in three samples (1, 2, and 5 for the former chemical; 1,2, and 8 for the latter). **Benzo(a)anthracene and benzo(a)pyrene were found to be above their corresponding DEC limits (1.0 p.p.m. for each) in samples 1 and 2. Our findings with respect to the PAHs that appear above or at DEC safety levels are fairly consistent with findings of Plesser and Lund (2004) in Norway, who also conducted a small survey of PAHs in rubber synthetic turf granules. Among all the PAHs sampled in various studies, chrysene appears most consistently (Plesser and Lund, 2004; OEHHA, 2007). All the PAHs that we found at or above the DEC safety limits are known, probable, or possible human carcinogens** as defined by International Agency for Research on Cancer (IARC, 2006). (End of Excerpt)

So the question has to be asked - can birds and wildlife eat toxic oil-based products and not be harmed? Well that was answered in an October 29, 2011 SF Chronicle article. ...

Environmentalists hunt wildlife-killing nurdles

By Peter Fimrite, Chronicle Staff Writer
Saturday, October 29, 2011

Here's an excerpt from the paper (indented):

Nurdles are the tiny bits of plastic that are melted down and used in the production of plastic bags, bubble wrap, packaging and wrapping material. They may sound cuddly and nonthreatening, but they are believed to be responsible for the sickness and death of thousands of fish and birds in the region that have mistaken them for food. (End of Excerpt)

Thus it is probable that just like the birds and fish getting sick from eating an oil-based substance, so will the birds and wildlife eating the small tire particles that will inundate the environment surrounding the proposed artificial turf field.

And yet the draft EIR never addressed the incredible damage to the ecosystem of that area of GG Park of putting over 300 tons of oil-based particles." (William Crowley, letter, December 10, 2011 [I-Crowley-04])

“There was an article in the September 4th Chronicle titled ‘Tattoo Health Risks, Research Raises Concerns.’ And it’s --one excerpt says, ‘black tattoo inks, which are usually made of soot, contain products of combustion called polycyclic aromatic hydrocarbons or PAHs. The PAHs in inks include benzo[a]pyrene which as identified in an EPA toxicity report as ‘among the most potent and well-documented skin carcinogens.’” This if from the EPA.

Continuing with the Chronicle article, it says, ‘It is so potent that it is routinely used in animal tests to grow tumors. It has also been linked to skin cancer in shale oil workers.’

So it turns out that this rubber crumb contains benzo[a]pyrene. This was documented in a November 2008 paper called ‘Hazardous Chemicals in Synthetic Turf Materials and Bioaccessibility in Digestive Fluids.’ It says the benzopyrene was found to be above the safe limits to the point where if it was in the ground it would have to be taken out.

Says, ‘Our findings with respect to the PAHs that appear above or at safety levels are fairly consistent with findings of Plessner and Lund in Norway.’ ‘Historically, significant exposures to PAHs via dermal contact were reported in workers handling used engine oils and chimneysweeps.’ (*William Crowley, public hearing comment [I-Crowley2-02]*)

“Another technical issue; one potentially even more serious, is the nature of the ‘synthetic turf’, which is stated to be composed of fiber, infill, and backing. The ‘fiber’ and the ‘backing’ are composed of polyethylene and polypropylene. While such polyolefins are made from petroleum, and lack any possible aesthetic appeal, they are not known to be toxic, or any special environmental hazard, in such an application.

In contrast, the ‘infill’ is potentially a true environmental hazard. It is stated to ‘be composed of about 70% styrene butadiene rubber (SBR) and 30% sand. The SBR infill, commonly called ‘tire crumb’, is recovered from scrap tires and from the tire-retreading process’. This statement, while broadly correct, totally ignores the facts that, while the initial rubber might have originally been mostly pure styrene-butadiene polymer, it has necessarily been mixed with various vulcanizing and stabilizing chemicals, some of which are recognized carcinogens, and then vulcanized. The rubber is then ‘used’, with varying and extended exposure to ultra-violet light, ozone, and other unknown environmental influences; and then ‘reclaimed’ by various mechanical and thermal processes. And then, this ‘infill’, some 8.5 acres of it, is to be further exposed to ultra-violet light and natural weathering for some extended length of time. Note I am not saying that persons using such a playing field are of some increased risk of cancer; but I certainly believe that any creature exposed to the leachate - the ‘run-off’ - from such a playing field WOULD be at some increased risk.” (*Fred W. Davis, Letter, July 15, 2011 [I-FDavis-04]*)

“But also the reason why I would urge you to reject the DEIR is the inadequate address of the biological and health concerns addressed earlier.” (*Jessica Dowell, public hearing comment [I-Dowell-02]*)

“We call this a green city and yet we’re putting in plastic and I don’t believe that the artificial turf is well studied. I’m concerned about the toxic impacts, the crumbs that come off of it. And so I ask that you reject that, at least give us more time to have comments.” (*Ellen Edelson, public hearing comment [I-Edelson2-02]*)

“I disagree with the finding of the Hydrology and Water Quality sections which report that there will be less than significant impact to water quality in the Park with synthetic turf placement. Crumb rubber used to secure the turf does have toxic materials in it and does have a negative impact on the environment in and of itself. The California Office of Environmental Health Hazard Assessment (OEHHA), in a January 2007 report, found that forty-nine chemicals could be discharged from crumb rubber, some of it highly toxic with neurological and carcinogenic consequences. We are talking about children being exposed to these noxious materials in the name of ‘fun,’ as some of the witnesses testified at the December 1 hearing on this DEIR. These materials also have the potential to be released into the soil, endangering animal and plant life. This does not sound like maintaining the natural recreational value of the park, much less its role as a bioresource to the Parks’s ecosystems.” (*Susan Englander, Letter, December 12, 2011 [I-Englander-01]*)

“Based on the above information, I disagree with Impact HZ-1: The proposed project would not create a significant hazard to the public or the environment through routine use, disposal, handling, or emissions of hazardous materials. It seems that there will be hazardous materials released from the crumb rubber alone, much less the plastic turf (one component is polyethylene) and the filler for the turf (one component is polypropylene). These synthetics are currently under investigation for their health consequences and it is probably that food containers made of polypropylene are carcinogenic.” (*Susan Englander, Letter, December 12, 2011 [I-Englander-02]*)

“And I really share the previous testimony regarding the crumb rubber. The migration of crumb rubber, the danger of crumb rubber to children and to animals in Golden Gate Park.” (*Susan Englander, public hearing comments [I-Englander2-02]*)

"I mean to put toxic waste in our Golden Gate Park is a crime. But I looked it up just superficially yesterday, artificial turf on Wikipedia. And I don't know why anybody would want their children to play on it. Like it seems to be bad for everybody." (*Anastasia Glichstern, public hearing comment [I-Glichstern-01]*)

"Installation of artificial turf with its human health implications and environmental non-sustainability.

The composition of the artificial turf.

...What will be the impact on the environment if the artificial turf starts to break down and there is no money to replace it? Will the artificial turf be left in place to degrade?" (*Thomas Hahn, letter, December 9, 2011 [I-Hahn-03]*)

"Participant Exposure. Much is made about the level of exposure to hazardous materials by participants being below the daily limits set by health agencies.

Two study groups (IV.H-10) recommended purchasing synthetic turf that is not made with lead or does not have lead in its infill.

However, Table IV.G4 clearly shows standards that allow for lead, zinc and chromium. By the absence of a statement to the contrary it must be assumed that SFRPD will purchase synthetic turf containing lead, zinc and chromium, along with other metals.

Samples tested, with the data presented, repeatedly use the phrase 'equal or less' than a criterion level for exposures to these hazardous metals.

There is a misrepresentation that the health of a child exposed to an 'equal to or less' than a specific criterion level for daily exposure at soccer is not compromised. This assumes that the soccer field is the only exposure to those metals or other hazardous matter. Most assuredly, it is not. The DEIR fails to address the additive impact of exposure to these metals in the participants.

Crumb rubber dust and particulate matter often attaches to the shoes and other clothing of the participant. In that manner it spreads to others, vehicles, the home, etc. where it can be inhaled or ingested. This extends the exposure time of the participant beyond the practice or the competition. The DEIR fails to discuss the impact on this cross-contamination of non-participants and their environments, and particularly family (group) members who have existing health problems which would be' exacerbated by those metals." (*Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-04]*)

“GG Park is an icon and it already plagued by too many people and events. It should be left as natural as possible, artificial turf is dangerous to children and it recues the space for the wildlife in GGP.” (*Katherine Hyde, email, December 11, 2011 [I-Hyde-02]*)

“I am not convinced that the synthetic turf is not toxic –to the athletes playing on the field and due to runoff from the field.” (*Richard Ivanhoe, letter, December 13, 2011 [I-Ivanhoe-07]*)

“...and is potentially poisonous because of the components that include ground up tires that will disintegrate and disperse. ...” (*Joan Joaquin-Wood, email, December 12, 2011 [I-Joaquin-Wood-02]*)

“The plan requires many many tons of finely shredded used automotive tires to be dumped into the ground: there is no analysis of the impact of these particles on the respiratory systems of the players.

The plan requires many many tons of finely shredded used automotive tires to be dumped into the ground: there is no analysis of the impact of these particles on the respiratory systems of area residents.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-03]*)

“The plan requires many many tons of finely shredded used automotive tires to be dumped into the ground: there is no analysis of the impact of these particles on the health of the animals in the ecosystem surrounding the fields.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-04]*)

“The plan requires many many tons of synthetic turf to form the synthetic surface of the soccer fields: there is no analysis of how local conditions (i.e., high humidity, high salinity, cool temperatures) will effect the anticipated lifespan degradation of the synthetic surface, and consequent impacts upon the respiratory systems of the players.

The plan requires many many tons of synthetic turf to form the synthetic surface of the soccer fields: there is no analysis of how local conditions (i.e., high humidity, high salinity, cool temperatures) will effect the anticipated lifespan degradation of the synthetic surface, and consequent impacts upon the respiratory systems of area residents.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-09]*)

“...Along with the other team parents I have serious concerns about the impact of turf on our children’s health and safety. The tire crumbs in turf contain numerous toxins, including carcinogens and heavy metals, and they often end up in our children’s hair, clothes, and shoes, as well as in the mouths of younger siblings. Furthermore, even in mild San Francisco heat, feet and gives off a chemical smell. I worry about the long term effects of breathing these chemicals, especially on children.

...When there are so few wild spaces left in the city, to pave over seven acres of natural meadows and cover them with synthetic, toxic surfacing would be nothing short of a tragedy.” (*Tehmina Khan, email, December 10, 2011 [I-Khan-01]*)

“ I would like the time to review closely the Task Force report on hazardous materials, including water contaminants, cited at page IV.G-4, footnote 10 of the DEIR, which was prepared under the aegis of the Recreation and Park Commission. This report apparently cites 27 studies of hazardous materials, yet only five of those studies are discussed in the DEIR. No explanation was offered for their selection. (See discussion of Table IV.G-1, Summary of Literature review, at pages IV.G-6 thro'ugh IV.G-10.)

Although this Task Force included many distinguished members from a number of agencies; the Recreation and Parks Department has a well-known reputation for skewing numbers and facts, so it will be important to analyze the Task Force report independently.” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn-01]*)

“Why is crumb rubber misidentified as styrene butadiene rubber? Since crumb rubber is made from ground up used tires, it is not pure styrene butadiene rubber. Tires pick up oil from the roads, and lead from older tires that ran during the era of leaded gas, just to being with. Some of the heavy metals associated with used tires are not considered in the DEIR at all. Copper comes from brake pads and is a major source of water pollution during storm run-off. Those copper fragments on the roads get ground into tires during regular wear, and will end up in crumb rubber. Yet it is not considered.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-64]*)

“What is the source of the sand for the 30% of the infill that is sand? What is the source of the tile or aggregate rock base?

How can the manufacturer ensure lower amounts of various metals unless they know the exact sources and histories of all the tires used? Carbon black, by the way, is added to polypropylene to reduce UV degradation in sunlight usages. The discussion of the manufacturing process on p. 2 lists much of what is supposedly taken out, but little of what is added. And while there is the assertion that the crumb rubber ‘should’ have lower levels of iron, manganese, and chromium relative to

earlier products, there is no proof of this, and no numbers given. Nor, in the same paragraph, is there any discussion of the health effects and biological dangers presented by nanoparticles beyond those due to inhalation (such as migration into cells and the brain, cytotoxicity, testicular cancer risks, and more).” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-66]*)

“The European Union uses the hazard-based, precautionary approach. The United States uses the public as guinea pigs approach. Why, though, is SFRP willing to treat children and neighbors of these synthetic turf fields as guinea pigs? The testing data given is very limited in scope and estimated exposures, does not look at cumulative chemical exposures (even though this field was revolutionized by work done by a scientist at UCB), and divides risk into binary concerns: noncarcinogenic and carcinogenic. However, during the scoping session, concerns were raised about the chemicals involved that went beyond cancer-causing abilities. What about mutagenic chemicals, endocrine disruptors, developmental and reproductive toxins, allergens, immunotoxicity, neurotoxicity, organ system toxicity, and bioaccumulation? Because these are not considered, though many of them are relevant for many of the chemicals and metals to be found in crumb rubber, the hazard quotient will produce faulty quantified information; it will give a number that will have little to no meaning in the real world. The further assumption that mixed ‘noncancer effects’ are additive is unsupported and will lead to more numbers with little basis.

On p. 3, the USEPA is referenced in the first paragraph, yet the footnote cites the CAEPA. These organizations are not the same. The second paragraph assures us that conservative estimates of exposure are used, and the assumptions reo noncancer risk are conservative, but additive calculations are not conservative, nor do they reflect modern toxicology research. The last paragraph in the Health risk Evaluation section says that because the synthetic turf will be outside, the wind will ‘easily disperse particulate matter’, reducing player exposures to nanoparticles. What is not addressed is that the wind blows in specific patterns in this area, so that these nanoparticles will be blown in specific locations and dumped there over and over, accumulating. This means that neighbors downwind of the fields, and animals living downwind, will be getting daily exposures to these nanoparticles for as long as they live there. This is not considered (as, indeed, the microclimate of the area, and many of the effects of this project on neighbors, and local animals).” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-67]*)

“In general, the section of the DEIR relies heavily on manufacturer supplied or company sponsored studies. These are not the same as peer-reviewed science and should not be given the same weight. Yet these company sponsored studies dominate the literature studied as cited in the DEIR. Even a company provided MSDS for crumb rubber cites more concerns with this material than most of the works referenced in the DEIR (...). Many of the site-specific studies referenced do not match our local climate or conditions, or make assumptions that do not match possible uses (for instance a one-time ingestion of 10 grams of tire shreds by a child doesn’t fit the habits

of small children who often put things in their mouths over long periods of time time)." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-69]*)

"...How, for instance, do they ensure that no synthetic turf is purchased that contains lead?

How was exposure of human and animal neighbors to the chemicals where risk evaluations were done studied? After all, the players will get a maximum exposure of 3 hours a day, 4 days a week, 8 months a year while downwind neighbors will get 12 or more hours a day exposure, 365 days per year.

No matter how the studies chop up the data, zinc qualifies as above the total threshold limit, but is excluded from the final summary of the data on the synthetic fields. Why? On p. 16, a test is determined to be more aggressive at dissolving constituents from a material than water because the solution was acidic. But water is acidic due to acidic compounds dissolving into clouds and CO₂ solubility in general.

For the End-of-Life Recycling Plans I see no estimate of the amount of infill lost per ten years of the 'life' of a field. This material will not be recycled. How much will it be and where will it go? This question was asked in the scoping session but is not addressed in the DEIR.

On p. 18 a wipe test is done but the conclusions are questionable. If one wipe produces 4.0 micrograms, then sticky hands doing four wipes and licking the hands clean can ingest 15 micrograms in a day. Another study on p. 19 assumed a standardization of synthetic turf that is unsupported in any of the literature I've seen. Another study that analyzed infill samples found cobalt and zinc in hazardous amounts. Yet another wipe sample report said it adjusted for the amount of lead, but didn't show how this was done.

The idea that there is no correlation between field temperature and VOCs as cited on p. 28 is highly unlikely given how chemicals behave. If this statement is to be accepted, it needs more support. What other studies back this assertion? What proof is there of the synthetic turf life-span in the similar climate conditions? What evidence is there that exceeding by 10 times the STLC is a good measure for soluble analysis of metals? Why were only metals studied in regards to hazardous waste classification? Why has the SFRP yet to implement the synthetic turf standards? Has there been no turf replacement at all up to this point? Generally, the section on Hazards seemed slapdash and often tangential to the point." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-73]*)

"However, I did not see any mention of how the infill material of polyethylene styrene butadiene rubber (SBR) also known as 'crumb rubber' might be dispersed into the surrounding soils and vegetation, and how this material might impact soils, vegetation and be taken up/ingested by wildlife." (*Deborah Learner, letter, November 29, 2011 [I-Learner-16]*)

“Installation of artificial turf with its human health implications and environmental non-sustainability.” (*Beth Lewis, letter, December 4, 2011 [I-BLewis-04]*)

“I am concerned that the City is rushing into this project without fully considering the negative impacts to the park and the environment: Cutting down many mature trees that serve as a wind break and sacrificing a benign, bucolic grass field and covering it with an artificial, potentially toxic substance.” (*Reddy Lieb, letter, December 5, 2011 [I-Lieb-02]*)

“No amount of language can change the fact that tire crumb is poison. Chicago & New York have banned these types of plastic/tire crumb fields. Has the DEIR investigated why?” (*Shana McGrew, email, no date [I-McGrew-05]*)

“I am very concerned about this proposed project for many reasons. I am concerned about the toxic chemicals which are found in the rubber compound used in the Astroturf.” (*Anna Myers, public hearing comment [I-Myers-01]*)

“On the matter of impacts of artificial turf alone, the DEIR fails to take into account studies that show serious health hazards, environmental impacts, “(*Rasa Gustaitus (Moss), letter, December 12, 2011 [I-Moss-05]*)

“On matters of toxicity and health hazards from synthetic turf, a diligent enumeration of existing studies by --or until now seem to be existing studies --shows that very little research has been done to support the conclusion in the EIR that we have nothing to worry about.” (*Rasa Moss, public hearing comment [I-Moss2-07]*)

“There appears to be enough health and safety issues surrounding the use of artificial turf that adding nearly seven (7) acres to a natural habitat is exposing the children and animals who will use the fields to this unnecessary risk.” (*Jerome Napoli, email, December 12, 2011 [I-Napoli-01]*)

“One major problem with artificial turf is that most types are extremely toxic. While the draft EIR does layout guidelines for acceptable levels of Lead, Chromium, and Zinc, it needs to do more.

The levels in the draft EIR are written in mg/L and the equivalent of ppm (parts per million) should be included because lead levels are required to be under 50 ppm, per the consent judgment by then Attorney General Gerry Brown in 2009. Also, there are other toxic materials in artificial turf besides Lead, Chromium, and Zinc so a more complete list should be included." (*Edward Pertcheck, letter, December 12, 2011 [I-Pertcheck-01]*)

"Setting out standards for artificial turf is not the same as choosing an actual artificial turf product. Without actual product information, comparisons cannot be made. It is imperative that an artificial turf product (or a few possible products) be chosen before the environmental impact of the artificial turf is analyzed so that proper comparisons to natural grass can be made.

Also, if artificial turf is installed, there should be a requirement to have it tested periodically to make sure that it meets the requirements set forth in the draft EIR. ..." (*Edward Pertcheck, letter, December 12, 2011 [I-Pertcheck-02]*)

"A lot of people are saying that we're doing this renovation project for the kids and, you know, we don't let kids play with toys that have lead in them. This has --most artificial turf fields have way beyond the amount of lead that we would allow our children to have in their toys. And children shouldn't be on these fields, adults shouldn't be on these fields, but certainly kids, you know, in their younger years and in their teen age when their brains are developing, they shouldn't be around these heavy metals and other chemicals." (*Edward Pertcheck, public hearing comment [I-Pertcheck2-01]*)

"Of most concern to me is the lack of peer-reviewed scientific and medical data on the health and environmental impacts of artificial turf that uses tire-crumbs infill. I have worked as a medical editor for more than 10 years, editing research papers and medical information. (My clients include the BMJ [British Medical Journal] and the World Health Organization.) This is why I have several concerns about the data presented in the Draft EIR.

The data presented seem to have been chosen selectively rather than representatively. There is no indication of why the studies included in the report were chosen instead of other, more recent studies; there is no indication of the criteria used to select studies for inclusion; and there is no indication why literature searches were not done to update the references cited in the reports included in the Draft EIR. This raises several questions that need thorough answers.

- Who selected the studies cited in the draft EIR? What are this person's qualifications for selecting relevant studies and assessing their findings?
- Does this person have any conflicts of interest that would influence the studies that s/he selected or the interpretation of their results? (For example, what is his or her view on the

proposed project and could this have influenced the decision about which studies were included?)

- Was this person asked about conflicts of interest? If not, why not? It is common for most medical and scientific journals to ask authors to declare any conflicts of interest that they may have or any interests that may be perceived as biasing their judgment. JAMA (the Journal of the American Medical Association) sums up conflicts of interest this way:

'A conflict of interest may exist when an author (or the author's institution or employer) has financial or personal relationships or affiliations that could influence (or bias) the author's decisions, work, or manuscript. All authors are required to complete and submit the ICMJE Form for Disclosure of Potential Conflicts of Interest. In this form, authors will disclose all potential conflicts of interest, including relevant financial interests, activities, relationships, and affiliations ... , including

Any potential conflicts of interest 'involving the work under consideration for publication' (during the time involving the work, from initial conception and planning to present),

Any 'relevant financial activities outside the submitted work' (over the 3 years prior to submission), and

Any 'other relationships or activities that readers could perceive to have influenced, or that give the appearance of potentially influencing' what is written in the submitted work (based on all relationships that were present during the 3 years prior to submission).

Authors are expected to provide detailed information about all relevant financial interests, activities, and relationships within the past 3 years as stipulated in the ... Form ... including, but not limited to, employment, affiliation, grants or funding, consultancies, honoraria or payment, speakers' bureaus, stock ownership or options, expert testimony, royalties, donation of medical equipment, or patents planned, pending, or issued '!

Additionally, the BMJ (the British Medical Journal) asks authors

'to disclose four types of information. Firstly, their associations with commercial entities that provided support for the work reported in the submitted manuscript (the time frame for disclosure in this section of the form is the lifespan of the work being reported). Secondly, their associations with commercial entities that could be viewed as having an interest in the general area of the submitted manuscript (the time frame for disclosure in this section is the 36 months before submission of the manuscript). Thirdly, any similar financial associations involving their spouse or their children under 18 years of age. Fourthly, nonfinancial associations that may be relevant to the submitted manuscript.'

Clearly, it is important that the people who selected and reviewed the studies that were included in the Draft EIR have appropriate skills and knowledge; they should also be asked to declare any conflicts of interest to ensure that the public benefits from a complete and unbiased report." (Miriam Pinchuk, letter, no date [I-Pinchuk-01])

“What specific criteria were used to select studies for inclusion? Only a handful of studies are cited, yet in a 15-minute search on a publicly accessible database of peer-reviewed biomedical research (PubMed, part of the National Library of Medicine at the National Institutes of Health)³ I found far more studies than were included in the Draft EIR. I was able to identify numerous scientifically valid studies on hazards associated with artificial turf, ... The two most recent studies evaluating the possible toxicity of artificial turf were published in 2011. Neither of these studies was included in the Draft EIR. I have appended to this letter a selection of the most recent studies that I identified (there are too many to provide all of them); although it is only a selection, it serves to show how much valid data were overlooked by the Draft EIR. Please include these studies as part of my comments. I would like to know why studies such as these were not included in the Draft EIR. And I would like to know why no databases of scientific and medical literature were searched.” (*Miriam Pinchuk, letter, no date [I-Pinchuk-02]*)

“Why were the studies included not limited to those that had been peer-reviewed? Peer-review is the ‘gold standard’ in scientific publishing: research is reviewed by those who are specialists in an area to determine the validity of the data collected, the methods used to collect the data, the statistics used to analyze the data, and the conclusions drawn. Peer-review is also used to weed out conflicts of interest that may have affected the results of a study.

One of the primary reviews cited by the Draft EIR is the 2008 report by the San Francisco Recreation and Parks Department’s Synthetic Playfields Task Force. The Draft EIR states that ‘... the Task Force report includes a complete listing of all literature reviewed’ (section IV, page H-6). However, the 2008 task force seems not to have reviewed any scientifically valid data for the sections on Material Composition: Overall Chemical Composition and Flammability Issues and Material Composition: Ingestion - Inhalation of Turf Product Materials. Appendix B - the master list of studies consulted by the task force - cites only non-peer reviewed communications with manufacturers of artificial turf, studies performed for the artificial-turf industry, non-reviewed reports commissioned by the SF Department of the Environment, and a couple of other questionable reports that were neither published nor peer-reviewed. Additionally, the ‘Ecosystem study group’ did not even prepare a formal written summary.

In light of the lack of scientifically valid evidence used to compile the 2008 report, and the clear conflicts of interest present in some of the ‘data,’ I would ask that mention of the 2008 report and any of its conclusions be removed from all sections of the Draft EIR, and that the Draft EIR does not rely on any findings from the 2008 report.” (*Miriam Pinchuk, letter, no date [I-Pinchuk-03]*)

“Why wasn’t a search done to update the references in the reports cited in the Draft EIR? In addition to the 2008 task-force report, section IV, subsection H, of the Draft EIR reviews studies from 2007 (the Integrated Waste Management Board Study), 2009 (the Office of Environmental

Health Hazard Assessment Study) and 2010 (California Department of Resources Recycling and Recovery Study). The latest date for any study included in these reports is 2009; thus the research cited by the Draft EIR is not up-to-date. All of these studies were commissioned, and none seems to have been peer-reviewed. (This is in contrast to the studies conducted in Connecticut that are cited in the Draft EIR; all were peer-reviewed by an independent agency.) The Draft EIR cites no studies from 2011, and also neglected to include relevant, independent research conducted on playing fields in San Francisco.

While I realize that as Commissioner Borden stated, the Commission will never have all the evidence it needs to make any decision, surely it is the responsibility of the Planning Department and the Commission to assess all of the current, relevant literature regardless of whether the findings are conclusions. At least then the public would know that an evidence-based decision had been made rather than one that relied on evidence selected to support foregone conclusions.

The low standards used in preparing the 2008 task-force report and the fact that it was included in the Draft EIR despite its obvious shortcomings, seem a clear warning that much of the other data presented about risks to health and the environment should be subject to scrutiny by an independent expert.

I ask that, given the dearth of appropriate, scientifically valid, and current data presented in the Draft EIR, an unbiased, independent expert - that is, someone without any interest in the outcome of the project- who has knowledge of scientific method and research, conducts a thorough review and evaluation of the relevant medical and scientific literature before any conclusions are drawn about the hazards of artificial turf - either to the the environment or to health - and its ability to reduce injuries. This person must declare all actual and potential conflicts of interest before undertaking these tasks. Additionally, if reports that are not readily accessible to the public are cited, then they should be included in the Draft EIR for the public to review. I realize that not all of the data favor my position on the artificial-turf fields, but as an interested citizen I would rather that the evidence be assessed fairly and without bias.

I further ask that only scientifically valid, reliable studies that have been peer-reviewed or published in peer-reviewed journals be included in the EIR, especially in Section IV, subsection H, for without valid studies, the report cannot draw valid conclusions." (*Miriam Pinchuk, letter, no date [I-Pinchuk-04]*)

“Artificial-turf playing fields: contents of metals, PAHs, PCBs, PCDDs and PCDFs, inhalation exposure to PAHs and related preliminary risk assessment. Menichini E, Abate V, Attias L, De Luca S, di Domenico A, Fochi I, Forte G, Iacovella N, Iamiceli AL, Izzo P, Merli F, Bocca R ...The artificial-turf granulates made from recycled rubber waste are of health concern due the possible exposure of users to dangerous substances present in the rubber, and especially to PARs. In this work, we determined the contents of PARs, metals, non-dioxin-like PCBs (NDLPCBs), PCDDs and PCDFs in granulates, and PAR concentrations in air during the use of the field. The purposes were to identify some potential chemical risks and to roughly assess the risk associated with

inhalation exposure to PARs. Rubber granulates were collected from 13 Italian fields and analysed for 25 metals and nine PARs. One further granulate was analysed for NDLPcBs, PCDDs, PCDFs and 13 PARs. Air samples were collected on filter at two fields, using respectively a high volume static sampler close to the athletes and personal samplers worn by the athletes, and at background locations outside the fields. In the absence of specific quality standards, we evaluated the measured contents with respect to the Italian standards for soils to be reclaimed as green areas. Zn concentrations (1 to 19 g/kg) and BaP concentrations (0.02 to 11 mg/kg) in granulates largely exceeded the pertinent standards, up to two orders of magnitude. No association between the origin of the recycled rubber and the contents of PARs and metals was observed. The sums of NDLPcBs and WRO-TE PCDDs+PCDFs were, respectively, 0.18 and 0.67×10^{-5} mg/kg. The increased BaP concentrations in air, due to the use of the field, varied approximately from <0.01 to 0.4 ng/m^3 , the latter referring to worst-case conditions as to the release of particle-bound PARs. Based on the 0.4 ng/m^3 concentration, an excess lifetime cancer risk of 1×10^{-6} was calculated for an intense 30-year activity. ...

Benzothiazole toxicity assessment in support of synthetic turf field human health risk assessment. Ginsberg G, Toal B, Kurland T. ...Synthetic turf fields cushioned with crumb rubber may be a source of chemical exposure to those playing on the fields. Benzothiazole (BZT) may volatilize from crumb rubber and result in inhalation exposure. Benzothiazole has been the primary rubber-related chemical found in synthetic turf studies. However, risks associated with BZT have not been thoroughly assessed, primarily because of gaps in the database. This assessment provides toxicity information for a human health risk assessment involving BZT detected at five fields in Connecticut. BZT exerts acute toxicity and is a respiratory irritant and dermal sensitizer. In a genetic toxicity assay BZT was positive in Salmonella in the presence of metabolic activation. BZT metabolism involves ring-opening and formation of aromatic hydroxylamines, metabolites with mutagenic and carcinogenic potential. A structural analogue 2-mercaptobenzothiazole (2-MBZT) was more widely tested and so is used as a surrogate for some endpoints. 2-MBZT is a rodent carcinogen with rubber industry data supporting an association with human bladder cancer. The following BZT toxicity values were derived: (1) acute air target of 110 llg/m^3 based upon a BZT RD(50) study in mice relative to results for formaldehyde; (2) a chronic noncancer target of 18 llg/m^3 based upon the no-observed-adverse-effect level (NOAEL) in a sub chronic dietary study in rats, dose route extrapolation, and uncertainty factors that combine to 1000; (3) a cancer unit risk of $1.8\text{E-}07/11\text{g-m}^3$ based upon a published oral slope factor for 2-MBZT and dose-route extrapolation. While there are numerous uncertainties in the BZT toxicology database, this assessment enables BZT to be quantitatively assessed in risk assessments involving synthetic turf fields. However, this is only a screening-level assessment, and research that better defines BZT potency is needed.

...Human health risk assessment of synthetic turf fields based upon investigation of five fields in Connecticut. Ginsberg G, Toal B, Simcox N, Bracker A, Golembiewski B, Kurland T, Hedman C. ...

Questions have been raised regarding possible exposures when playing sports on synthetic turf fields cushioned with crumb rubber. Rubber is a complex mixture with some components possessing toxic and carcinogenic properties. Exposure is possible via inhalation, given that

chemicals emitted from rubber might end up in the breathing zone of players and these players have high ventilation rates. Previous studies provide useful data but are limited with respect to the variety of fields and scenarios evaluated. The State of Connecticut investigated emissions associated with four outdoor and one indoor synthetic turf field under summer conditions. Onfield and background locations were sampled using a variety of stationary and personal samplers. More than 20 chemicals of potential concern (COPC) were found to be above background and possibly field-related on both indoor and outdoor fields. These COPC were entered into separate risk assessments (1) for outdoor and indoor fields and (2) for children and adults. Exposure concentrations were prorated for time spent away from the fields and inhalation rates were adjusted for play activity and for children's greater ventilation than adults. Cancer and noncancer risk levels were at or below de minimis levels of concern. The scenario with the highest exposure was children playing on the indoor field. The acute hazard index (HI) for this scenario approached unity, suggesting a potential concern, although there was great uncertainty with this estimate. The main contributor was benzothiazole, a rubber-related semi volatile organic chemical (SVOC) that was 14-fold higher indoors than outdoors. Based upon these findings, outdoor and indoor synthetic turf fields are not associated with elevated adverse health risks. However, it would be prudent for building operators to provide adequate ventilation to prevent a buildup of rubber-related volatile organic chemicals (VOC) and SVOC at indoor fields. The current results are generally consistent with the findings from studies conducted by New York City, New York State, the U.S. Environmental Protection Agency (EPA), and Norway, which tested different kinds of fields and under a variety of weather conditions. ...

Characterization of substances released from crumb rubber material used on artificial turf fields. Li X, Berger W, Musante C, Mattina MI. ...

Crumb rubber material (CRM) used as infill on artificial turf fields can be the source of a variety of substances released to the environment and to living organisms in the vicinity of the CRM. To assess potential risks of major volatilized and leached substances derived from CRM, methods were developed to identify organic compounds and elements, either in the vapor phase and/or the leachate from CRM. A qualitative method based on solid phase micro-extraction (SPME) coupled with gas chromatography/mass spectrometry (GC-MS) was developed to identify the major volatile and semi-volatile organic compounds out-gassing from CRM samples under defined laboratory conditions. Direct vapor phase injection into the GC-MS was applied for the quantitative analysis. Ten organic compounds were identified in the vapor phase by the SPME method. Volatile benzothiazole (BT) was detected at the highest level in all commercial CRM samples, in the range 8.2-69 ng g⁻¹ CRM. Other volatile PAHs and antioxidants were quantified in the vapor phase as well. A decrease of volatile compounds was noted in the headspace over CRM samples from 2-years-old fields when compared with the virgin CRM used at installation. An outdoor experiment under natural weathering conditions showed a significant reduction of out-gassing organic compounds from the CRM in the first 14 d; thereafter, values remained consistent up to 70 d of observation. Zinc was the most abundant element in the acidified leachate (220-13000 microg g⁻¹), while leachable BT was detected at relatively low amounts. ...

Toxicological assessment of coated versus uncoated rubber granulates obtained from used tires for use in sport facilities. Gomes J, Mota H, Bordado J, Cadete M, Sarmiento G, Ribeiro A, Baiao M, Fernandes J, Pampulim V, Custodio M, Veloso I. ...

Reuse of tire crumb in sport facilities is currently a very cost-effective waste management measure. Considering that incorporation of the waste materials in artificial turf would be facilitated if the rubber materials were already colored green, coatings were specifically developed for this purpose. This paper presents an experimental toxicological and environmental assessment aimed at comparing the obtained emissions to the environment in terms of polycyclic aromatic hydrocarbons (PAHs), heavy metals, and ecotoxicity for coated and noncoated rubber granulates. This study is a comprehensive evaluation of the major potential critical factors related with the release of all of these classes of pollutants because previous studies were not systematically performed. It was concluded that between the two types of coatings tested, one is particularly effective in reducing emissions to the environment, simultaneously meeting the requirements of adherence and color stability. ...

Metals contained and leached from rubber granulates used in synthetic turf areas. Bocca B, Forte G, Petrucci F, Costantini S, Izzo P. ...

The aim of this study was to quantify metals contained in and leached from different types of rubber granulates used in synthetic turf areas. To investigate the total content of metals, ca 0.5 g of material was added with HNO₃, HF and HClO₄ and microwave digested with power increasing from 250 W to 600 W. Leachates were prepared by extraction of about 5.0 g of material at room temperature for 24 h in an acidic environment (PH 5). Leaching with deionized water was also performed for comparison. Aluminium, As, Ba, Be, Cd, Co, Cr, Cu, Hg, Fe, Li, Mg, Mn, Mo, Ni, Pb, Rb, Sb, Se, Sn, Sr, Tl, V, and Zn were quantified by high-resolution inductively coupled plasma mass spectrometry (HR-ICP-MS) and ICP optical emission spectrometry (ICP-OES). Results indicated that the developed method was accurate and precise for the multi-element characterization of rubber granulates and leachates. The total amount and the amount leached during the acidic test varied from metal to metal and from granulate to granulate. The highest median values were found for Zn (10,229 mg/kg), Al (755 mg/kg), Mg (456 mg/kg), Fe (305 mg/kg), followed by Pb, Ba, Co, Cu and Sr. The other elements were present at few units of mg/kg. The highest leaching was observed for Zn (2300 microg/l) and Mg (2500 microg/l), followed by Fe, Sr, Al, Mn and Ba. Little As, Cd, Co, Cr, Cu, Li, Mo, Ni, Pb, Rb, Sb and V leached, and Be, Hg, Se, Sn, Tl and W were below quantification limits. Data obtained were compared with the maximum tolerable amounts reported for similar materials, and only the concentration of Zn (total and leached) exceeded the expected values. ...

Characterization and potential environmental risks of leachate from shredded rubber mulches. Kanematsu M, Hayashi A, Denison MS, Young TM. ...

In order to determine whether shredded rubber mulches (RM) pose water quality risks when used in storm water best management practices (BMPs) such as bioretention basins, batch leaching tests were conducted to identify and quantify constituents in leachates from RM such as

metal ions, nutrients, total organic carbon (TOC), and aryl hydrocarbon receptor (AhR) activity (determined by the chemically activated luciferase gene expression (CALUX) bioassay) at varied temperature and initial pH values. The results indicate that aqueous extracts of RM contain high concentrations of zinc (Zn) compared with wood mulches (WM), and its concentration increased at lower pH and higher temperature. Although methanol extracts of RM displayed high AhR activity, none of the aqueous extracts of RM had significant activity. Hence, while unknown constituents that have significant AhR activity are present in RM, they appear to be not measurably extracted by water under environmental conditions relevant for stormwater ($5 < \text{pH} < 9$, $10 < T < 40$ degrees C). Our results suggest that organic constituents in water extracts of RM which have AhR activity may not be of significant concern while leaching of Zn from RM appears to be a potentially larger water quality issue for RM. ...

Hazardous chemicals in synthetic turf materials and their bioaccessibility in digestive fluids.

Zhang JJ, Han IK, Zhang L, Crain W. ...

Many synthetic turf fields consist of not only artificial grass but also rubber granules that are used as infill. The public concerns about toxic chemicals possibly contained in either artificial (polyethylene) grass fibers or rubber granules have been escalating but are based on very limited information available to date. The aim of this research was to obtain data that will help assess potential health risks associated with chemical exposure. In this small-scale study, we collected seven samples of rubber granules and one sample of artificial grass fiber from synthetic turf fields at different ages of the fields. We analyzed these samples to determine the contents (maximum concentrations) of polycyclic aromatic hydrocarbons (PAHs) and several metals (Zn, Cr, As, Cd, and Pb). We also analyzed these samples to determine their bioaccessible fractions of PAHs and metals in synthetic digestive fluids including saliva, gastric fluid, and intestinal fluid through a laboratory simulation technique. Our findings include: (1) rubber granules often, especially when the synthetic turf fields were newer, contained PAHs at levels above health-based soil standards. The levels of PAHs generally appear to decline as the field ages. However, the decay trend may be complicated by adding new rubber granules to compensate for the loss of the material. (2) PAHs contained in rubber granules had zero or near-zero bioaccessibility in the synthetic digestive fluids. (3) The zinc contents were found to far exceed the soil limit. (4) Except one sample with a moderate lead content of 53 p.p.m., the other samples had relatively low concentrations of lead (3.12-5.76 p.p.m.), according to soil standards. However, 24.7-44.2% of the lead in the rubber granules was bioaccessible in the synthetic gastric fluid. (5) The artificial grass fiber sample showed a chromium content of 3.93 p.p.m., and 34.6% and 54.0% bioaccessibility of lead in the synthetic gastric and intestinal fluids, respectively. ..." (Miriam Pinchuk, letter, no date [I-Pinchuk-05])

"I was shocked at the lack of scientifically valid data presented in Section 4, Hazards and Hazardous Materials. I have worked as a medical editor for more than ten years editing research papers and medical information. In a 15-minute search on a publicly accessible database, I was able to identify numerous scientifically valid studies on hazards associated with artificial turf,

... Section 4 of the Draft EIR reviews studies from 2007, 2009 and 2010. Yet the Draft EIR cites no studies from 2011. Given the dirt of appropriate scientifically valid data presented in the report, I would like to ask that an unbiased independent expert with knowledge of scientific method and research conducts a thorough review of the scientific and medical literature before any conclusions are drawn about the hazards of artificial turf, either to the environment or to health, and its ability to reduce injuries.

Additionally, I ask what the findings of RPD's 2008 task force be removed from the Draft EIR owing to the clear conflicts of interest present in the sections on material compositions --they cite conversations and reports commissioned by manufacturers as evidence --and the fact that the ecosystem study group did not even prepare a formal written summary.

I further ask that only scientifically valid reliable studies that have been peer reviewed or published in peer-reviewed journals be included in Section 4, for without valid studies the report cannot draw valid conclusions. Thank you." (*Miriam Pinchuk, public hearing comment [I-Pinchuk2-01]*)

"The DEIR is also deficient in that it does not sufficiently address hazards of synthetic turf to humans. most importantly. children, The main review cited by the DEIR is a 2008 report by the San Francisco Recreation and Park Department's Task Force set up to review synthetic turf. Their data is flawed as it was taken by data written for the artificial turf industry, This is a conflict of interest. An independent, impartial experts must be hired to undertake a proper analysis of all health risks associated with artificial turf." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-04]*)

"In addition, the Precautionary Principle states: 'Based on the best available science, the Precautionary Principle requires the selection of the alternative that presents the least potential threat to human health and the City's natural systems...' Simply put, the Precautionary Principle means 'Safety First.' More precisely, it stands for the proposition that when an activity raises threats of harm to human health or the environment, precautionary measures should be taken even if some cause and effect relationships are not fully established scientifically, In this context the proponent of an activity, rather than the public, should bear the burden of proof." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-05]*)

"The DEIR is deficient in that it has not reviewed the synthetic turf with the Precautionary Principle in mind, This must be considered, The hazardous impacts of the proposed project are clearly significant and cannot be mitigated. There is simply too much threat to human health and/or the environment. And, in accordance with the Precautionary Principle, when there is too much threat, it is best not to proceed. Tire crumb contains many compounds, including toxic metals, volatile organic carbons, phthalates, carbon black, allergens, and endocrine disrupters that are carcinogenic

01' otherwise toxic. These toxins appear in ... the air. Rubber tire crumb gets attached to clothing, shoes, and skin and is tracked into homes." (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-06]*)

"The chemicals and metals from the tires' carbon black particles and dust can enter and compromise the human body in a variety of toxic ways .." (*G. Sherman, email, November 28, 2011 [I-Sherman-01]*)

"There are so many things wrong with this, from the hazardous waste disposal problems it will create in 7 - 10 years to the prospect of children playing in ground up tires." (*Lyn Stein, email, December 11, 2011 [I-Stein-03]*)

"But to the point of safety and nature, the natural field and grass in Hunter's Point have been shown by multiple studies to be full of toxins which are incredibly harmful to both humans and wildlife and in no way are ecologically sound.

This is displayed by the asthma rate in Bayview and Hunter's Point is double the rest of the population in the city and higher rates of cancer as well. In the absence of restorative action on the eastern part of the city and the comprehensive nature of the DEIR, it seems logical that if we are a city that cares about children and physical activity and safety, the Beach Chalet project seems to be a no-brainer." (*Johanna Thomashefski, public hearing comment [I-Thomashefski-01]*)

"The DEIR does discuss the presence of carcinogens in crumb rubber and the problem of leachate. But that problem is different than the accumulation in the soil of solid crumbs full of toxic compounds and their long-term effects on the ecosystem." (*Gene Thompson, email, December 5, 2011 [I-GThompson-02]*)

"At the scoping session and later in writing I described a specific concern regarding crumb rubber. I do not see that concern addressed in this Draft, so I will repeat it.

The EIR must document how much crumb rubber migrates to areas surrounding artificial turf fields currently in use, then estimate the amount that will migrate into areas surrounding this project.

Using this figure, the EIR must calculate how much crumb rubber will accumulate in park soil over fauna. Will animals directly consume the rubber? What are the potential effects as these compounds that are included in the rubber are broken down and absorbed into the ecosystem.

The Draft does discuss the presence of carcinogens in crumb rubber and the problem of leaching. But that problem is different than the accumulation in the soil of solid crumbs full of toxic compounds and their long-term effects on the ecosystem.” (*Gene Thompson, public hearing comments [I-GThompson2-01]*)

“... These tires were found by the EIR to contain over 50 chemicals and heavy metals, the most extreme impact rating available to the Planning Department reviewers. This potentially significant impact seems extremely inadequate in light of what’s being discovered daily about the material used in these fields.

On tests done on synthetic soccer fields and tires crumb infill, over 400 volatile organic compounds were detected. And among the chemicals identified, eight appear on the California Proposition 65 list of chemicals known to the State to cause cancer. The SBR material contains carbon black, which makes up 60 percent of the synthetic field’s infill. This is not in the EIR.

Carbon black is an industrial chemical which is composed of nano particles. The International Center Agency for Research on Cancer paneled experts conducted a comprehensive inner review and concluded that there was sufficient evidence of carcinogenic response to carbon black in laboratory animals so that even in these early stages of research, they have classified carbon black as a possible human carcinogen.

Recent research shows the intake of carbon black nano particles kill immune cells in lungs and the mechanism of pulmonary response. This needs to be in the EIR.

As the tires break down through oxidation and erosion back into particulate form and dust, it enters the human body in a variety of ways. This EIR does not address the complexity of our physiology and how it tries to handle such a of toxins, which is unpredictable at the very least. Today medical science cannot accurately predict the long-term health consequences of repeated exposure to these children that we want to encourage to play sports and lose weight, through other means hopefully than coming up with cancer.

Investigative science regarding its impact on the organs of developing children or the sick is in its infancy. The EIR almost totally is based on industry reports and political reports that cannibalize other industry and political reports. The EIR does not Mercer transmission and yet it states virtually zero disinfectants will be used on the fields.

It also makes a claim that carbon black will not break down into nano particulates. There’s no basis for this in science, I’ve never seen anything in the material and there’s nothing in the EIR to support this assumption based on a guess. Thank you.” (*Kelley Watts, public hearing comment [I-Watts-01]*)

Response HAZ-4

Several commenters presented hazardous materials studies not included in the EIR or alternate interpretations of the studies included in the EIR. Determinations of significant impacts need to be based on substantial evidence, which do not include arguments, speculations, or unsubstantiated narratives or opinions (CEQA Guidelines Section 15384). The studies presented by commenters were considered as they relate to the proposed project and response HAZ-4, below, includes further information on the studies presented in the EIR, as well as studies presented by commenters. The studies presented by commenters would not result in changes to the significance determinations identified in the EIR, as discussed below.

Chemical Content of Turf Materials and Health Risks Associated with Use of Synthetic Turf

The Synthetic Playfields Task Force published their findings in 2008. The EIR summarizes the results of those findings related to hazards and hazardous materials for informational purposes beginning on p. IV-H.5 of the EIR. The findings are presented for information, therefore purposes and questions on the sufficiency of the task force findings are not specifically addressed in this response to comments because they do not constitute the analysis on which the EIR's conclusions are based. The EIR presents summaries of literature published since the publication of the task force findings and independently reviewed by the EIR authors beginning on EIR page IV.H-10. The results of five studies (or sets of studies in the case of those studies reviewed from New York and Connecticut) are presented, and these studies provide the primary basis for the evaluation of human health and environmental effects. Many of these studies were selected because they provided risk analyses specific to synthetic turf materials with SBR infill. Because there is limited research specific to such turf, some of the studies were selected because they provide risk analyses for similar materials.

As described in the Project Description on EIR p. II-14, the synthetic turf would consist of four components: fiber, infill, backing, and underlayment. The fiber, which would consist of polyethylene, would be grass-like in appearance. The infill, which would be used to provide stability, would be comprised of about 70 percent SBR and 30 percent sand. The SBR infill is recovered from scrap tires and from the tire re-treading process. The fiber and infill would be supported by a backing made up of a combination of permeable woven and un-woven polypropylene fabrics that provide strength and vertical drainage. Underlayment would consist of drainage tile or an aggregate rock base. The studies reviewed by the DEIR authors evaluated the effects of materials derived from recycled tires which would include oil, particulate matter, and other materials picked up by the tires from the roadway before they were recycled. Note that several of the studies reviewed refer to styrene butadiene rubber material as "crumb rubber" or "tire crumb."

Section IV.H-2, Hazards and Hazardous Materials and Air Quality (EIR page IV.H-2) lists the primary components of SBR based on an evaluation by the Integrated Waste Management Board. As discussed there, it has been demonstrated that SBR contains a number of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) (including polynuclear aromatic

hydrocarbons), and metals. VOCs in the SBR originate from the use of carbon black and petroleum oils in the tire production process.³ The predominant SVOCs identified are benzothiazoles, which are used in tire production to accelerate the vulcanization process and help bond the metal wires and metal beads to the tire rubber; aniline, which is added to tires to inhibit rubber degradation; and phenols, which are present in petroleum oils and/or coal tar fractions used as softeners and extenders in tire production. The predominant metals include zinc, resulting from zinc oxide used as an activator in the tire vulcanization process (purposely added to tires at concentrations of two percent or more); iron and manganese from the steel belts and beads used in the tires; barium, which is used to catalyze the synthesis of polybutadiene rubber; lead, which was formerly used as an activator of the vulcanization process; and chromium, which is used in steel production.

The composition of SBR can vary, depending on the type of tire and tire manufacturer, and this is one reason for the development of the Synthetic Turf Standards described on DEIR pages IV.H-14 through IV.H-17. These standards limit the metals concentrations in the infill and fiber (including lead) and require full disclosure of the SVOC content. A comprehensive list of all chemical constituents would depend on the specific turf product purchased. Because of the chemical composition of SBR, it would be impossible to purchase synthetic turf without any metal content. Instead, the Synthetic Turf Standards provide limits on metals concentrations to ensure that human health and the environment would not be adversely affected. The risk analyses presented in the literature cited in DEIR Section IV.H are based on chemical analysis of the turf product tested, and risks associated with the identified chemicals of concern.

As discussed in Impact HY-1 (EIR p. IV.H-27), impacts related to the use of the synthetic turf would be significant if the use resulted in adverse health effects due to inhalation of vapors and particulates from the synthetic turf, ingestion of the synthetic turf, or dermal contact with the synthetic turf materials. However, the studies reviewed in the EIR (chosen because they provide an analysis of risk associated specifically with synthetic turf installations and therefore provide substantial CEQA evidence) concluded the following regarding each exposure pathway:

- In the five studies that addressed inhalation hazards, the maximum cancer risk level identified was 8.7 in a million which is higher than the *de minimus* level of one in a million, however this was based on data from an indoor field which would present higher health risks than an outdoor application such as the Beach Chalet Athletic Fields. For outdoor applications, the highest cancer risk level identified was 8 in a million based on the concentration of 2-methyl-1,3-butadiene identified in one of eight air samples from above a playfield. However, risks would likely be much lower because this volatile compound was only identified in one of eight air samples, the compound is not consistently emitted and therefore a player would not be consistently exposed to the maximum concentration identified and used in the risk analysis. The hazard index for noncancer risk was close to or less than one in the two studies that addressed noncancer risk. Particulate matter concentrations (both PM10 and PM2.5) at athletic fields were either not detected or similar to background levels in the three studies that addressed particulate matter, and metals

³ Integrated Waste Management Board, Evaluation of Health Effects of Recycled Waste Tires in Playground and Track Products. January 2007, available online at: <http://www.calrecycle.ca.gov/publications/Tires/62206013.pdf>, accessed on March 28, 2011.

were not detected in the air samples collected as part of the 2010 OEHHA study. The oldest field sampled was 26 months at the time of sampling.

- In the two studies that addressed ingestion, the highest noncancer risk identified was 6.9 based on the total metals concentrations, but the hazard index would be reduced to 1.8 when zinc is excluded. The study stated that at most, gastrointestinal distress would occur from the ingestion of zinc at the calculated level. When tested using a gastric simulation, which is considered more representative of actual conditions, the hazard index was 2.2, sufficiently close to a hazard index of 1, and deemed not to represent a serious health hazard by the 2007 OEHHA study. The only cancer risk that exceeded the *de minimus* level of one in a million was the increased cancer risk of 2.9 in a million related to hand-to-surface-to-mouth activity.
- Wipe sampling conducted at six San Francisco synthetic fields with SBR infill found that the daily intake of lead would range from 0.078 µg/day to 0.74 µg/day, which is well below the 15 µg/day limit recommended by the Consumer Products Safety Commission.
- The two studies that addressed dermal contact with synthetic turf products, found that dermal contact with surfaces comprised of recycled tires would not cause skin sensitization in children, nor would contact with these surfaces be expected to elicit skin reactions in children already sensitized to latex. The Bainbridge Island evaluation concluded that none of the estimated cancer risks for dermal contact exceeded *de minimis* excess cancer risk of 1 in 1,000,000, and noncancer risks did not exceed the hazard index of 1.

These risk analyses use standard methods for analysis of risk, are based on the known toxicological properties of the chemicals of concern, and consider the combined risk associated with all of the chemicals of concern. Based on this analysis, the EIR concluded that human health impacts related to the use of synthetic turf with SBR infill would be less than significant. These risk analyses were conducted for fields using SBR infill or similar materials, and even if the properties of the SBR changed from those of the rubber used in tires, they are more representative of the risks associated with play on synthetic fields.

Because the three studies that evaluated particulate matter at playfields did not identify particulate matter at concentrations above background levels, and metals were not identified in the particulates analyzed, there would be no respiratory risk to the field users or surrounding community related to inhalation of particulates or associated metals from the play fields. The oldest field sampled as part of these studies was 26 months, but the generation of particulates would be expected to remain consistent over the life of the product.

The studies cited in the EIR considered health effects on a wide range of ages based on identified chemicals of potential concern: the 2007 Integrated Waste Management Board study described on EIR page IV.H-3 considered ingestion by a 3-year old; the 2010 Office of Environmental Health Hazard Assessment Study described on EIR page IV.H-10 assessed inhalation risks to players aged 5 to 55 years old; the 2010 Connecticut studies described on EIR page IV-H-12 considered inhalation risks to children aged 6 to 18 years and adults, and assumed exposure to turf materials for 3 hours per day, four days per week for eight months; the Bainbridge Island study described on EIR page IV.H-14 considered inhalation, dermal contact, and ingestion health risks for

children aged 8 to 10 years and teenagers age 11 to 18 years, and assumed exposures of 3 hours per day for 261 days per year. Based on the age groups considered and the durations of exposure, the risks are considered generally representative for the age groups that would play at Beach Chalet, and also inclusive of risks to coaches, referees, and other people associated with play at the fields.

As discussed on EIR page IV.H-3, laboratory research indicates that there can be health risks associated with the inhalation of these particles. However, the limited available research does not address the potential for the generation of nanoparticles from actual use of tires or from SBR infill as a result of play on synthetic turf fields. Given the low potential for generation of PM₁₀ and PM_{2.5} (discussed above) and because the turf installations are generally located outside where wind would easily disperse particulate matter, it is expected that exposures to nanoparticles as a result of play on synthetic turf fields that use SBR infill would be minimal, if any at all.

While several comments provided additional studies related to carbon black, these studies describe laboratory research or evaluate risks in the workplace environment which would be enclosed, and would result in more intense exposure to nanoparticles. Because of this, and because wind would disperse the nanoparticles, if generated, it is expected that exposures to nanoparticles as a result of play on synthetic turf fields that use SBR infill would be minimal, if any at all, as concluded in the EIR.

In a good faith effort at full disclosure, the EIR reviewed reasonably available reports assessing health risks specifically associated with use of synthetic turf products with SBR infill or similar products and provided the results of sampling conducted at existing installations specifically conducted for the CCSF. Much of the work reviewed included air, leachate, and surface runoff sampling at actual field installations, and air sampling for particulate matter was conducted during active play to ensure that the samples would be representative of what would be breathed during play. Many of these studies were commissioned by municipalities in an effort to accurately assess risks associated with the use of synthetic turf. While there are limitations in these analyses, as there are limitations in any risk assessment, they provide an adequate evaluation of potential risks. Additional studies referred to in the EIR comments are summarized below, and have similar limitations.

The Material Safety Data Sheet for crumb rubber referenced in Comment I-Koivisto-69 does not explicitly address the level of risk related to exposure to crumb rubber under normal conditions of use but concludes that respiratory protection is not required.

Additional Studies Reviewed for Comments and Responses

Additional studies were recommended for review by the commenters, including the following:

- **A Scoping Level Field Monitoring Study of Synthetic Turf Fields and Playgrounds** (O-SFPARKS-28). This 2009 report by the USEPA included air sampling at synthetic turf installations for volatile organic compounds as well as particulate matter and associated metals; analysis of surface wipe samples; and analysis of tire crumb infill and turf blades at synthetic turf fields. Pertinent results of this study are as follows:

- PM10 particulate mass concentrations in air samples collected at the synthetic turf installations were generally equivalent to the concentrations measured in the ambient air upwind of the installations, and the concentrations did not substantially vary within a given field.
 - The metals concentrations in the particulate matter collected at the synthetic turf installations were generally similar to the concentrations detected in particulate matter collected from upwind locations, indicating the infill material and other turf materials provided little contribution to the measured metals concentrations. Although several metals at one installation were higher than the upwind location, the increase can be attributed to influence from the nearby roadway, and was not attributed to the turf installation.
 - With the exception of methyl isobutyl ketone, volatile organic compound concentrations in the air samples collected at the synthetic turf installations were similar to those measured in the ambient air upwind of the installations or were attributed to other nearby sources. Methyl isobutyl ketone was detected in air samples from two synthetic turf installations at concentrations of 0.13 ppbV and 0.12 ppbV, and not in the upwind air samples at these locations. The USEPA noted that methyl isobutyl ketone is associated with tires but concluded that these concentrations were low.
- **Air Quality Survey of Synthetic Fields Containing Crumb Rubber Infill (O-SFPARKS-28).** This 2009 study prepared for the New York City Department of Health and Mental Hygiene included the analysis of two air samples from outdoor synthetic turf installations utilizing crumb rubber infill and one air sample from a comparison grass field for semi-volatile organic compounds, volatile organic compounds, metals, and particulate matter (PM2.5). All samples were collected at a level of three feet under simulated play conditions. Pertinent results are as follows:
 - Seven volatile organic compounds (2-butanone, chloroform, n-hexane, isobutene, pentane, 2-methyl-1,3-butadiene, and 2-methylbutane) were deemed unique to the synthetic turf installations because they were not detected in samples from background locations or the grass field. The presence of chloroform was attributed to a nearby swimming pool. The concentrations of other volatile organic compounds detected were either below health risk screening guidelines or could not be attributed to the turf materials.
 - No semi-volatile organic compounds were detected in any of the air samples collected.
 - Zinc was detected in the air sample from the grass field but not in any of the other air samples analyzed.
 - PM2.5 measurements from the synthetic turf installations were within the range of those measured at the grass playing field and upwind locations.
 - The results do not support the need to conduct a human health risk assessment for the inhalation route of exposure.
 - **Hazardous Chemicals in Synthetic Turf Materials and their Bioaccessibility in Digestive Fluids (I-Crowley-04, I-Pinchuk-5).** This study addressed potential health risks associated with ingestion of SBR infill and polyethylene fibers. Seven samples of infill material and one sample of polyethylene fiber were collected. Four of the samples were from the same

field at two months, three months, and almost two years after installation. The samples were analyzed to determine the maximum concentrations of polycyclic aromatic hydrocarbons (PAHs) and several metals, and the bioaccessibility of these materials in digestive fluids, including saliva, gastric fluid, and intestinal fluid were assessed using a laboratory simulation technique. Pertinent findings of this study are the following:

- The PAH contents of the infill material declined with age, likely due to photo and thermal degradation.
 - Although the PAH concentrations exceeded New York Department of Environmental Conservation screening levels for contaminated soil, absorption of these PAHs through ingestion is unlikely.
 - Although New York State Department of Conservation’s zinc limits for residential soil were exceeded, only two samples were analyzed.
 - Lead levels were below 53 milligrams per kilogram; however the lead in infill materials was highly bioaccessible in gastric fluids. The bioaccessibility of lead in these materials was lower than the gastric bioaccessibility lead found in household dust.
 - Arsenic and cadmium and chromium concentrations in all the tested samples were below the New York State Department of Conservation’s standards.
- **Artificial-turf playing fields: contents of metals, PAHs, PCBs, PCDDs and PCDFs, inhalation exposure to PAHs and related preliminary risk assessment (I-Pinchuk-05).** This study assesses the concentrations of PAHs, metals, and other compound concentrations in the air during use of synthetic turf fields. Pertinent results of this study include the following:
 - Zinc and PAH concentrations in the rubber samples were variable, regardless of the origin of the rubber at the 13 fields monitored.
 - PAH concentrations in air samples from one synthetic turf field exceeded background concentrations. Using conservative assumptions, the excess cancer risk level associated with inhalation of benzo(a)pyrene (the PAH modeled for the risk analysis) was approximately one in a million.
- **Characterization of Substances Released from Crumb Rubber Material used on Artificial Turf Fields (I-Pinchuk-5).** This study assesses the substances volatilized and leached from crumb rubber. Key findings include:
 - 10 volatile organic compounds were identified in the vapor phase over the 16 virgin crumb rubber samples and two aged field samples assessed, and 6 volatile compounds were quantified by vapor phase injection. Benzothiazole was detected at the highest level in all virgin crumb rubber samples.
 - The aged samples exhibited substantially lower concentrations of volatile organic compounds.
 - Under natural weathering conditions there was substantial reduction in the out-gassing of organic compounds in the first 14 days, leveling out for up to 70 days of observation thereafter.

- Leachability tests were conducted with distilled water and acidified water. Both fluids extracted organic chemicals similarly. During the natural aging experiment, leachable benzothiazole reduced substantially over the 70 day test period. Zinc was the most abundant metal in the acidified leachate, and was four to five times higher in the leachate from the aged samples relative to the virgin samples, possibly because the samples were collected immediately after rain events.

More data are necessary to accurately assess outgassing of volatile organics due to aging, and the leachability of crumb rubber constituents over time.

- **Toxicological Assessment of Coated Versus Uncoated Rubber Granulates Obtained from Used Tires for Use in Sport Facilities** (I-Pinchuk-5). This paper evaluated the ability of two types of coatings to reduce emissions from crumb rubber material while also providing adherence for the crumb rubber and color stability. Key findings are as follows:
 - Cryogenic and semi-cryogenically produced granulates produce less inhalable dust than mechanically produced granulates.
 - The PAH concentrations were similar in the uncoated granulates and the granulates coated with PVS, but PAH concentrations were higher in granulates coated with an alquidic polymer.
 - PAHs were not detected in leachate from uncoated granulates and both types of coated granulates, with the exception of one compound detected at the detection limit in the leachate from the PVC coated granulates.
 - All metals concentrations were low in acidic leachate from all three granulate types but highest for the uncoated granulates.
 - Uncoated granulates exhibited the highest toxicity in the laboratory.
- **Metals Contained and Leached from Rubber Granulates Used in Synthetic Turf Areas** (I-Pinchuk-5). This study quantified the metals concentrations in different types of rubber granulates used in synthetic turf and in acidic leachate and water leachate. Key findings included that the metals content of the granulates and leachate were variable, and factors such as local ground conditions, the type of drainage, and the composition of the fill material would influence the ability of metals to leach from the turf materials. Based on this, the assessment of risk should be conducted on a site-by-site basis.

Additional studies referred to in various comments are not described above for the following reasons:

- The documents referred to in Comment O-SFPARKS-15 provide chemical-specific toxicological information and/or exposures to rubber components in an industrial and manufacturing environment and are not specific to synthetic turf installations. Toxicological effects of the individual chemical components are considered in the analyses described in the literature cited in DEIR Section IV.H, Hazards and Hazardous Materials and Air Quality.
- The document referred to in Comment O-SFPARKS-24 addresses the approach to assessing exposure to lead, including the half-life of lead in the blood. The analyses described in the literature cited in EIR Section IV.H, Hazards and Hazardous Materials and Air Quality include the methodologies used for the assessment of lead exposure, and the document

referred to in Comment O-SFPARKS-24 does not provide additional details that would inform the DEIR.

- Comment O-SFPARKS-25 notes that elevated levels of lead are associated with lead chromate in turf fibers and that elevated lead levels have been identified in the turf fiber at other fields. The additional studies referred to in this comment were not reviewed because, as stated on EIR p. IV.G-15, the Synthetic Turf Standards would limit the lead concentration in the turf fibers to 50 mg/kg. Further, turf companies cannot sell material above 50 parts per million in the State of California. Therefore exposure to elevated lead levels in turf fibers would not occur at the Beach Chalet athletic fields.
- One document referred to in Comment I-Pinchuk-5 is “Human Health Risk Assessment of Synthetic Turf Fields Based upon Investigation of Five Fields in Connecticut.” This study was already reviewed in the EIR (see EIR pages IV.H-12 and IV.H-13).
- One document referred to in Comment I-Pinchuk-5 is “Benzothiazole Toxicity Assessment in Support of Synthetic Turf Field Human Health Risk Assessment.” This study was prepared in support of the document referred to above, and therefore the results of the study are assessed in that report.
- One document referred to in Comment I-Pinchuk-5 is “Characterization and potential environmental risks of leachate from shredded rubber mulches.” This study assesses the leachability of materials from shredded rubber mulches to evaluate the use of this material in stormwater treatment features such as bioretention basins. Because this material has different properties than SBR, this study is not described.
- Several comments referred to documents addressing health risks associated with nanoparticles from carbon black. While these studies present a substantial amount of information, they are all laboratory studies, or evaluate risks associated with nanoparticle exposure in an occupational setting. None specifically address exposure to nanoparticles in an open air environment or associated with play on synthetic turf fields, and are therefore not summarized here.

As discussed in EIR Impact HZ-1, impacts related to the inhalation of vapors and particulates, ingestion of synthetic turf products, and dermal contact with synthetic turf materials would be less than significant. This conclusion is based on review of the studies reviewed for the EIR, and subsequent review of the above references provided by the commenters does not change this conclusion for the reasons indicated for each summary above.

Consent Judgment

The California Attorney General’s Proposition 65 suit against two manufacturers of synthetic turf in 2008 is described on EIR pages IV.H-24 and IV.H-25. As stated in that description, the Attorney General and the turf companies reached a final settlement on the lawsuits in 2010, and the settlements limit the lead content of any synthetic turf product to be installed in California to 50 mg/kg. These settlements followed settlements with another synthetic turf manufacturer from the previous year. The Synthetic Turf Standards described on EIR pages IV.H-15 through IV.H-17 limit the lead content in all turf components to 50 mg/kg, therefore the project is consistent with

the settlements reached. Note that 1 mg/kg is the equivalent of one part per million, so it is not necessary to provide both units.

Bans on Synthetic Turf by Other Entities

In response to Comments O-SFPARKS-32 and I-McGrew-05, research was conducted to identify whether any bans on use of synthetic turf or SBR have been enacted by other municipalities and school districts. The New York State Department of Environmental Conservation and the Department of Health concluded in 2008 that SBR infill used in synthetic turf fields posed no significant environmental threat to air or water quality and posed no significant health concerns.⁴ The City of Los Angeles Unified School District does not have a ban on use of synthetic turf, but only allows infill to be installed after they verify the manufacturer has properly assayed the infill material for lead levels, which must be less than 60 parts per million.⁵ No other municipalities or school districts, such as the City of Chicago, were identified with requirements regarding synthetic turf and SBR infill.

Characteristics of Liner and Other Construction Materials

The liner installed beneath the synthetic turf would be composed of impermeable materials commonly used in construction. Similarly, sand used in the infill materials and rock used for site preparation and construction of the drainage system would be standard construction-grade materials. Therefore, these materials would not be potential sources of contaminants.

Precautionary Principle Ordinance

San Francisco adopted a Precautionary Principle Ordinance in 2006 requiring the selection of alternatives to environmentally harmful activities that present the least potential threat to human health and the City's natural systems. In accordance with this ordinance, where threats of serious or irreversible damage to people or nature exist, lack of full scientific certainty about cause and effect shall not be viewed as sufficient reason for the City to postpone cost-effective measures to prevent the degradation of the environment or protect the health of its citizens. Any gaps in scientific data uncovered by the examination of alternatives will provide a guidepost for future research, but will not prevent the City from taking protective action. As new scientific data become available, the City will review its decisions and make adjustments when warranted. Where there are reasonable grounds for concern, the precautionary approach to decision-making is meant to help reduce harm by triggering a process to select the least potential threat. The project is consistent with this ordinance because there is no evidence that adverse human health effects would occur as a result of play on the athletic fields as discussed above, and the project includes precautionary measures (a liner and perimeter drain system discharging to the city's combined sewer system) as discussed in response HYD-3.

⁴ City of New York, Office of the First Deputy Commissioner, personal communication, February 21, 2012.

⁵ City of Los Angeles Unified School District, personal communication, February 7, 2012.

Safe Chemicals Act of 2011

The Safe Chemicals Act of 2011, introduced to the U.S. Senate on April 14, 2011, is proposed to amend the Toxic Substances Control Act (TSCA) to ensure that risks from chemicals are adequately understood and managed, and for other purposes. Specifically, the act would ensure that the USEPA has sufficient information on the health risks of all chemicals; require the USEPA to prioritize chemicals based on risk; expedite action to reduce risk from chemicals of highest concern; further evaluate chemicals that could pose unacceptable risk; provide broad public, market, and worker access to reliable chemical information; and promote innovation, green chemistry, and safer alternatives to chemicals of concern.

N.6 Migration of Turf Materials [HAZ-5]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-SFPARKS-41	I-Crowley-02	I-Kohn2-11	I-GThompson-01
I-Barish-19	I-Crowley-03	I-Koivisto-63	I-GThompson-02
I-Barish-29	I-Crowley-04	I-Koivisto-73	I-GThompson2-01
I-Barish-30	I-Edelson2-02	I-Learner-16	I-Welborn-02
I-Barish-31	I-GoHoward-04	I-Richards-07	

“SBR TIRE CRUMB MIGRATION. 2500 tons of pulverized SBR Tire Crumb would be introduced onto the site in a loose and uncontained fashion. It can and will migrate away from the site into the surrounding environment in a myriad of ways. It is our position that this is an environmental impact and should be included in the EIR.” (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-41]*)

“The effect of tire crumb sticking to clothes, skin, shoes, and the like, and migrating beyond the sports fields;” (*Jean Barish, letter, December 12, 2011 [I-Barish-19]*)

“...What toxic metals and in what amounts will these toxic metals run off into San Francisco Bay, the Pacific Ocean, and the surrounding environment through storm drains and surface runoff during the lifetime of the fields?

What toxic metals and in what amounts will these toxic metals migrate during the life of the product from the artificial turf and tire crumb infill as the result of tracking on shoes and clothes, leaching, wind transport, and the like?

What is the amount of human and environmental exposure of these toxic metals, due either to direct exposure to artificial turf and tire crumb infill and/or due to migration of product due to tracking on shoes and clothes, leaching, wind transport, and the like? ..." (*Jean Barish, letter, December 12, 2011 [I-Barish-29]*)

"In addition to VOC's and heavy metals, phthalates, latex and other substances, some of which may be listed under Proposition 65, are considered toxic. These may also be present in artificial turf and tire crumb infill.

In what amounts will these other substances migrate during the life of the product from the artificial turf and tire crumb infill as the result of tracking on shoes and clothes, leaching, wind transport, and the like? ...

What is the amount of human and environmental exposure to these substances during the lifetime of the product, due either to direct exposure to artificial turf and tire crumb infill and/or due to migration of product due to tracking on shoes and clothes, leaching, wind transport, and the like? ..." (*Jean Barish, letter, December 12, 2011 [I-Barish-30]*)

"Agents such as cleaning solutions, disinfectants, anti-static agents, flame retardants, and the like are used on artificial turf. An artificial turf field, for example, must be disinfected regularly to remove body fluid spills as well as bacteria that cannot be naturally removed through the action of rainfall and natural processes found in the soil biology. ...

What is the amount of human and environmental exposure to these substances during the lifetime of the product, due either to direct exposure to artificial turf and tire crumb infill and/or due to migration of product due to tracking on shoes and clothes, leaching, wind transport, and the like? ..." (*Jean Barish, letter, December 12, 2011 [I-Barish-31]*)

"A good portion of those particles will sit on or close to the playing surface. Thus strong winds and heavy rain will easy carry those very small tire particles all over the surrounding area - an area that is the ecosystem for that area of the park." (*William Crowley, letter, December 10, 2011 [I-Crowley-02]*)

"Thus any valid EIR would address the impact of those 300 tons of tire particles on the wildlife and ecosystem of the area. But this EIR DOES NOT do this." (*William Crowley, letter, December 10, 2011 [I-Crowley-03]*)

“As it turns out, the tire particles, being oil-based, contain several cancer-causing carcinogens. Thus common sense says that it would not be good to spread 300 tons of such carcinogens into the ecosystem. If the project sponsors think it is okay to do that, then it is up to them to prove that all those hundreds of tons of carcinogen-containing tire particles would do no harm. But they don’t and the EIR completely ignores the subject. ...

Environmentalists hunt wildlife-killing nurdles By Peter Fimrite, Chronicle Staff Writer
Saturday, October 29,2011

Here’s an excerpt from the paper (indented):

Nurdles are the tiny bits of plastic that are melted down and used in the production of plastic bags, bubble wrap, packaging and wrapping material. They may sound cuddly and nonthreatening, but they are believed to be responsible for the sickness and death of thousands of fish and birds in the region that have mistaken them for food. (End of Excerpt)

Thus it is probable that just like the birds and fish getting sick from eating an oil-based substance, so will the birds and wildlife eating the small tire particles that will inundate the environment surrounding the proposed artificial turf field.

And yet the draft EIR never addressed the incredible damage to the ecosystem of that area of GG Park of putting over 300 tons of oil-based particles.” (William Crowley, letter, December 10, 2011 [I-Crowley-04])

“We call this a green city and yet we’re putting in plastic and I don’t believe that the artificial turf is well studied. I’m concerned about the ... the crumbs that come off of it. And so I ask that you reject that, at least give us more time to have comments.” (Ellen Edelson, public hearing comment [I-Edelson2-02])

“...Crumb rubber dust and particulate matter often attaches to the shoes and other clothing of the participant. In that manner it spreads to others, vehicles, the home, etc. where it can be inhaled or ingested. This extends the exposure time of the participant beyond the practice or the competition. The DEIR fails to discuss the impact on this cross-contamination of non-participants and their environments, and particularly family (group) members who have existing health problems which would be’ exacerbated by those metals.” (Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-04])

“One of the most specious and dangerous conclusion in the DEIR addresses the environmental impact of contaminants on natural water in the vicinity of the soccer fields. The DEIR claims that there will be no leaching of contaminants into the soil

Furthermore, the DEIR fails to discuss at all the effect of crumbled turf mixing with surrounding soil and then leaching contaminants into the aquifer. The DEIR assumes that the proposed underlay material for the astro-turf will solve all leaching problems. Yet, he does not consider this problem.” (*Marilyn Kohn, letter, December 12, 2011 [I-Kohn2-11]*)

“I could find nothing in regards to the migration of hazardous materials due to wind and water, yet I know from a study I did of the South Sunset Playground that crumb rubber migrates and gets into storm drains. Photographic evidence was presented at the 12/1/11 hearing as to crumb rubber migration at Crocker Amazon. And the soccer league community has frequently mentioned the tracking and migration of crumb rubber into their cars and homes. This site is windy and prone to flooding; crumb rubber here will migrate into the rest of the park, onto the beach, and into the ocean, yet this is not addressed. This issue was brought up in the scoping session.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-63]*)

“...How was exposure of human and animal neighbors to the chemicals where risk evaluations were done studied? After all, the players will get a maximum exposure of 3 hours a day, 4 days a week, 8 months a year while downwind neighbors will get 12 or more hours a day exposure, 365 days per year.” (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-73]*)

“However, I did not see any mention of how the infill material of polyethylene styrene butadiene rubber (SBR) also known as ‘crumb rubber’ might be dispersed into the surrounding soils and vegetation, and how this material might impact soils, vegetation and be taken up/ingested by wildlife.” (*Deborah Learner, letter, November 29, 2011 [I-Learner-16]*)

“We know fish and birds are dying from eating plastic pellet ‘nurdles’ ... why wouldn’t wildlife that lives or migrates through GG Park also knowingly or unwittingly consume tire crumbs, to their certain detriment?” (*Renee Richards, email, December 8, 2011 [I-Richards-07]*)

“The EIR must document how much crumb rubber migrates to areas surrounding artificial turf fields currently in use, then estimate the amount that will migrate into areas surrounding this project. Using this figure, the EIR must calculate how much crumb rubber will accumulate in

park soil over time, and how that accumulation will affect flora and fauna. Will animals directly consume the rubber? What are the potential effects as these compounds are broken down and absorbed into the ecosystem?" (*Gene Thompson, email, December 5, 2011 [I-GThompson-01]*)

"The DEIR does discuss the presence of carcinogens in crumb rubber and the problem of leachate. But that problem is different than the accumulation in the soil of solid crumbs full of toxic compounds and their long-term effects on the ecosystem." (*Gene Thompson, email, December 5, 2011 [I-GThompson-02]*)

"At the scoping session and later in writing I described a specific concern regarding crumb rubber. I do not see that concern addressed in this Draft, so I will repeat it.

The EIR must document how much crumb rubber migrates to areas surrounding artificial turf fields currently in use, then estimate the amount that will migrate into areas surrounding this project.

Using this figure, the EIR must calculate how much crumb rubber will accumulate in park soil over fauna. Will animals directly consume the rubber? What are the potential effects as these compounds that are included in the rubber are broken down and absorbed into the ecosystem.

The Draft does discuss the presence of carcinogens in crumb rubber and the problem of leaching. But that problem is different than the accumulation in the soil of solid crumbs full of toxic compounds and their long-term effects on the ecosystem." (*Gene Thompson, public hearing comments [I-GThompson2-01]*)

"Another problem with this EIR is it doesn't explore the toxic components of powdered tires and how they get into people's clothes, they get into skin, they get into the air and they go home with the kids. There's nothing in this EIR that addresses that. Why that omission." (*Tes Welborn, public hearing comment [I-Welborn-02]*)

Response HAZ-5

In response to the comments above regarding migration of turf particles offsite, as discussed in EIR Chapter II, Project Description and Section IV.G, Hydrology and Water Quality, the SFRPD would construct a liner and drainage system to collect leachate and stormwater runoff from the Beach Chalet Athletic Fields. The liner would underlie the turf installation and direct leachate and stormwater runoff to a perimeter drainage system that would discharge to the combined

sewer system via a new pipeline and connection. Because all runoff would be directed towards the drainage system, any loose turf material that would be carried in stormwater runoff would likewise be transported to the system and, ultimately, to engineered stormwater controls once infiltration is approved by the SFPUC. This would restrict migration of any particulates beyond the boundaries of the field in surface runoff.

As discussed in Response HYD-4, the project site is not located in a flood zone identified on preliminary flood maps prepared by the Federal Emergency Management Agency. Based on 2007 maps published by the Bay Conservation and Development Commission, the site is not located in an area that would be inundated due to sea level rise by 2100. Also, the project site is not in an area subject to tsunami run-up based on Map 6 of the San Francisco General Plan. Therefore, the project site would not likely be subject to flooding. Although there are currently areas of ponded surface runoff and saturated ground, this ponding would not occur with implementation of the proposed project because the fields would be appropriately engineered with a liner and perimeter drainage system that would direct flows to the combined sewer system and ultimately to engineered stormwater controls once infiltration is approved by the SFPUC. Therefore, SBR particulates would not be transported from the fields via flooding.

The three studies discussed on EIR pages IV.H-10 through IV.H-14 evaluated particulate matter at playfields. These studies did not identify particulate matter at concentrations above background levels, and based on this, the potential for off-site transport of SBR by wind is low. However, some particulate matter could be carried off-site in the cleats, clothing, or gear of the players which could be bothersome to some individuals, but would not constitute a hazardous materials impact under CEQA.

N.7 Fire Hazards of Turf Products [HAZ-6]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

O-SFPARKS-42

I-Barish-21

I-Barish-32

I-Koivisto-68

“THE VULNERABILITY OF SYNTHETIC FIELDS TO VANDALISM. ‘Given the incidents of arson fires in playgrounds using synthetic turf fields with rubber infill, the Task Force report states that synthetic turf fields should be considered potentially flammable’, (DEIR IV.H-7)

The fragile nature of the materials used are vulnerable to accidental and purposeful damage. Warranties may be void if the fields are not protected during non-athletic events.

The cost of acts of vandalism to both synthetic fields should include but not limited to;

- 1) graffiti, (tagging or other painted messages),

- 2) arson, (synthetic turf, even with fire -retardant, will melt if set on fire with an accelerant like gasoline).
- 3) purposeful biological vandalism.

Expensive surveillance equipment and cameras are increasingly being utilized to protect synthetic fields.

The DEIR reports that, 'SFRPD staff indicate that the two known incidents of fires in playgrounds using synthetic turf fields with rubber infill have been arson fires', (DEIR IV. H-7)

It is our position that anonymous SFRPD staff are not be the most reliable resource for accurate data. Here is a partial list of some incidences they seem to have overlooked.

FIRE & ARSON

- OEHHA study told of 'a fire in a playground surface made of chipped tires at the Yulupa Elementary School in Sonoma County.' (DEIR page IV.H-5)
- Richmond, CA Vandal(s) left a crater-like burn mark on synthetic turf field.
- Boston, Massachusetts Vandals set fire to highly flammable artificial turf, damage, \$50,000 worth. ...
- Scotch Plains, New Jersey Vandals burned a bad rendition of a swastika onto the new synthetic field. ...
- Arlington, Massachusetts Fire on a synthetic field, (fireworks, lighter fluid, cigarette burns).
- Charlestown, Massachusetts Vandals set ablaze rolls of turf waiting to be installed. ...
- Naperville, Illinois Someone set artificial turf on fire, possibly using a flare, \$10,000 damage....
- Delta, British Columbia Vandal(s) set fire to 250-sq.ft. area of the park's artificial turf field causing a\$10,000 damage. Authorities also identified fire damage to another turf field nearby....
- Oregon State University Burn damage to the artificial turf, \$1,500-damage ...
- Stamford, Connecticut Bonfire and spray paint damages artificial turf field <http://www.stamfordadvocate.com/news/artiele/Arsonist-damages-Westhill-football-field-527255.php>
- Middletown, Maryland Vandals torch artificial turf field. It caused about \$50,000 - \$75,000 in damage.
- East Hampton, NY A 20-by-60-foot dollar sign that was burned into synthetic turf field will cost \$65,000 to repair....
- Glasgow, Lanarkshire Vandals torch turf field. ...

- Watertown, NY Burns damages synthetic turf field. ...
- Toronto, Canada A flare torch landed on the artificial turf causing a section to ignite causing \$2,000 damage. ...
- Bluffton, South Carolina Juveniles set fire to rubber mulch spread beneath the playground equipment. ...
- Juneau, Alaska: Artificial turf field burned. The arson damage estimated between \$10,000 and \$25,000 to repair. ...” (SFPARKS, letter, December 12, 2011 [O-SFPARKS-42])

“The fact that artificial turf with tire crumb infill is flammable; ...” (Jean Barish, letter, December 12, 2011 [I-Barish-21])

“...Is artificial turf with tire crumb infill flammable? If so, under what conditions and what measures will be taken to minimize the risk that the turf will ignite?” (Jean Barish, letter, December 12, 2011 [I-Barish-32])

“Under the 2007 Integrated Waste Management Board Study, a 4-year old study looking at playground and track surfaces is cited. These surfaces are not the same as crumb rubber and do not pose similar risks. The last paragraph of this section provides no fire data specific to synthetic turf though this was requested at the scoping session. Yet data on the frequency of such fires and the effects is not difficult to find:

1. From Wikipedia article on the Civil War (Oregon football rivalry) 2010: After a 37- 20 victory which sent the Ducks to the BCS championship, a group of Duck fans lit on tire aT-shirt saying ‘I hate your Ducks’ over the Beavers logo on the field. The resulting fire caused significant damage to the artificial turf. Police used a photo of the incident from the Portland Tribune to arrest a University of Oregon student and charge him with riot and several misdemeanors. ...
2. From Wikipedia article on the Pingle School: The 2005 Pingle School fire On 2 December 2005, the Pingle School sixth form building caught fire as a result of a ‘break time prank gone wrong’. [2] This resulted in the near total destruction of the sixth form building. The fire was started within school hours and required the evacuation of the entire school population. Three 15 year old boys were arrested in connection with the fire out of which one was charged with arson and sentenced to 18 months detention. [2] Since the sixth- form centre was destroyed in the fire, temporary accommodation for lessons saw the use of portable classrooms, provided by Portakabin Ltd from their centre in Derby. The new sixth- form area was officially opened in December 2007, being in full use from February 2008. There were two other major fires at Pingle School prior to this. ...

3. from CBS Chicago 8/31/2011 Vandals Set Fire To Artificial Turf At North Central College NAPERVILLE, Ill. (CBS) - Authorities in west suburban Naperville were offering a reward of up to \$1,000 for information about who set fire to the artificial turf at North Central College's football field last weekend.

Around 11 p.m. Saturday, someone started a fire in the end zone of the North Central football stadium, burning the letters 'C' and 'L' in the word 'CARDINALS,' causing \$10,000 worth of damage, police said.

4. On YouTube there's the Westfields Sports Synthetic Grass Fire #1 At...
5. There's a report issued on the flammability of artificial turf from the ISSS meeting in Vienna in 2004 ... that is very informative with good science, though still with a limited scope (due to the wide array of materials and formulations of synthetic turf).
6. An article with video on an artificial turf factory in Italy burning in March of this year ...
7. A web page devoted to synthetic turf fires and vandalism lists 42 cases and their costs at ... with the most recent case listed for September 2011.
8. An article in the Frederick News Post for August 2009 about the arrest of three students who set fire to a middle school synthetic turf field at ... included a picture of the damage and a damage estimate from the company that installed the synthetic turf of around \$20,000.
9. West Ottawa Soccer Club fire destroyed one of their artificial turf fields recently.
10. Here is video of a playground fire in Rutherford, New Jersey at the Lincoln School ... Please note the color of the smoke." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-68]*)

Response HAZ-6

In response to comments O-SFPARKS-42, I-Barish-21, I-Barish-32, and I-Koivisto-68, as discussed on the DEIR pag IV.H-7, the Synthetic Playfields Task Force findings discussed fires on two playgrounds with synthetic turf with loose-fill SBR. Both fires were intentionally started by juveniles who used matches, paper, and wood to ignite the artificial turf. The spread of flames was slow, and no one was injured. Given the incidents of arson fires in playgrounds using synthetic turf fields with rubber infill, the Task Force report states that synthetic turf fields should be considered potentially flammable⁶ and recommended that the SFRPD request that Material Safety Data Sheets from turf providers include information with regard to the flammability of the turf materials and obtain an opinion or review of the flammability of synthetic turf from the San Francisco Fire Department.

The references provided in comments O-SFPARKS-42 and I-Koivisto are generally newspaper articles describing fires on synthetic playfields, but the articles do not document the type of turf

⁶ SFRPD staff indicate that the two known incidents of fires in playgrounds using synthetic turf fields with rubber infill have been arson fires with burnt/melted areas limited to the point source location.

on which the fires occurred. For the most part, the reported fires were of limited extent and resulted in limited damage, consistent with the observations of the Synthetic Playfields Task Force Findings. In some cases, the fires were extinguished by stomping them out. Although several of the references provided showed larger scale fires and resulting smoke, the type of material ignited was not documented, and it is not stated whether the use of accelerants contributed to the fire. At a playground in Buffington where a fire damaged 90 percent of the playground equipment, the material ignited was referred to as “rubber mulch-like material,” not synthetic turf with SBR infill.

Based on the limited ignitability of synthetic turf products, no further evaluation is required in the EIR.

N.8 Hazardous Building Materials [HAZ-7]

Issues Raised by Commenters

This response addresses all or part of the following comment, which is quoted in full:

I-Dumont-01

“I think many of you might have heard about the lead paint contamination at Stow Lake. The reason I bring this up is that Rec and Park has for the last two months been ignoring the public’s requests for remediation of the lead paint contamination that they caused in October and November. They sandblasted, powered, scraped and basically blew lead paint particulate all over Stow Lake.

The reason I’m bringing this up is that in the Draft EIR it mentions that all lead paint codes and regulations will be followed. Well, the same thing was said about the boathouse and now we have contamination and we have a coverup going on. So please do take note of that.” (*Suzanne Dumont, public hearing comment [I-Dumont-01]*)

Response HAZ-7

In response to comment I-Dumont-01, as discussed in Impact HZ-2 (EIR p. IV.H-31), the hazardous building materials survey conducted for the Beach Chalet Soccer Field Restroom identified lead-based paint throughout much of the building. The SFRPD would abate this paint in accordance with Section 3423 of the San Francisco Building Code (Work Practices for Lead-Based Paint on Pre-1979 Buildings and Steel Structures). Compliance would include implementation of notification requirements and work standards specified in the Building Code, as well as meeting specified performance standards, including establishment of containment barriers at least as effective at protecting human health and the environment as those in the

U.S. Department of Housing and Urban Development (HUD) Guidelines (the most recent Guidelines for Evaluation and Control of Lead-Based Paint Hazards). In addition, SFRPD would be required to: protect the ground from contamination during exterior work; protect floors and other horizontal surfaces from work debris during interior work; make all reasonable efforts to prevent migration of lead-based paint contaminants beyond containment barriers during the course of the work; comply with clean-up standards requiring the removal of visible work debris; and use a High Efficiency Particulate Air (HEPA) vacuum following interior work. Compliance with these regulations and procedures of the San Francisco Building Code would ensure that potential impacts of demolition or renovation of the Beach Chalet Soccer Field Restroom would be less than significant. As a responsible CCSF agency, the SFRPD would implement these regulations as stated in the DEIR. SFRPD has implemented required regulations for the Stow Lake project as well.

O. Alternatives

O.1 Overview of Comments on Alternatives

The comments and corresponding responses in this section cover topics in Chapter VI of the EIR. These include topics related to:

- ALT-1, Alternatives
- ALT-2, Improve Existing Grass Fields
- ALT-3, West Sunset Alternative
- ALT-4, Grass Field Improvements Plus Offsite Alternative
- ALT-5, Other Alternative Locations

Portions of some of the comments addressed in this section also relate to other topics and therefore, those portions of the comments are responded to in those sections, including discussion of project related costs and discussion of hazards and hazardous materials.

O.2 Alternatives [ALT-1]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Antonini-04	O-GGAS2-35	O-SFPARKS-56	I-McGrew-16
O-CLF-02	O-GGAS2-37	I-Browd-04	I-GMiller-06
O-CLF-08	O-GGAS2-38	I-Buhler-03	I-Moss-03
O-CPF-03	O-GGPPA-07	I-Clayton-01	I-Paskey-01
O-CSFN-06	O-GGPPA-09	I-Clayton-05	I-Pattillo-01
O-GGAS2-02	O-GGPPA-10	I-Cope-02	I-Pattillo-09
O-GGAS2-11	O-SFAH-01	I-Crowley2-01	I-Pattillo2-02
O-GGAS2-12	O-SFAH-04	I-Donjacour-05	I-Pfister-03
O-GGAS2-13	O-SFAH-06	I-Johnson-01	I-Splittgerber-01
O-GGAS2-14	O-SFPARKS-35	I-Jungreis2-25	I-Stern-01
O-GGAS2-34	O-SFPARKS-36	I-Jungreis2-33	I-Welborn-03

“And the other thing was not addressed in here, we talked about the lighting and there was an alternative that would use less lighting. I think there is an amount of light you have to have. I mean, you have to be able to see. You know, it does not have to be daylight quality, so there is probably that alternative that was analyzed.

What was not analyzed was shutting the lights off a little early. Instead of 10:00 o’clock, how about 9:00 at night? I mean, that would still give you a lot of additional time, particularly this time of the year because, as you may be aware, a lot of schools, this is a soccer season. It happens

in the winter months. So to try to practice a soccer team, it's pretty hard to get it in after school between 3:00 and 5:00 when it gets dark.

So the lighting is really important to allow these practices. In fact a number of schools, private and I don't know about public, but they actually use a lot of energy and cause a lot of pollution by having to take their students to Daly City and Pacifica to practice because they can go to lighted fields that are available there and we don't have enough in San Francisco for practicing.

So there is an environmental benefit even though you're going to have lights and you're going to have the down side to the environment of having lights, you're going to have the up side of people not having to travel as far to practice. So there's two sides to this, of course." (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-04]*)

"We also encourage the City of San Francisco and the Department of Recreation and Parks to select only alternatives that are consistent with the National Park Service's *Secretary of the Interior Standards for the Treatment of Historic Properties* (Secretary's Standards), *Preservation Brief 36: Protecting Cultural Landscapes* (NPS, 1994), and *The Guidelines for the Treatment of Cultural Landscapes* (NPS, 1996), the latter two of which were authored by myself." (*The Cultural Landscape Foundation, letter, December 8, 2011 [O-CLF-02]*)

"The project, as proposed, will result in a substantial adverse impact and potentially affect the significance of the Beach Chalet Athletic Fields. We ask that you seriously analyze alternatives that would not negatively affect the integrity of Golden Gate Park." (*The Cultural Landscape Foundation, letter, December 8, 2011 [O-CLF-08]*)

"Public agencies must "deny approval of a project with significant adverse effects when feasible alternatives or feasible mitigation measures can substantially lessen such effects." *Sierra Club v. Gilroy City Council* (1990) 222 Cal.App.3d 40, 41; see also Public Resources Code § 21002,21002.1. In the DEIR three additional alternatives and the No Project Alternative were analyzed. Of these alternatives, all three alternatives would decrease the impact to the cultural resource. These alternatives however only took out one aspect of the project and did not explore minimizing the overall impact to the site by reduction of use." (*California Preservation Foundation, letter, December 8, 2011 [O-CPF-03]*)

"Many of the negative impacts could be reduced by selecting a more environmentally friendly option." (*Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-06]*)

“As an important historical resource and as a designated Urban Bird Refuge, Golden Gate Park deserves special consideration and projects that inflict substantial environmental changes should be given heightened scrutiny. There should be special consideration given to this area and all reasonable, environmentally superior alternatives should be fully considered. The comments provided below are intended to assist the Planning Department and the project sponsors with improving the DEIR and adopting an alternative that meets their most objectives while preserving the naturalistic landscape of the park as required by the Master Plan.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-02]*)

“Once again, the DEIR’s bias for RPD’s and the City Fields Foundation’s preferred alternative of artificial turf and large light fixtures is apparent in the discussion of the Grass Fields/Reduced Lighting Alternative in the Executive Summary. (See DEIR, at ES-4-6) First, the Executive Summary states that the Grass Fields alternative would have ‘similar construction impacts’ but it explicitly excludes impacts associated with the installation of artificial turf, which likely constitute the greatest construction-related impacts (to say nothing of the construction-related impacts associated with removing the artificial turf in 8-10 years). (Id., at ES-5) We also note that the DEIR acknowledges that there would be fewer impacts from light than those of the proposed project, but it emphasizes that those impacts under the proposed project are ‘less than significant.’” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-11]*)

“The Executive Summary incorrectly states that under the Grass Fields alternative hazardous materials impacts are expected to be similar to the preferred Alternative. (DEIR, at ES-5). The DEIR itself makes this assertion, but provides no concrete assurances to support it.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-12]*)

“Like the full text of the DEIR, the Executive Summary also overstates the similarity between Alternative 3 and the proposed alternative. For example, the text of the Executive summary understates impacts due to field construction and focuses primarily on the removal of trees and other vegetation. (DEIR, at ES-5) However, the construction of the proposed Project will also include the installation of tons of artificial turf materials and 60-foot tall stadium lights. Golden Gate Audubon does not understand how the impacts of the proposed Project, which include significant earth moving and installation of tons of artificial fill, as well as 60-foot tall lights, can be considered to be substantially similar to the replacement of naturally growing grass.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-13]*)

“Moreover, as discussed further below, the DEIR appears to create criteria within the alternatives, such as the ‘decomposed granite’ landscaping, which seem designed to create conflict with the

project sponsor's objectives. The narrowness with which the alternatives were drafted doom them to rejection." (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-14]*)

"An EIR must include an adequate discussion of alternatives to ensure informed decision making in the selection of one alternative over another. (*See San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.AppAth 713, 735 [‘A major function()1 an EIR ‘is to ensure that all reasonable alternatives to proposed projects are thoroughly assessed by the responsible official.’ (citation omitted)]; *see also* Pub. Resources Code, § 21002.1(a) (a) [purpose of EIR includes identifying alternatives to the project].) The ‘reasonableness’ of alternatives, which is assessed in part on their financial and physical feasibility. (Pub. Resources Code, § 21061.1)

The alternatives proposed must be designed to reduce or avoid one or more of a proposed project's potentially significant impacts. (CEQA Guidelines, § 15126.6.) The explanation provided by the lead agency for the selection of an alternative must be adequate to ensure an informed public discussion. (*Stand Tall on Principles v. Shasta Union High Sch. Dist.* (1991) 235 Cal.App.3d 772, 786.) The ‘EIR must explain why each suggested alternative either does not satisfy the goals of the proposed project, does not offer substantial environmental advantages[,] or cannot be accomplished.’ (*San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.AppAth at 737; *see also* CEQA Guidelines, § 15091(c) [stating that when an agency finds that alternatives are infeasible, it must ‘describe the specific reasons for rejecting’ the alternatives].)

The DEIR does not discuss an adequate range of reasonable alternatives and mischaracterizes the differences between the proposed project and the alternatives, with the effect of downplaying the benefits of the alternatives and the environmental impacts of the project. As discussed in detail below, the DEIR must be revised to (1) reflect a real range of reasonable alternatives and (2) include an honest, independent discussion of alternatives that is not dictated by the project sponsors.

A. The DEIR Fails to Discuss an Adequate Range of Reasonable Alternatives. The list of alternatives provided in the DEIR does not constitute an adequate consideration of reasonable alternatives. (*San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.AppAth at 735) While CEQA does not require every conceivable alternative be assessed, it does require a full review of available alternatives. By failing to provide adequate alternatives and discussion thereof, the DEIR is fatally flawed and must be revised.

First, the Beach Chalet Athletic Fields renovation is intended to serve regional soccer needs, not just those in the western or northern part of the city. (*See, e.g.,* DEIR at II-I [‘The Beach Chalet Athletic Fields are one of three primary ground sports athletic facilities citywide ’], and at II-10) The list of alternatives fails to include any other sites that would also serve ‘citywide’ (though users from outside the city are anticipated as well). Instead, the alternatives analysis is limited to only one, relatively limited site nearby the fields, the West Sunset Playground. At a minimum, the EIR must be revised to include other alternatives that could meet the citywide need for more playing fields.

Second, as discussed more fully below, several of the alternatives appear to include provisions intended to bring them into conflict with the project sponsor's objectives. For example, there is not a good reason given why Alternatives 2, 3, and 4 must include the 'decomposed granite' border, which may create conflicts with ADA requirements. This kind of positioning appears to be intended to reduce the viability of the alternatives.

...By failing to forthrightly analyze these alternatives, the DEIR is unfairly skewed toward the proposed project." (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-34]*)

"The DEIR erroneously characterizes Alternatives 2, 3, and 4 as having 'similar' impacts to the proposed project despite significant differences in the nature of each alternative, especially when compared to the proposed project. (*See, e.g., Table VI-I*) Alternative 2 and 3 would maintain the natural turf at the Beach Chalet, where it would continue to provide forage and refuge for birds and other wildlife. Alternatives 2, 3, and 4 would significantly reduce or eliminate the changes to lighting in the western end of Golden Gate Park, also resulting in fewer impacts to birds, bats and other wildlife (as well as fewer aesthetic impacts).

The DEIR also characterizes Alternatives 2 and 3 as having 'similar' hazardous and hazardous material impacts. (*See, e.g., id.*) However, Alternative 2 would obviate the need for 400 tons of material to be removed from the site in 8-10 years, which the DEIR acknowledges will take up 'valuable landfill space'. Notably, the DEIR fails to identify that the material will also have to be disposed of as hazardous material. Moreover, by ranking the impact as 'similar', the DEIR downplays the fact (that it concedes elsewhere) that the artificial turf may leach heavy metals and other contaminants into ground water and the local environment. Finally, the DEIR does not address at all the issue dispersal of the crumb rubber from the project site, where it may enter storm water, be consumed by wildlife, or result in exposures to children and other park users.

The DEIR's assumption that impacts are similar is contrary to the purpose of CEQA, which is to ensure decisions that are most protective of the environment. The DEIR acknowledges that

[a]lthough it is unknown whether this alternative would reduce biological resources impacts and/or hazards and hazardous materials, **this analysis conservatively assume that similar impacts to these topics could occur.**

(DEIR, at VI-9 [emphasis added]). We note that the true 'conservative' approach is to (1) perform an adequate analysis to differentiate potential impacts between alternatives and/or (2) not to assume impacts are 'similar' in the absence of information. This conclusion, which conveniently supports pushing the preferred project though, appears to fly in the face of the purpose of CEQA." (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-35]*)

“Alternative 3 (Grass Turf with Reduced Lights) would substantially reduce impacts to biological and historical resources at the Beach Chalet site, but it is clearly designed to be an outlying objective and is set up to be rejected. For example, it includes unnecessary features that make it unattractive and contrary to the Project Sponsor’s objectives, including ‘decomposed granite’ may reduce access or ADA compliance.

The analysis also seems to rely on several unsubstantiated assumptions. For example, it states that hazards and hazardous materials impacts are anticipated to be similar to the proposed project. (DEIR, at VI-II) Remarkably, this alternatives analysis omits discussion of the need to dispose of at least 400 tons of rubber material that will be considered hazardous materials at the end of the artificial field’s lifetime. The DEIR is also silent on the issue of dispersal of the rubber crumb to the adjacent environment, resulting in exposures to wildlife and humans and its persistence in the environment. The DEIR also seems to assume, without evidence, that the large stadium lights described in the proposed project will ensure increased visitor safety and increased nighttime use of the western end of the park significantly more than will occur under Alternative 3. The DEIR is also silent on the lesser impact to transportation and traffic congestion.

We also note that the alternatives analysis is written in such a way as to reflect the bias of the DEIR’s authors. For example, where the DEIR acknowledges that Alternative 3 would have fewer aesthetic impacts due to lights, it also inserts that dubious conclusion that the aesthetic impacts under the proposed project would be less than significant. (Id.) It repeats this tactic in its discussion of impacts to water resources and hydrology. (Id.)

Finally, the alternatives analysis is silent regarding Alternative 3’s consistency with the Golden Gate Park Master Plan, especially as compared to the proposed project. Clearly, maintaining a naturally growing turf field will permit the facility to continue providing at least some habitat value for wildlife in the area and for people who visit the site to observe wildlife” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-37]*)

“Like the analysis for Alternative 3, the DEIR’s description of Alternative 4 appears to be calculated to precipitate its rejection. The alternatives analysis relies on many of the same unsubstantiated assumptions regarding visitor safety and usage because of the change in the lighting scheme. (See, e.g., VI-13) Alternative 4 also includes, unnecessarily, the ‘decomposed granite’ which brings it into conflict with ADA requirements.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-38]*)

“Another project objective is **renovating the restroom building** at Beach Chalet Athletic Fields. This is a worthy goal, but hardly worth substantiating the destruction of parkland and the expense of a \$9.8 million project. **What alternative could accomplish this objective?**” (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-07]*)

“Alternative 3: Grass Turf with Reduced Lights -- This alternative is disingenuous. If the current fields cannot sustain play for long periods of time because they are natural grass, how will the grass stand up to added lights and increased hours of play? If real grass can sustain long hours of play with renovation, why aren’t the fields being renovated now with real grass so that this project can be avoided? Why does the DEIR state that installing lights would remain consistent with the Golden Gate Park Master Plan? What language in the Master Plan is this referring to? What studies support the statements of needing more maintenance for the grass? What kind of maintenance would be performed that cannot be performed now with the stated 1/3 FTE for the fields?” (Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-09])

“Alternative 4: Synthetic turf without lights - -The DEIR states that this is consistent with the Golden Gate Park Master Plan - what is the basis for this statement? Where does it say in the GGPM that this is acceptable? The same questions about safety, crime, and lighting would have to be asked.... What is the removable seating that is referred to? What does it look like? How large is it? How is it brought in and taken out? What would prevent it from becoming a de facto site feature? Decomposed granite is not accepted as an ADA material by San Francisco -- why is it continually mentioned as an option for the pathways?” (Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-10])

“The DEIR, however, ...fails to evaluate a reasonable range of potentially feasible alternatives.” (San Francisco Architectural Heritage, letter, December 12, 2011 [O-SFAH-01])

“The DEIR fails to adequately analyze the impacts of the proposed project or formulate alternatives within the context of these policies. Findings of the DEIR state that:

The proposed project would be generally consistent with [Golden Gate Park Master Plan] policies because the project would be implemented entirely within the boundaries of the existing complex, the proposed turf would be consistent with the character of the use as an athletic field complex, any trees or shrubs removed would be replaced at a ratio of at least 1-to-1, and the project would not diminish or encroach upon the surrounding open space (III-8).’ (San Francisco Architectural Heritage, letter, December 12, 2011 [O-SFAH-04])

“Although there are at least two potentially feasible alternatives identified in the DEIR (Alternatives 3 and 4), neither would maintain the bucolic character of the west end of the park. Heritage is encouraged by several changes to the original design that help maintain the naturalistic and historic feel of the west end, including the proposal to install small-scale, removable seating and to install a pathway consisting of decomposed granite (Alternative 3 and 4). Nevertheless, we

believe that the DEIR does not adequately meet CEQA requirements to provide a range of reasonable alternatives.” (*San Francisco Architectural Heritage, letter, December 12, 2011 [O-SFAH-06]*)

“ALTERNATIVE 4: SYNTHETIC TURF WITHOUT LIGHTS ALTERNATIVE (DEIR page VI-S, VI-7). Because Alternative 4 would entail the same hazardous materials and their by-products, (including but not limited to carbon black nanoparticles, heavy metals, and chemical ingredients), it is our position that the Hazards and hazardous materials impact would be equally significant as the Beach Chalet project and therefore should receive a rating of significant impact.

It is our position that the impacts that arise from the use of SBR crumb rubber and synthetic turf at the Beach Chalet project are applicable to any alternative project that utilizes SBR crumb rubber and synthetic turf.” (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-35]*)

“ALTERNATIVES TO SBR TIRE CRUMB. If the final EIR should make mention of an alternative infill to SBR Tire Crumb, it should be noted that;

There are no affordable alternatives to SBR Tire Crumb that will realistically be used in the 9 acre Beach Chalet conversion. Since the 2008 Synthetic Fields Task Force; the City Fields Foundation and RPD have floated various red herrings, the most common being a combination of coconut fiber and cork, (corkanut).

Other touted infill materials that are too expensive, unrealistic, or unhealthy for various reasons include; Nike Grind Rubber, ethylene propylene diene monomer (EPDM), non-vulcanized thermoplastic elastomer (TPE), Elastomer-coated sand.

It is our opinion that these options will not be used and should not be offered by this EIR as a realistic possibility.” (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-36]*)

“C. Environmentally Superior Alternative. The DEIR states, ‘The No Project Alternative would be the environmentally superior alternative.’ (DEIR page VI-14)

It also is our position that the ‘No Project Alternative’ is the environmentally superior alternative.” (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-56]*)

“...The fact that there are several alternatives to the stadium idea makes it a lot easier to compromise. The soccer people say all or nothing, the opposition says restore and maintain the natural grass field and use the remaining \$10 million to improve and develop other parks. The report should be rejected and steps taken to pursue one of the alternatives. Surely, reasonable

people can come up with a plan that benefits youth soccer, as well as all of us, a plan that does not forget the history, the heritage and the current and future enjoyment of this western edge of our city.” (*Gary Browd, letter, December 7, 2011 [I-Browd-04]*)

“As stated in our previous comments, Heritage believes that there is more than one feasible alternative to the proposed project. Indeed Alternatives 3 and 4 outlined in the Draft DEIR appear to be feasible because the DEIR acknowledges that they both meet the majority of project objectives. However, we believe that the city can improve on that.” (*Mike Buhler, public hearing comment [I-Buhler-03]*)

“In my view, the EIR needs substantial amendment in these areas in order to meet the standards of adequacy laid out by the California Environmental Quality Act. This additional research, along with the addition of the fundamentally obvious ‘compromise alternative’, will necessarily require the planning department to repeat its analysis of many areas. This new analysis should then provide the basis for the department to revise the EIR’s conclusions as to the environmental impact of each alternative and how well each alternative meets the stated objectives. In view of the substantial deficiencies in the draft, any Final EIR that retains broadly the same analyses in these areas, or repeats the existing conclusions without review, will fail the test of adequacy under CEQA.” (*Rupert Clayton, letter, December 10, 2011 [I-Clayton-01]*)

“Why the Existing Alternatives Alone are Insufficient. Parts of the Compromise Alternative are included as elements of some alternatives in the Draft EIR.

- Alternative 2: Off-Site Alternative (EIR: VI -7 to VI -9) considers an alternative site, but only ‘Without renovation of the Reach Chalet site, not in combination.
- Alternative 3: Grass Turf with Reduced Lights Alternative (EIR: VI-9 to VI-12) considers renovated grass turf at the Beach Chalet site, but retains sports lighting and does not include additional renovated fields elsewhere.
- Alternative 4: Synthetic Turf without Lights Alternative (EIR: VI-12 to VI-14) considers not installing sports lighting at the Beach Chalet site, but still includes synthetic turf and does not include additional renovated fields elsewhere.

However, each of the existing alternatives either causes some significant environmental impact, fails to meet the sponsor’s stated objectives, or both. This is because each contains some combination of elements that fails in some way. The same is true for the project as proposed, and remains true for the mitigations suggested by the Draft EIR ...” (*Rupert Clayton, letter, December 10, 2011 [I-Clayton-05]*)

“It is my belief that these are environmentally irresponsible acts and I believe that the project’s third alternative, the grass turf and reduced lighting alternative is the only --is the most responsible way to carry out a project like this.” (*Jeffrey Cope, public hearing comment [I-Cope-02]*)

“...in respect to the grass turf with reduced lights alternatives, it says, ‘Installation of the new grass field turfs would eliminate potential for less than significant water quality impacts due to the installation of the synthetic turfs, i.e., potential for contaminants in the run-off from the synthetic fields.’ So right there it’s saying it’s not much of an impact.

But then later under the synthetic turf without lights alternative, it says, ‘The no-project alternative would be an environmentally superior alternative.’ So it’s contradicting itself at -- above it was saying it’s not significant, and here it’s saying the no-project alternative is the environmentally superior alternative.” (*William Crowley, public hearing comment [I-Crowley2-01]*)

“The value judgments and conclusions that the DEIR makes about ‘significance’ clearly differ from those that I, and many others who attended the hearing, would draw. We value the wild nature of the western part of Golden Gate Park much more than the potential revenue that this more carnival-like sports field might bring in. I believe that the ‘Grass Turf with Reduced Lighting’ is the most reasonable alternative to the artificial turf proposal.” (*Annemarie A. Donjacour, Letter, December 8, 2011 [I-Donjacour-05]*)

“Our Titan SS is a turf system that does not use recycled car tires for the infill, instead we use a 100% sand infill. The Sand infill eliminates the worry of Storm water pollution caused by Crumb rubber migration, the sand stays cooler than black rubber, it is all natural, and it can be reused 12 years down the road when the Turf is replaced.” (*Dominic Johnson, email, December 12, 2011 [I-Johnson-01]*)

“Under the plan the grass fields will be destroyed at least in part due to issues concerning alleged gopher damage: there is insufficient analysis of alternatives to preventing gopher damage.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-25]*)

“The plan refers to possible alternatives: there is insufficient analysis of these alternatives as they relate to each of the issues raised above.” (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-33]*)

“Quoting from the DEIR “The No Project Alternative would be the environmentally superior alternative”, “Selection of the Off-Site Alternative would avoid significant unavoidable historic resources impacts to the character defining features of the Beach Chalet Athletic Fields cultural landscape” “potential conflicts with existing plans and policies, particularly the Golden Gate Master Plan; and potential loss of historic resources or substantial changes to the character of historic resources.”

We the undersigned feel that a lot of the figures, assumptions, are skewed to support what the SFRPD wants. Renovation of the Beach Chalet to keep it natural meets all of the ‘objectives’ of the project and is in keeping with the Master Plan.” (*Shana McGrew, email, no date [I-McGrew-16]*)

“Section VI proposes Alternative 3, which would include reduced night lighting.’ ... the SFRPD would install six new field lights instead of ten, which would provide lighting for the two center fields.’ (Page VI-1 0) It’s hard to visualize that such a change could allow this alternative to be judged to have impacts ‘less than significant’. The Final EIR should illustrate this option in a manner similar to Figure IV.B-3.” (*Greg Miller, letter, December 9, 2011 [I-GMiller-06]*)

“...failing to analyze alternatives to the artificial turf, brightly lit one the Recreation and Park Department seeks to build.” (*Rasa Gustaitus (Moss), letter, December 12, 2011 [I-Moss-03]*)

“The EIR for conversion to synthetic turf at this specific location does not look deeply at the looming crisis for all Bay communities as oceans rise. If anything these very important locations should be converted into wetlands and not into toxic material. This project is selfish in its exclusive views of all animals who like humans require water & migratory food.” (*Candice Paskey, letter, December 7, 2011 [I-Paskey-01]*)

“The purpose of this letter is to urge the Planning Department staff to seriously consider an alternative in the EIR to the currently proposed plan to completely, transform the Beach Chalet Soccer Fields from a low profile set of fields to an intensely modern sports complex with artificial turf and network of lights.” (*Chris Pattillo, letter, December 8, 2011 [I-Pattillo-01]*)

“You should direct the Recreation and Parks staff to seek an alternative that represents a compromise between those who demand increased play time and those who wish to retain the historic character of the pastoral landscape envisioned by the park's original designer - William Hammond Hall. Hall expressed this sentiment

‘a park therefore, should be an agglomeration of hill and dale, meadow, lawn, wood and coppice presenting a series of sylvan and pastoral views, calculated to banish all thought of urban objects.’

The Beach Chalet fields are a valuable cultural resource. I know you will hear from sports advocates and feel pressured to accommodate their demands. But unstructured recreation and enjoyment of nature are also valid needs, and these park uses serve a broader spectrum of people, in terms of age, economic status, and physical ability, than does a limited-use athletic activity. I understand that you need to be responsive to all parties, and I believe that is achievable. Please use your authority to conceive a compromise that will retain the historic integrity of the fields.” (Chris Pattillo, letter, December 8, 2011 [I-Pattillo-09])

“Part VI of the DEIR offers a number of alternatives that would reduce the impacts on this resource. I strongly encourage your commission to seriously consider the alternatives to the proposed project. Identifying an alternative location for these fields should be thoroughly explored - West Sunset Playground has been suggested as a possible suitable location.” (Chris Pattillo, letter, November 15, 2011 [I-Pattillo2-02])

“There are plenty of alternatives. The DEIR seems to be just a boilerplate of the carefully crafted arguments of this lobbying group and simply ignores or gives little consideration to the many arguments against the project.” (Charles Pfister, email, December 12, 2011 [I-Pfister-03])

“As a soccer coach for 25 years, I have seen soccer teams play on a wide variety of surfaces. I believe that including the A-Turf system in the Environmental Review would add the most advanced and environmentally sound alternative available.” (Buzz Splittgerber, email, December 12, 2011 [I-Splittgerber-01])

“The DEIR states that the proposed Beach Chalet Soccer Fields Renovation Project has a ‘significant and unavoidable impact on historic resources’. However, the two on-site alternatives in the DEIR - Grass Turf with Reduced Lights and Synthetic Turf without Lights - do nothing to mitigate the significant and unavoidable impact. They are both in conflict with the Golden Gate Master Plan which says that the western edge of the park should remain ‘sylvan’ and ‘pastoral’.” (Kathleen Stern, email, December 11, 2011 [I-Stern-01])

“A couple of other things. The Golden Gate Master Plan is compatible with having grass restoration. It would --having grass restoration even with modest lights would allow the historic district to be kept. Otherwise you’re violating that.” (*Tes Welborn, public hearing comment [I-Welborn-03]*)

Response ALT-1

As described on EIR page IV-2, in accordance with the CEQA Guidelines Section 15126.6, an alternatives analysis must meet the following three criteria: (1) the alternative would attain *most* of a project’s basic objectives; (2) the alternative would *avoid or substantially lessen* one or more of the significant environmental impacts of the proposed project; and (3) the alternative must be *potentially feasible*. An EIR need not consider an alternative whose impact cannot be reasonably ascertained and whose implementation is remote and speculative. Furthermore, an EIR need not consider every conceivable alternative, but must consider a reasonable range of alternatives that will foster informed decision-making and public participation. Therefore, the EIR included alternatives that would attain most of the project’s objectives:

The objectives of the proposed project include the following:

- Increase the amount of athletic play time on the Beach Chalet Athletic Fields by renovating the existing athletic fields and adjacent warm-up areas.
- Improve public access to the Beach Chalet Athletic Fields by adding new pathways, increasing the size of the existing parking lot, providing a formal drop-off area, and providing bicycle racks.
- Increase ground-sports athletic opportunities on the north side of San Francisco commensurate with improvements elsewhere in San Francisco.
- Provide a safe, optimal recreation facility and amenities for athletes, spectators, and park users by renovating the existing Beach Chalet Athletic Fields and the existing restroom building, adding bleachers, and installing a new plaza area with visitor amenities.
- Reduce ongoing maintenance and resource needs.
- Comply with current Americans with Disabilities Act (ADA) requirements.
- Improve safety and increase nighttime use of the west end of Golden Gate Park by installing new lighting and bringing more recreation facility users to the area.
- Remain consistent with the *Golden Gate Park Master Plan*.

In addition, the EIR alternatives focused on alternatives that would avoid or lessen the following impacts:

- **Significant and Unavoidable Impacts to Historic Resources.** As discussed on pages IV.C-20 to IV.C-28, the proposed project would result in significant and unavoidable impacts to historic resources associated with overall effects on the character-defining

features of the Beach Chalet Athletic Fields cultural landscape from the proposed alterations to the Beach Chalet Athletic Fields, including the addition of synthetic turf, spectator seating, field lights, and new pathways. (Impact CP-1, SU). Implementation of Mitigation Measure M-CP-1, which includes redesigning the circulation paths to include a more naturalistic and compatible surface material (i.e., decomposed granite), would reduce the effects of concrete pathways and help maintain the integrity of the Field; however, this measure alone would not reduce the overall impacts on historic resources to a less than significant level. Further, it cannot be stated with certainty that decomposed granite would meet all applicable accessibility requirements, and therefore, may not be feasible for use in the project.

- **Significant Biological Resources Impacts that Can be Mitigated to Less Than Significant.** As discussed on pages IV.F-23 to IV.F-24, the proposed project would remove turf grass and trees/shrubs to accommodate the proposed synthetic turf, playfield expansion, spectator seating, pathways, and other structures. If special-status bats are present during vegetation removal and/or building construction and renovation activities, and are disturbed during project construction, a significant impact on special-status bats would occur (Impact BI-1, LSM). Implementation of pre-construction bat surveys (Mitigation Measure M-BI-1), and avoidance measures (if any bats are present) would reduce this impact to a less-than-significant level.

As discussed on page IV.F-33, the Golden Gate Park Master Plan states that individual large trees should be replaced in kind with similar species. While Chapter II, Project Description, includes tree replacement, the species of trees has not been identified. If tree replacement does not include similar species as the trees removed under the proposed project, the project would conflict with the Golden Gate Master Plan. Consequently, this analysis considers removal of trees within SFRPD-managed lands to result in a significant impact related to conflict with applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Implementation of the tree replacement, with requirements regarding type of trees appropriate for replacement (Mitigation Measure M-BI-3), would reduce impacts to less-than-significant levels.

- **Significant Hazards and Hazardous Materials Impacts that Can Be Mitigated to Less than Significant.** As discussed on pages IV.H-31 to IV.H-32, during renovation of the restroom building, workers and the public could be exposed to hazardous building materials including electrical transformers that could contain polychlorinated biphenyls (PCBs), fluorescent light ballasts that could contain PCBs or (2-ethylhexyl) phthalate (DEHP), and fluorescent light tubes that could contain mercury vapors (Impact HZ-2, LSM). Implementation of a pre-construction survey and removing any hazardous building materials found at the restroom building in accordance with applicable laws and regulations (Mitigation Measure M-HZ-2) would reduce this impact to a less-than-significant level.

Comment I-Moss-03 indicates the EIR is inadequate because it fails to analyze alternatives to the proposed project and comment I-Pattillo-01 requests consideration of an alternative to the project. Comment O-GGAS2-02 indicates that all reasonable environmentally superior alternatives should be fully considered. Comment I-Clayton-01 indicates the EIR alternatives analysis is not adequate because each alternative causes an environmental impact, fails to meet the project

objectives, or both. EIR Chapter VI, Alternatives includes a no project alternative, required under CEQA, as well as three project alternatives that would each meet most of the project objectives. Each of the alternatives would avoid or reduce the significant impacts of the proposed project listed above. Thus, the CEQA alternatives are adequate and represent a reasonable range of alternatives. Further, it is noted that the San Francisco Recreation and Parks Commission may consider approval of the project, or an alternative to the project within the range of alternatives considered. Several comments indicate that the grass field and reduced lights and the artificial turf with no lights alternatives would be in conflict with the project objective related to Americans with Disabilities Act requirements. While this component of the alternative may not fully meet the specific objective regarding accessibility, most of the project objectives would be met so the alternatives would satisfy CEQA requirements.

Comment O-GGAS2-38 indicates that the analysis of the artificial turf without light alternative relies on assumptions regarding visitor safety. Comment O-GGAS2-37 indicates that improved safety related to lighting should be supported. Because field and pathway lights would not be included under this alternative, EIR page VI-13 indicates that the alternative would fail to meet the objective pertaining to increased nighttime use, and the associated improvements to safety from increased legitimate use of the site. It is SFRPD's experience that artificial turf and field lighting installed at other sites has resulted in improved safety. An alternative that does not install lights would not "improve safety ... by installing new lighting." However, the alternative would meet most of the project alternatives and thus, the analysis of this alternative does not rely on assumptions regarding visitor safety.

Comments I-Jungreis2-33 and O-GGAS2-34 indicate that the alternatives analysis is insufficient regarding environmental topics, and non-environmental topics such as funding. These comments do not provide specific examples of insufficient alternatives analysis regarding environmental topics, and therefore no response is provided. Comment I-GMiller-06 requests a graphic of one of the EIR project alternatives. An EIR need not analyze the impacts of alternatives at an equal level of detail as the proposed project, but shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project (CEQA Guidelines Section 15126.6[d]). Thus, graphics of alternatives site layouts is not necessary. However, it is noted that EIR Chapter VI, Alternatives includes a comparison of the impacts of the CEQA alternatives and the proposed project, particularly regarding the significant impacts identified for the proposed project. As discussed in Response GC-2, discussion of project cost is not considered under CEQA. Comment O-GGPPA-09 indicates that the grass turf with reduced lights alternative is faulty because if grass cannot be maintained under existing conditions, it could not be maintained with increased use with lighting; this comment also requests supporting statements regarding increased maintenance requirements under this alternative. As the commenter notes, increased site use with reduced lights would result in increased play time. Because grass fields that exist under existing conditions would be retained, maintenance requirements would increase, compared to existing conditions. Maintenance requirements would also be greater than with the proposed project, because grass fields require more maintenance than artificial turf related to ongoing reseeding, fertilization, and rest periods for regrowth.

An alternative that would include closure of the fields at 9:00 p.m., as suggested in Comment A-SFPC-Antonini-04, would meet the project objectives, but would not avoid or substantially reduce any of the significant impacts of the proposed project and thus, was not considered in the EIR. CEQA analysis of alternatives is governed by what the CEQA Guidelines call the “rule of reason.” Thus, an EIR must “set forth only those alternatives necessary to permit a reasoned choice” (CEQA Guidelines Section 15126.6[f]). This the EIR does. However, it is noted that closure of the fields one hour earlier than proposed would incrementally reduce the night lighting that would be emitted at the project site, compared to lighting with the proposed project. Therefore, the potential effects of an operational decision to turn lights off at 9:00 p.m. are contained within the range of alternatives analyzed in the EIR, and the decision-makers could select this option based upon the analysis in the EIR.

Similarly, an alternative that includes use of sand infill rather than styrene butadiene rubber infill, as suggested in Comments I-Johnson-01 and I-Splittgerber-01, would meet the project objectives, but would not avoid or substantially reduce any of the significant impacts of the proposed project and thus, was not considered in the EIR. Comment O-SFPARKS-36 indicates that there are no affordable or healthy artificial turf infill materials. This opinion is noted.

Prevention of gopher damage (Comment I-Jungreis2-25) is not a project objective, but is an element that affects play time availability, player safety, and maintenance needs. However, the no project alternative would include ongoing maintenance at the existing fields and would include ongoing gopher damage repair and prevention. Comment I-Paskey requests consideration of conversion of the project area to wetlands. This alternative would meet few, if any, of the project objectives, and would clearly not meet the objectives relative to improving Beach Chalet as an athletic facility. Further, this alternative would result in habitat conditions not consistent with the existing setting of the project area and would require substantial construction activities, as well as ongoing maintenance requirements to maintain conditions not normally found in this area. Comment O-CPF-04 requests consideration of an alternative that minimizes impacts to the site by reduction of use. It is noted that the no project alternative and all of the other alternatives that would undertake some version of the project would result in reduced use of the site for ground sports compared to the proposed project.

Several comments request consideration of an alternative that balances the demand for increased play time with retention of the historic character of the project area, or an alternative that does not result in significant impacts to historic resources. Comment I-Welborn-03 indicates that one of the EIR alternatives would not result in significant unavoidable historic resources impacts. Comment O-SFAH-06 indicates that the EIR does not include an adequate range of reasonable alternatives because alternatives 3 and 4 would not maintain the character of the area. It is noted that the no project alternative and the Off-site Alternative would result in no impacts to historic resources, the other two alternatives analyzed in the EIR would result in less-than-significant impacts to historic resources. As discussed in Response PP-2, the approving agency will consider any potential conflicts between the public and adopted plans or policies such as the Golden Gate Master Plan.

Comment O-GGPPA-07 requests consideration of an alternative that would allow for restroom building renovation without affecting parklands. Comments O-GGAS2-12, O-GGAS2-37, O-GGAS2-35 disagree with EIR findings that hazardous materials impacts associated with the grass fields with reduced lights alternative and other alternatives would be similar to the proposed project. Comment O-SFPARKS-35 indicates that the synthetic turf without lights alternative would result in the same impact associated with artificial turf as the proposed project. EIR Alternative 3, Grass Turf with Reduced Light, and Alternative 4, Synthetic Turf without Lights Alternative, would allow for restroom renovation and would reduce the significant impacts of the proposed project. However, restroom renovation under these alternatives would result in similar hazardous materials impacts as the proposed project related to potential lead based paint and asbestos materials exposure during construction activities. As indicated above, hazardous materials associated with existing building materials is the only significant hazardous materials impact identified for the proposed project; effects related to the installation and use of artificial turf were found to be less-than-significant. See the responses in Section 10.N, Hazards and Hazardous Materials. EIR page VI.11 indicates that installation of new grass turf fields would avoid the potential for less-than-significant water quality impacts related to the installation of synthetic turf. In response to comments O-GGAS2-12 and O-GGAS2-37, EIR page ES-5, second paragraph, has been revised as follows:

The Grass Turf with Reduced Lights Alternative would have similar construction-related impacts as the proposed project. With the exception of construction activities associated with synthetic turf installation, it is assumed that all other construction activities would be the same as those for the proposed project. Like the proposed project, this alternative would be compatible with existing zoning and land use designations since the location of this alternative is the same as the proposed project. The installation of the reduced number of lights would result in less visual impacts on surrounding residences as the proposed project (though it is noted that aesthetic resources are less than significant under the proposed project). Since the Grass Turf with Reduced Lights Alternative would entail similar restroom renovations as the proposed project, hazards and hazardous material impacts associated with hazardous building materials in structures are anticipated to be comparable to those determined under the proposed project.

EIR page ES-5, paragraph 4 would also be revised:

Installation of new grass turf fields would eliminate the potential for less than significant water quality and hazards and hazardous materials impacts related to the installation of synthetic turf (i.e., potential for contaminants in runoff from the synthetic fields, ~~and~~ groundwater quality degradation, and environmental hazards). Therefore, impacts to traffic, recreation, and hydrology, ~~and~~ water quality and hazards and hazardous materials, with the exception of hazardous building materials would be less than those identified for the proposed project (which are less than significant).

EIR page VI-11, paragraph 3 has also been revised:

Impacts of the Grass Turf with Reduced Lights Alternative Compared to Those of the Proposed Project

Because the Grass Turf with Reduced Lights Alternative and the proposed project share several components, this alternative would result in similar impacts as the proposed project. Like the proposed project, this alternative would be compatible with existing zoning and land use designations because the location of this alternative is the same as the proposed project. The installation of the reduced number of lights would result in reduced visual impacts compared to the proposed project (though it is noted that aesthetic impacts are less than significant under the proposed project). In addition, because the Grass Turf with Reduced Lights Alternative would entail similar restroom renovations as the proposed project, hazards and hazardous materials impacts involving release of hazardous building materials in structures are anticipated to be comparable to those identified for the proposed project.

In addition, EIR page VI-11, paragraph 5 has been revised:

Installation of new grass turf fields would eliminate the potential for less than significant water quality impacts and hazards and hazardous materials related to the installation of synthetic turf (i.e., potential for contaminants in runoff from the synthetic fields, ~~and~~ groundwater quality degradation, and environmental hazards). Therefore, in light of the discussion above, impacts to traffic, recreation, ~~and~~ hydrology and water quality, and hazards and hazardous materials, with the exception of hazardous building materials would be less than those identified for the proposed project (which are less than significant).

These revisions do not change the analysis or conclusions presented in the EIR.

Comment O-GGAS2-35 indicates that biological resources impacts would not be similar to the proposed project under the CEQA alternatives. As discussed in EIR Chapter VI, Alternatives, and as indicated above, significant impacts to special-status bat species could occur related to construction activities during turf replacement and tree/shrub removal. Each of the alternatives other than the no project alternative would also require turf replacement (either grass turf or artificial turf replacement) and would likely require tree and shrub removal; thus, biological resources impacts related to special status species impacts would be similar to the proposed project. While the grass fields with reduced turf alternative would not include artificial turf, impacts associated with habitat loss from conversion of grass turf fields to artificial turf would be less than significant, as stated on EIR page IV.F-25.

In response to comments I-Crowley2-01, I-McGrew-16, and O-SFPARKS-56, as described on EIR page VI-14, the CEQA Guidelines require the identification of an environmentally superior alternative (Section 15126.6[e]). If it is determined that the “no project” alternative would be the environmentally superior alternative, then the EIR shall also identify an environmentally

superior alternative among the other project alternatives (Section 15126.6[3]). The no project alternative would be the environmentally superior alternative. Of the remaining alternatives, the Off-Site Alternative would also qualify as the environmentally superior alternative, as stated on EIR page VI-14, because it is not located within the Golden Gate Park National Register Historic District. Selection of the Off-Site Alternative would avoid significant unavoidable historic resources impacts to the character defining features of the Beach Chalet Athletic Fields cultural landscape due to the addition of synthetic turf, lights, spectator seating, and new pathways. The off-site alternative could require tree removal or disturbance, and could require renovation to existing facilities. Therefore, biological resources impacts (bats and tree resources) and hazardous building material exposure impacts would likely be similar to the proposed project, and would be less than significant with mitigation.

Several comments indicate that the grass fields with reduced lights alternative would not result in similar construction impacts as the proposed project because there would be less construction than the proposed project. However, this alternative would entail installation of new grass fields and most of the other improvements included in the proposed project, thereby reducing construction impacts only incrementally. The EIR determines that most construction impacts would be less than significant, with the exception of potential exposure to asbestos and lead based paint during restroom renovations, which would also occur under the grass fields with reduced lights alternative. It is noted that the proposed project would result in aesthetic resources impacts, but that those impacts would be less than significant. Because the grass field with reduced lights alternative would include less lighting than the proposed project, the aesthetic resources impacts associated with lighting would be even less than under the proposed project.

Some commenters indicated that alternatives to the proposed project should be implemented (I-Browd-04 and I-Budler-03), or state preference for one of the EIR alternatives (I-Cope-02 and I-Donjacour-05. Comment O-CSFN-06 indicates that impacts would be reduced by selecting a more environmentally friendly alternative. The San Francisco Recreation and Parks Department may consider approval of the project, or an alternative to the project.

O.3 Improve Existing Grass Fields [ALT-2]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Antonini-02	I-Dumont-02	I-Koivisto-74	I-Ray3-01
A-SFPC-Antonini-03	I-Elias-09	I-Litehiser-03	I-Ray3-05
A-SFPC-Antonini-14	I-Fukuda-03	I-MMiller-03	I-Ray3-07
A-SFPC-Moore-03	I-Gattuso-03	I-Mosgofian-07	I-Ray4-06
O-CSFN-10	I-Goggin-06	I-Mosgofian2-03	I-Ray5-01
O-PAR3-04	I-Goggin2-03	I-Moss2-08	I-Richards-08
O-SCSFBC-36	I-JoGoldberg-03	I-Murphy-11	I-Richman2-02
I-Bridges-05	I-Hall-04	I-Napoli--02	I-CRussell-01
I-Campos-02	I-GIHoward-12	I-Ogilvie-04	I-Schoggen-05

I-Campos-03	I-Ivanhoe-03	I-Pattillo-08	I-Stein-01
I-Colao-09	I-Kaspar-02	I-Pattillo2-03	I-Stein-04
I-Corley-02	I-Keegan-01	I-Pattillo2-05	I-Stern2-03
I-FDavis-05	I-Kessler-01	I-Pertcheck-03	I-Weeden-08
I-DeLisle-02	I-Koivisto-03	I-Ray-05	I-Wooding-03
I-Denefeld2-06	I-Koivisto-47		

“I think the alternatives were good with particular attention to Alternate No. 2. Those of you who spoke about the possibility of natural turf blight, there --I did a lot of study on the use of the newer natural turfs on areas where --near some football stadiums where they park on them and they use them for recreation too.

Now, how active this recreation is, but there have been a lot of advances on this, the natural turfs and so this is something that, you know, I think in your comments you can certainly ask. And have those been analyzed, the newest turfs.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-02]*)

“Again, they’re going to take maintenance and this is the big problem that’s been pointed out. And we are maintaining Polo and Kezar and a lot of other natural grass fields. So is it realistic to expect that even the highest grade and the newest type of natural turf, can we expect that is it’s going to be maintained with the kind of usage that we need. And even with that being said, it will be quite clear that the usage will be less given the fact that you have to rest the natural turf. That’s a decision that Park and Rec will have to make, of course.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-03]*)

“But that being said, it is turf management is tough, and one of the things we have in San Francisco which of course we passed regulations a few years ago to limit the use of pesticides, or herbicides rather, and I’m not sure how much they use and there are a lot of good natural fertilizers out there --I’m not sure how much they use those.

And I don’t think they aerate their lawns that often which is another problem. It’s labor intensive but that’s, you know, all their fields would do a lot better if they did that. I’m not saying they don’t do it, but you know, these are all sort of the issues we struggle with when we try to make these decisions about natural turf and artificial turf. And there are a lot of issues that are involved.

The final issue is exposure. I think the choice has been made at least for now to continue with the natural turf at Kezar and at the Polo Fields. The Beach Chalet is closer to the ocean. It’s damp more of the time probably and I’m not sure but I think their exposure is, you know, they don’t

have a lot of really good southern or eastern exposure due to the trees and the other things around there and so it's even more of a challenge to support the turf there.

I don't know, you'd have to talk to some of the experts in Park and Rec or whoever's working on those to find out. I'm sure it could be done. It just would be more of a challenge, I think." (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-14]*)

"I do believe that there is across the world enough examples where indeed the maintenance and even the relevance of turf as it used to be has been examined and studied and there are new ways of building natural turf with ecologically sensitive solutions relative to water, the use of pesticides and on and on and on. That is the same kind of science and the same kind of study which goes into golf courses. That new technology has not been described by example or by reference anywhere in this EIR." (*Kathrin Moore, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Moore-03]*)

"The benefits for new technology that have been used to insert turf in other areas of the country and throughout the world. This has not been fully evaluated.

From Turf resource Center: Natural Grass and Artificial Turf -Separating Myths and Facts

Natural turfgrass playing surfaces have been used successfully for many years and there is a wealth of scientific data documenting their safety. With proper management and balanced use, natural grass fields have been proven to withstand and accommodate multiple sports team usage. While natural grass surface may become worn from excessive use, those portions of the fields can be easily, economically and quickly replaced. With proper management, the playability of a natural grass field, with a consistent and uniform playing surface, can be maintained year after year for a fraction of the cost of an artificial turf surface over its projected life expectancy. An entire natural turf grass field could be replaced every year and have the worn parts of the field repaired, all at a significantly lower cost than installing and maintaining an artificial turf field. A well maintained natural grass field may require water, fertilizer, pest management and mowing, but at significantly lower levels than often claimed by artificial turf sales people.

An artificial turf field requires watering to cool the field to make it playable during warm days. What is generally omitted is the fact artificial turf fields need pesticides and disinfectants to prevent or eliminate mold, bacteria and other hazards that would otherwise be biodegraded by the natural environment of turfgrass fields. The maintenance equipment required for artificial turf fields is often underestimated. Companies produce entire lines of maintenance equipment for upkeep of artificial fields and for bringing them back to a playable condition.

While artificial turf has made improvements, artificial turf manufacturers continue attempts to simulate the exceptional playing surface that only natural grass provides. No matter what you call it - Artificial Turf, Synthetic Turf, Plastic Grass - it is a fact that artificial surfaces lack most of the benefits provided by natural turfgrass. Many athletes, coaches, parents and spectators take for granted the significant benefits of natural grass.

Companies involved in the manufacture or marketing of artificial turf acknowledge they have a responsibility to address concerns about their products; however their products have a relatively short history from which to draw any proven results. It is disconcerting that very few people question the erroneous claims of marketing firms and consider their data to be factual. More scientific research is needed to directly address reliability, longevity and the potential negative impact of artificial turf with regards to safety, health and environmental issues. ...

Surveys of NFL players show that most athletes prefer a natural grass playing surface and feel it is the more desirable, premium surface. The fact that others have installed artificial turf surfaces is not an acceptable reason to ignore the research and facts. Choosing the best playing surface for our children and athletes should not be taken lightly. Anyone interested in a sustainable future should be fully informed about the benefits of natural turfgrass to our ecosystem" (*Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-10]*)

"We are concerned about the proposal to introduce over 7 acres of artificial turf and 150,000 watts of night lighting into our premier landscape Park. While we appreciate the desire to provide more playing time for children, we also feel that the western edge of Golden Gate Park has value as parkland which would be lost if this project were built. Residents of the Richmond District enjoy exploring the natural beauty of the Park and would like to see it preserved as habitat and as parkland, with a variety of uses that everyone can enjoy. With the addition of the Westside Water Treatment Plant, the current project would take this particular section of parkland forever out of the realm of nature and make it a developed, urban area with a limited use. We prefer the alternative of a renovation of the natural grass fields, so that they can be made safer for children to play on, and the use of the current available funding for other playing fields, to provide more room for play for children all over San Francisco." (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-04]*)

"Lack of Significant Investigation of Grass Alternative. The Sierra Club believes that greater investigation of natural grass solutions should have been made in drafting the DEIR, and suggests that this be done in the Final EIR. Natural grass does not have the environmental impacts of on hydrology, habitat, user safety, and many other issues described in this document. Natural grass would be significantly less costly to build and maintain, and would not require complete replacement and hazardous waste disposal in ten years.

There are number of ways the existing fields could be improved using modern methods such as those used on professional natural turf fields, including better drainage options, use of underground spaced blocks or netting to prevent gophers, and maintenance." (*Sierra Club San Francisco Bay Chapter, letter, December 12, 2011 [O-SCSFBC-36]*)

"It is much less expensive and more environmentally sustainable for the City to restore the natural grass fields." (*Stacey Bridges, letter, December 2, 2011 [I-Bridges-05]*)

"...Beach Chalet Soccer Complex should only go forward if **living grass** is used and **absolutely no stadium lights or poles are erected.**" (*Roland Campos, letter, December 11, 2011 [I-Campos-02]*)

"Artificial turf and stadium sports lighting are a major infringement to the character of Golden Gate Park. ...

Regarding Beach Chalet Meadow I request that you please support the following:

1. Renovate the existing LIVING GRASS PLAYING FIELD for one million dollars. **KEEP THE LIVING GRASS. NO PLASTIC TURF!**
2. Use non-lethal humane gopher controls for player safety
3. DO NOT erect field night lighting – **ABSOLUTELY NO SPORTS LIGHTING** – let's keep this area for recreation during the day and the wildlife at night.
4. **DON'T CUT DOWN THE SURROUNDING TREES!**
5. USE THE REMAINING ELEVEN MILLION DOLLARS BUDGET FOR OTHER PARKS AND PLAYING FIELDS. ..." (*Roland Campos, letter, December 11, 2011 [I-Campos-3]*)

"We have to think about our children, our grandchildren and future generations. We have to think in terms of preserving our parks. Artificial 'grass' is not the answer to low rainfall/water restrictions and maintenance issues. The answer lies in water wise plantings and other treatments that are more environmentally friendly and sustainable." (*Flora Colao, letter, November 23, 2011 [I-Colao-09]*)

“Now I do want to address the question of alternatives because that has been studied and I think it’s important that those speakers today who have had experience with their kids and themselves playing on the grass fields can tell you that is not a legitimate alternative. Now, it may be the decision to make is no. That’s too bad, and we’ll just live with it. But it is not a legitimate alternative. The grass fields do not work.

My daughter’s high school in the spring rents a field out of the city and a bus to take them out of the city just to practice because there are not fields here and the grass fields don’t accommodate them.” (*Jackie Corley, public hearing comment [I-Corley-02]*)

“One might reasonably ask; Why? Why use such a questionable material with its possible concatenation of cancer-causing substances, when the nearly universally used alternative, just plain GRASS, is so readily available? Just because of a few gophers?” (*Fred W. Davis, Letter, July 15, 2011 [I-FDavis-05]*)

“So I strongly suggest that the EIR, like, review this and I also agree on previous comments of not using the synthetic rubber turf instead of the normal grass.” (*Jimmy DeLisle, public hearing comment [I-DeLisle-02]*)

“It seems apparent that a fair balance between preserving the character of the Park and adjacent neighborhoods and providing more athletic opportunities for city-wide residents would consist of a scaled-back renovation which eliminates overwhelming lighting, uses natural turf, and keeps new construction to a minimum. It is unfair and unnecessary to provide facilities that would cater to a sports community from outside of the city. Furthermore, it is well within the budget of the SF Recreation and Park Department to renovate with natural turf.” (*Charles Denefeld, Letter, December 10, 2011 [I-Denefeld2-06]*)

“And they always --at their meetings, it’s really interesting at the Rec and Park Commission meetings. You frequently hear our mismanager, Phil Ginsberg, talk about how proud he is of the golf courses and that they get awards for how wonderful the courses are and how pristine they are and how everybody from around the world rants and raves about our golf courses and the real grass and the gorgeousness of the maintenance.

And you can’t afford that for the soccer fields for the kids? Our kids need the soccer fields. I have no doubt of that. ...” (*Suzanne Dumont, public hearing comment [I-Dumont-02]*)

“Keeping the Soccer Fields at the Beach Chalet the same size and installing real grass and no lighting or shorter and dimmer lighting might work. But the trees and shrubs need to be retained as they are for bird and animal habitat, in my opinion.

Soccer is very popular nowadays which is wonderful. And soccer has been played on real grass fields, and somehow these fields have been managed all through the history of the sport. Surely we can maintain real grass soccer fields without destroying trees and bird habitat, and poisoning the ground. This project as it stands is a poor use of Golden Gate Park.” (*Evan Elias, Letter, December 11, 2011 [I- Elias-09]*)

“It also did not fully evaluate natural turf and the benefits and the new technology that have been used to insert natural turf in other areas of the country and also throughout the world.” (*Hiroshi Fukuda, public hearing comment [I-Fukuda-03]*)

“I would like to urge the San Francisco Recreation and Parks Department to consider the possibility of dismissing the synthetic turf alternative and continue using natural grass methods to prevent harmful toxins from affecting the individuals who visit Golden Gate Park and the species who inhabit it.” (*Courtney Gattuso, public hearing comment [I-Gattuso-03]*)

“Failure to include description and analysis of a project alternative, characterized by renovation with natural grass and the omission of lighting. During the recent DEIR hearing before the Planning Commission, numerous speakers called for the renovation of the fields with natural grass and the omission of night lighting. Despite mention of several other alternatives in the DEIR, this alternative is not included or analyzed, despite its obvious greatly reduced environmental impact and likelihood to satisfy most project objectives.” (*David E. Goggin, Letter, December 10, 2011 [I-Goggin-06]*)

“I would just conclude by saying the compromise project alternative that has been proposed that calls for renovation of the fields with natural grass and no lighting. This is an alternative I could 100 percent support. Thank you.” (*David Goggin, public hearing comment [I-Goggin2-03]*)

“We believe hybrid Alternatives of 2, 3 and 4 should be reviewed and studied in further detail focusing on the natural improvements to the fields to ensure that greater playing time is available to field users. The playing field’s natural features should be enhanced, not replaced.” (*Johnathan Goldberg, public hearing comment [I-JoGoldberg-03]*)

“It is much less expensive and more environmentally sustainable for the City to restore the natural grass fields.” *(Robert Hall, letter, November 29, 2011 [I-Hall-04])*

“On the major sports area about 4.5 acres, the City of Glen Cove fields baseball, softball, soccer, lacrosse, football and field hockey. These fields are in use 8.5 months a year. From June to Labor Day they are in use continuously from 9 a.m. to midnight seven (7) days a week. These fields (see aerial views in Figures 2 and 3) are next to Long Island Sound and lie just above the water table, just as the fields in Golden Gate Park. Drainage is very good and the fields rarely cannot be used after even a heavy rain. The fields are relined for each sports season. In addition they are fully flexible for all age groups by adjusting the field ‘sizes’, unlike the proposal for the San Francisco soccer fields which have no adjustability show in the design plans for children vs. adults.

Note in Figure 3 the City fields lower center, which can accommodate 8 ball fields or 2 football and 6 soccer fields, and the Middle School and High School fields (with baseball and football fields of natural grass) upper right.” *(Glenn Howard, Jr., Ph.D., letter, December 8, 2011 [I-GlHoward-12])*

“Alternatives proposed include ‘Grass Turf with Reduced Lights’ and ‘Synthetic Turf with No Lights.’ What about ‘Grass Turf with No Lights?’ it seems that this would require digging only one foot below the surface rather than ten feet, and might not require tree or shrub removal. There does not appear to be any analysis of how improved drainage would impact the grass turf fields.” *(Richard Ivanhoe, letter, December 13, 2011 [I-Ivanhoe-03])*

“Upkeep? Of course. But destruction, never.” *(Trish Kaspar, letter, November 22, 2011 [I-Kaspar-02])*

“I oppose the renovation of the soccer fields using artificial turf and installing lights for night games.

Please use natural grass for people to enjoy during daylight hours and use the money saved to renovate playing ies outside the park.” *(Bruce Keegan, email, December 10, 2011 [I-Keegan-01])*

“what astrotuf would be doing -- and you remove the kids one more step from the reality of the natural earth. Instead you hand them a petro-product to play on. Aren’t we trying to remain ‘green’? Aren’t we trying to get away from petroproducts? Grass works fine –there is no need to

change it. Turning to astroturf or a similar product would hurt the environment in so many ways. We are losing more and more of our 'real' out of doors. I think it is incumbent on those running our government to listen to the great opposition that has been expressed towards this project." (*Janet Kessler, email, December 8, 2011 [I-Kessler-01]*)

"The Project Alternatives seem limited in imagination and scope; why is there no alternative for good grass with adequate drainage and gopher barriers with no lights? That certainly was a suggested alternative at the scoping session. Yet it is not examined in the DEIR." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-03]*)

"The Golden Gate Park Master Plan states that some of the problems with the fields are drainage and lack of regular maintenance (p. E-1 0), yet none of the options in the DEIR involve fixing of the grass fields with no stadium lighting." (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-47]*)

"ALTERNATIVES. Why is replaced, graded, and gopher-proofed grass with new bathrooms, fixed paths, ADA parking spaces, and no lights not an alternative?" (*Ellen Koivisto, letter, December 10, 2011 [I-Koivisto-74]*)

"If the soccer fields are desired they should be grass fields. We have plenty of artificial fields in the park system and we are in danger of converting all our fields to this type of turf. People desire grass fields as well." (*Linda Stark Litehiser, email/letter, December 1, 2011 [I-Litehiser-03]*)

"A true restoration is envisioned by the group Ocean Edge and it's the third page on what I've handed to you. This is a compromise alternative. Really, everyone who is opposed to the project as is wants those fields restored in a true restoration.

So this compromise alternative would add more hours, it would be safe, it would not have lights. We are not serving out-of-town soccer clubs. We are serving the children of San Francisco in daylight time, not in rainy season. Although drainage could be put there so you could play right after a rain. But the point is who are we serving." (*Mary Anne Miller, public hearing comment [I-MMiller-03]*)

"I urge Planning to declare the project has irreversible environmental consequences and look to an alternative with natural turf, state-of-the-art drainage system, good gopher barrier, and regular maintenance crew." (*Denis Mosgofian, letter, December 11, 2011 [I-Mosgofian-07]*)

"till 10:00 p.m. at night, but rather what's the difference between the playing time on well-maintained fields, which Rec and Park does not do, I understand that but theoretically it could do with sufficient funding, well-maintained natural fields, grass fields, and the artificial turf." (*Dennis Mosgofian, public hearing comment [I-Mosgofian2-03]*)

"Please, let's be imaginative. Get a patrol of soccer players out there with little shovels. Do something about the gophers before every game. And let's have grass." (*Rasa Moss, public hearing comment [I-Moss2-08]*)

"From the elements of the EIR I had time to read, this project should be rejected on the grounds it is likely to cause irreparable harm to wildlife. There are many other reasons to reject the lighting element of the project and the artificial turf element as well, but I will not comment on them since this is a focused comment. I would encourage the Recreation and Park Department to improve the soccer fields by employing the use of gopher netting beneath a new natural turf field. I would hope night lighting would be rejected under any circumstances. I would also suggest extending the soccer fields south into the site of the former sewage treatment plant. By doing so they could add an additional soccer field and perhaps 2." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-11]*)

"At a time when all city and county agencies are under severe budgetary constraints, spending ten to twelve million dollars on the proposed project is profligate! Other cheaper, natural alternatives exist and MUST be considered. DON'T LET THIS PROJECT GO FORWARD as currently proposed!" (*Jerome Napoli, email, December 12, 2011 [I-Napoli-02]*)

"Any of the gardeners in the Park will state that this is one of their biggest challenges, as they are difficult to exclude from doing significant damage. While this is true of an area such as a golf course, in the case of the Beach Chalet soccer fields, is relatively easier and inexpensive to address.

- As the soccer fields are contained by a fence, by digging a trench 2 to 3 feet deep by 1 foot wide around the outer perimeter of the fence. Narrow gauge wire fencing is then put in to

the trench, backfilled, thus providing an underground barrier that the gophers cannot pass through.

- Should the gophers attempt to enter through the fence; a barrier of small gauge wire can be added to the existing fence to provide yet another barrier." (*Alan Ogilvie, letter, December 12, 2011 [I-Ogilvie-04]*)

"While I understand the need to provide sufficient fields to accommodate the demand, I question the logic of impacting a treasured historic resource to do so. You should question the premise that the Beach Chalet fields should be renovated to the extent that a 200 percent increase in play time is an acceptable idea at this location. The current budget could provide a high tech drainage system, water conserving irrigation system, and modern day stormwater management. Such improvements would preclude the need for artificial turf." (*Chris Pattillo, letter, December 8, 2011 [I-Pattillo-08]*)

"Another alternative that would significantly reduce the impacts would be a combination of alternatives 3 and 4 presented in the DEIR - this would provide renovated fields with real turf and no lights. While such an approach does not meet all of the applicant's desired criteria, it would meet many of the stated objectives while retaining the essence of the historic fields." (*Chris Pattillo, letter, November 15, 2011 [I-Pattillo2-03]*)

"You should question the premise that the Beach Chalet fields should be renovated to the extent that they will be able to accommodate up to 1000 people for day and night games, and that a 200 percent increase in play time is a good idea at this location. The DEIR tells us that one of the four fields is currently unusable at any given time due to maintenance, so by correcting drainage, rodent and other routine problems the parks department could increase field use by 25% while having essentially no impact on the cultural resource." (*Chris Pattillo, letter, November 15, 2011 [I-Pattillo2-05]*)

"While the draft EIR does give a natural grass alternative, it does not compare natural grass with artificial turf. This comparison must take all relevant items into account, including, but not limited to the following issues:

- installation, maintenance, and replacement
- toxicity
- water use and drainage
- temperature

- incorporation (or destruction) of the existing park's environment (grass, soil, trees, animals, insects, birds, etc.)
- uses (such as types of sports and other events)
- accessibility to everyone, including wheelchair users and parents with strollers
- carbon footprint

There are several existing case studies and actual data from recently installed fields that can be analyzed." (*Edward Pertcheck, letter, December 12, 2011 [I-Pertcheck-03]*)

"Gophers live underground in every park or grassy area. In the case of Golden Gate Park, gophers are everywhere.

Any of the gardeners in the Park will state that this is one of their biggest challenges, as they are difficult to exclude from doing significant damage. While this is true of an area such as a golf course, in the case of the Beach Chalet soccer fields, is relatively easier and inexpensive to address.

- As the soccer fields are contained by a fence, by digging a trench 2 to 3 feet deep by 1 foot wide around the outer perimeter of the fence. Narrow gauge wire fencing is then put in to the trench, backfilled, thus providing an underground barrier that the gophers cannot pass through.
- Should the gophers attempt to enter through the fence; a barrier of small gauge wire can be added to the existing fence to provide yet another barrier." (*Jamie Ray, letter, December 12, 2011 [I-Ray-05]*)

"The problem, according to RPD, is that one of the four fields is always being 'rested' and that they sometimes have to close all the fields for 'rain days' due to poor drainage.

The Beach Chalet Soccer Fields (BCSF) are under-utilized most weekdays. Our rainy season is comparatively short and mild. Weekend demand at present, does exceed the BCSF capacity some of the year.

The question is, can rainy season closures/drainage issues be addressed in an environmentally sound and neighbor friendly way? Can we reduce field 'resting' to increase access to the fields on weekends when most teams play matches? Could we do this by hiring an actual turf specialist to maintain the fields and increase drainage issues for more winter use?" (*Jamie Ray, letter, no date [I-Ray3-01]*)

“Another option, far cheaper, more ecologically sound, and in keeping with the majority of park users who are not soccer players, is to address the turf problems by increasing drainage, and hiring a turf specialist that can keep all four fields available to the public on weekends. This is my preferred choice.

These fields have been inadequately maintained and thus not as available for public use as they could be.” (*Jamie Ray, letter, no date [I-Ray3-05]*)

“Proper care of these fields, including regular aeration to reduce compaction would reduce field closures due to rain and reduce the extent to which fields are currently ‘rested.’ The Beach Chalet Soccer Fields rest on sand, beneath the sod’s (compacted) loam layer. Sand provides excellent drainage. If necessary, perforated drainage tubing could be installed under the turf to carry away excess water on heavy rain days, at minor cost. England plays on grass throughout their heavily rainy winters as do many world class countries. Why can’t we? ‘The city that knows how.’ “ (*Jamie Ray, letter, no date [I-Ray3-07]*)

“Natural grass, properly maintained and drained is the environmentally sound solution to increase local playtime on the fields.” (*Jamie Ray, letter, December 12, 2011 [I-Ray4-06]*)

“Features and Benefits of Natural Grass Sports Fields. To be fair, anyone strongly in favor of synthetic sports floors should consider the attributes of natural grass with the same enthusiasm, Honesty, most people take for granted all the great things grass plants do.

Features of natural grass sports fields:

- Environmentally friendly. 2,500 square feet of living, growing grass plants release enough oxygen for a family of four for a year. Grass absorbs carbon dioxide, helping to reduce global warming.
- Microorganism utopia. Grass and the topsoil are home to zillions of beneficial organisms that break down and recycle organic and inorganic products that fall into the grass.
- Aquifer recharger. The area inside a typical high school football/track complex is about 2 acres. Over 2 million gallons of water from rain will fall on this area if it rains 40 inches a year. Grass will filter the water as it flows into the groundwater.
- Cooler surface. Grass provides a cooler place to play than bare dirt, cement, asphalt or artificial turf. This occurs because the photosynthetic process in the leaves intercepts sunlight, utilizing the sun’s energy to make plant sugars instead of warming the dirt or other surface. Plants evaporate water as part of the process, which also cools the air.
- Clean surface Grass roots, thatch and leaves provide a good, clean surface to run and play on.

- Better appearance. The visual appearance and smell of grass are pleasing to people.
- Fewer health risks. Years of study have shown no risks to playing on natural turf when fertilizers and pesticides are properly applied. No such proof exists from long-term exposure to elements in artificial turf, such as crumb rubber infill.

Benefits of natural grass sports fields:

- Recycles. Because grass has microorganisms, it is an excellent recycling center. Tree leaves, chewing gum, hard candy, peanut shells, vomit, urine, soda pop, spilled food, sports drinks, sunflower seed hulls, bird or animal manure, and bits of paper do not have to be picked up off a natural grass field, unlike on a artificial sports field, which saves on labor costs. Human diseases like MRSA that are transferred from a player to the grass are naturally disinfected. Grass fields do not need disinfecting.
- Self-repairs. Natural grass fields repair themselves. All sports fields sustain wear and damage when used. Living natural grass fields have the ability to repair and regenerate themselves. Man-made surfaces do not repair themselves. Natural grass fields can last two to three times longer than artificial fields.
- Provides traction. Grass gives good traction, but not great traction. Good traction means when players collide, the turf gives way, not human joints. Great traction is bad, because joints can break before a player's foot slides on artificial turf.
- Costs less to remove. End-of-life disposal costs are a small fraction of what it costs to remove and dispose of artificial turf." (*Jamie Ray, email, December 13, 2011 [I-Ray5-01]*)

"It is much less expensive and more environmentally sustainable for the City to restore the natural grass fields, and those fields can be maintained beautifully as has been shown by the newly refurbished Polo Fields. One can't play on them in the pouring rain or on a cold night, but is that such a bad thing?" (*Renee Richards, email, December 8, 2011 [I-Richards-08]*)

"And secondly, children --and I'm a parent --certainly need activities and there's a problem with obesity and there's all these other factors that are absolutely important. But couldn't --and someone said --made a funny little thing about kids getting out there with little shovels. Well, why couldn't maintenance of fields, natural fields be integrated into the curricula of schools.

This would give children --city children --people complain about how they're so disconnected from nature and disconnected from the natural world, even from the physical world because they go from school and go home and they locked into their screens.

Well, here is a great opportunity for children to become intrinsically involved with the natural processes and actually maintaining the very fields they play on. Just think of how proud that would make them." (*Dan Richman, public hearing comment [I-Richman2-02]*).

“So I’d like to encourage a closer look at some of the state of the art alternatives that use natural grass. San Francisco prides itself on its green leadership and it seems a natural extension of that leadership.” (*Carrie Russell, public hearing comment [I-CRussell-01]*)

“It makes no sense to disturb a living part of the park to replace it with plastic.” (*Leida Schoggen, letter, November 29, 2011 [I-Schoggen-05]*)

“I realize that the current conditions are hazardous due to gopher holes. This problem can be addressed through increased maintenance.” (*Lyn Stein, email, December 11, 2011 [I-Stein-01]*)

“And children being taught by example that natural fields are too dangerous to play in (!); that they need a formal regulation field in order to play childhood games.

In short, please keep the field natural. For the wildlife, for the children, for the civic, non-commercially driven future most San Franciscans want.” (*Lyn Stein, email, December 11, 2011 [I-Stein-04]*)

“I would like to see the EIR include an alternative that restores the Beach Chalet soccer fields with natural grass and no lighting.” (*Kathleen Stern, public hearing comment [I-Stern2-03]*)

“It is much less expensive and more environmentally sustainable for the City to restore the natural grass fields. Sustainability is a commitment to social, economic and environmental factors that promote long-term survival, a capacity to endure and a sustained quality of life. Most important, it means to think about the impact our actions have on the environment, on the economy and on future generations. Why is natural grass which sequesters carbon dioxide not recommended when the installation of the artificial turf is the equivalent of putting asphalt in 9 acres of Golden Gate Park?

There are ways to manage the gophers on natural grass fields as indicated in this recent article about golf courses in San Francisco. The golf courses are also managed by San Francisco Recreation and Parks Department staff. See <http://www.sfgate.com/cgi-bin/article.cgi?f=/c/a/2011/11/29IDDDK1M3JCA.DTL>. Why isn’t this successful program of gopher management recommended?” (*Noreen Weeden, email, November 29, 2011 [I-Weeden-08]*)

“the Beach Chalet soccer fields have not been fully renovated since 1998. The RPD is not giving the grass fields a chance to thrive and is quickly jumping to this new alternative, and I think they would be better served and the people of San Francisco would be better served if the fields remain grass. Thank you.” (*George Wooding, public hearing comment [I-Wooding-03]*)

Response ALT-2

Many commenters indicated that restoration or improvement of natural turf should be considered as a CEQA alternative, or indicated that continued use of the existing grass field should be considered. Some commenters noted that improved natural turf maintenance options have been developed. Many commenters that requested analysis of existing natural turf or improved natural turf as an alternative requested that field size remain the same, and that no tree removal occur to accommodate any improvements. Renovating grass fields as a unique alternative would not substantially differ from the no project alternative and the Off-site Alternative, which would both include continued use of the existing grass field. Under the alternatives, turf repair and replacement, gopher control, and other maintenance activities would continue to occur and could include use of improved turf maintenance, as available. Under either alternative, active play fields would remain at the existing size. Currently, there is staffing capacity for one 1/3 full-time equivalent employee for maintenance of the fields on a continual basis. Under the no project alternative and the Off-site Alternative, it is unlikely that additional playing time could occur at the Beach Chalet Athletic Facility based on the existing level of available maintenance staffing (Comment A-SFPC-Antonini-03 and I-Corley-02). It is acknowledged that improved natural turf maintenance options have been developed; however, natural turf has play time limitations and improved turf maintenance would not increase play time at the Beach Chalet athletic fields (an objective of the project) because the degradation of grass is caused by the high volume of play rather than lack of appropriate maintenance. Without additional detail on other turf maintenance methods referenced by commenters, it is not possible to respond further to these comments.

Comment I-Pertcheck-03 indicates that the EIR is insufficient because it did not compare the impacts of natural grass to those of synthetic turf. EIR Chapter VI, Alternatives includes a comparison of the impacts of the CEQA alternatives and the proposed project, particularly regarding the significant impacts identified for the proposed project. As described above, both the no project alternative and the Off-site Alternative would retain grass turf at the Beach Chalet Athletic Fields. The San Francisco Recreation and Parks Commission may consider approval of the project, or an alternative to the project.

O.4 Off-Site Alternative (West Sunset Playground Alternative) [ALT-3]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFPC-Antonini-01	O-SFPARKS-34	I-Elias-08	I-O'Leary-03
A-SFPC-Antonini-07	I-Anderson-17	I-Fukuda-04	I-Richards-10
A-SFPC-Borden-03	I-Bar-David-03	I-GoHoward-09	I-Schultz-18
O-GGAS2-09	I-Citron-17	I-Khan-17	I-Schultz-19
O-GGAS2-36	I-Dennenberg-16	I-McGrew-01	I-Schultz2-04
O-GGPPA-08	I-Edelson-18		

“So that being said, I guess what we have to talk about is are there alternatives? There are alternatives. I thought they summarized them well based upon the project itself. I know other alternatives have been brought up by you regarding West Sunset and other places that could be used in lieu of this.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-01]*)

“As far as the West Sunset alternative, there were groups and schools and people were willing to pay to have that renovated and unfortunately it wasn't worked out with the city many years ago. So to expect that would happen now may not happen either. So ultimately, you know, there has to be the money brought forward to be able to convert that and maybe the funding would be there to do it at West Sunset. It might be transferable from here.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-07]*)

“I think we need to be really responsible, obviously, in looking at the alternatives. I think if we do look at the EIR, it actually says the environment superior alternative is the off-site alternative. So the document is not saying that the turf fields or anything like that is the environmentally superior alternative. I just want to make that clear out there because I know there's a perception that the document says, you know, the proposed project is the best thing since sliced bread. It actually does not say that. It says otherwise.” (*Gwyneth Borden, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Borden-03]*)

“The Executive Summary mischaracterizes the Off-site Alternative by stating that it would have biological resources, hydrology and water quality, and hazards and hazardous material impacts

that would be ‘comparable’ to the proposed Project. (DEIR, at ES-3) This assessment does not appear to be consistent with information provided later in the DEIR or, frankly, with reality. The proposed project at the Beach Chalet will render a significant biological and ecological change to a part of Golden Gate Park that has long been much darker at night than it will under the preferred plan. Moreover, the hydrology of the Beach Chalet in Golden Gate Park is much different than that at West Sunset Playground, including the fact that the western end of Golden Gate Park discharges groundwater to an aquifer that the San Francisco PUC considers of important strategic value.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-09]*)

“(DEIR, at VI-8). We note that Alternative 2 would provide benefits not described in the alternatives analysis. The DEIR should be amended to better consider these and other benefits. These include:

1. improved access to public transportation;
2. improved access to athletic facilities for neighbors adjacent to the park; and
3. reduce traffic and congestion in Golden Gate Park.

After a cursory statement of benefits, the alternatives analysis lingers instead on what Alternative 2 will purportedly not accomplish. According to the DEIR, Alternative 2 would not result in increased use or access improvements to the western end of Golden Gate Park. Golden Gate Audubon would ask why this particular objective (or set of objectives) is so important to the Recreation and Parks Department and the Planning Department. If, as the Golden Gate Park Master Plan requires, the western end is to be maintained in a more sylvan state, than the stated objective of development and lighting to increase visitor usage through degrading the natural state of the park seems to be directly in conflict with the Plan. As such, this objective is not a valid reason for rejecting Alternative 2.

The DEIR correctly identifies Alternative 2 as the ‘environmentally superior alternative’. (DEIR, at IV-I4) Golden Gate Audubon asserts that if the DEIR were written in a less biased manner and/or if Alternative 2 was slightly modified, it could achieve all of the project sponsor’s legitimate and prioritized objectives while preserving the western end of Golden Gate Park as intended in the Master Plan.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-36]*)

“Alternative 2: Off-site alternative. The project objectives oriented towards only the location in Golden Gate Park have caused the DEIR to give little consideration to any alternatives outside of Golden Gate Park. For example, **the West Sunset Playground alternative is dismissed**, because it does not fulfill the project objective of providing athletic opportunities in the northern part of San Francisco. What is the substantiation for this project objective? The DEIR traffic report states that most of the players will arrive at the Beach Chalet Athletic Fields by car. West Sunset Playground is two miles from Beach Chalet, a matter of a few minutes by car.” (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-08]*)

“ALTERNATIVE 2: OFF-SITE ALTERNATIVE. In regards to the EIR whereby it states; ‘construct similar renovations to athletic fields but at the West Sunset Playground instead of the Beach Chalet Athletic Fields.’(DEIR Page VI-7), and ‘Under this alternative, it is assumed that all of the project components would be similar to those identified for the proposed project. The Off-Site Alternative would consist of replacing turf grass athletic fields at the West Sunset Playground with synthetic turf ...’ (DEIR Page VI-7).

It is our position that

- because the West Sunset Playground is a neighborhood park with close proximity to surrounding residences, unlike the Beach Chalet Fields,
- And because West Sunset Playground is directly adjacent to 4 public spaces of concern;
 - Sunset Elementary School,
 - A.P. Giannini Middle School,
 - St. Ignatius Prep School,
 - Sunset Health Center, (DPH)
- And because 2 pre-existing SBR infilled synthetic fields are located adjacent to the site creating a cumulative impact related to hazards and hazardous materials. (St. Ignatius Prep School - J.B. Murphy Field and Gordon Practice Field)
- And because Alternative 2: Off-Site Alternative would entail the same hazardous materials and their by-products, (including but not limited to carbon black nanoparticles, heavy metals, and chemical ingredients,
- And because Alternative 2: Off-Site Alternative would entail the same Musco stadium lighting, it is our position that the impacts would be more significant than the proposed Beach Chalet Athletic Fields conversion.

This option entails a topic that was ‘screened out’ from the Initial Study/NOP for the Beach Chalet EIR; ‘Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? (not applicable)’ (Initial Study page 53) It is our position that it IS applicable to Alternative 2: Off-Site Alternative.

The Alternative 2: Off-Site Alternative is just 5 blocks from a pre-existing multi-field synthetic turf installation, South Sunset Playfield. South Sunset Playfield is in the same neighborhood as West Sunset Playfield and is adjacent to Ulloa Elementary School and the South Sunset Senior Center. (YouTube Video Clip <http://www.youtube.com/watch?v;8zsoduIEmzO>)

Lobbyists for the City Fields Foundation and SF-RPD fought for and got an exemption from conducting an Environmental Impact Report for South Sunset Playfield. It is our position that because of the lack of an EIR, that classrooms at Ulloa Elementary School were exposed to SBR Tire Crumb and dust spill ing into air conditioning intakes of some classrooms. Recommended mitigations to RPD, City Fields Foundation, and the Rec & Parks Commission were never

implemented.” (See comment letter for images included in this comment) (*SFPARKS, letter, December 12, 2011 [O-SFPARKS-34]*)

“What level of maintenance will be required if natural grass is planted at Beach Chalet? What kinds of activities and how many hours will be spent on each activity? Please give the same information for the West Sunset Playing fields - -how will this change between the current natural grass and if it has artificial turf?” (*Raja Anderson, letter, December 12, 2011 [I-Anderson-17]*)

“What level of maintenance will be required if natural grass is planted at Beach Chalet? What kinds of activities and how many hours will be spent on each activity?

Please give the same information for the West Sunset Playing fields - -how will this change between the current natural grass and if it has artificial turf?” (*Ilana Bar-David, letter, December 12, 2011 [I-Bar-David-03]*)

“What level of maintenance will be required if natural grass is planted at Beach Chalet? What kinds of activities and how many hours will be spent on each activity? Please give the same information for the West Sunset Playing fields - -how will this change between the current natural grass and if it has artificial turf?” (*Ben Citron, letter, December 11, 2011 [I-Citron-17]*)

“What level of maintenance will be required if natural grass is planted at Beach Chalet? What kinds of activities and how many hours will be spent on each activity? Please give the same information for the West Sunset Playing fields - -how will this change between the current natural grass and if it has artificial turf?” (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-16]*)

“What level of maintenance will be required if natural grass is planted at Beach Chalet? What kinds of activities and how many hours will be spent on each activity? Please give the same information for the West Sunset Playing fields - -how will this change between the current natural grass and if it has artificial turf?” (*Ellen Edelson, Letter, November 28, 2011 [I-Edelson-18]*)

“Of the alternatives few are appealing. The Offsite project alternative at the West Sunset Playground seems most appealing if the artificial sod requirement is replaced with real grass. There are already two installations of astroturf playing fields in San Francisco, and the studies

run by this DEIR show they are both still leaching unacceptable levels of toxic metal contamination into the soil and water. Why even consider poisoning another part of San Francisco?" (*Evan Elias, Letter, December 11, 2011 [I-Elias-08]*)

"Alternative sites have not been fully investigated. The entire park needs to be fully investigated and the west Sunset Park. So please provide another 60 days for this review. Thank you." (*Hiroshi Fukuda, public hearing comment [I-Fukuda-04]*)

"There is a false premise in the project goals that only an athletic complex at the west end of the park can provide other amenities such as paths, bike racks, or increasing visitation to the area. Additional amenities can be provided if the Recreation and Parks Department decides to do so. It has already identified the need. Similarly, creative minds can find ways to bring more people to the area as it is now, without creating a sports complex.

Alternative 2: Off-Site Alternative is poorly presented without any consideration for potential economic benefits to neighborhoods where development is needed.

The biggest positive derived from Alternative 2 is that the unique Golden Gate Park will not be sacrificed for organized athletics. San Francisco has many athletic facilities. It has only one Golden Gate Park. The impact of the conversion of the Park to an Athletic Mecca is not fully evaluated." (*Gordon Howard, Ph.D., letter, December 8, 2011 [I-GoHoward-09]*)

"What level of maintenance will be required if natural grass is planted at Beach Chalet? What kinds of activities and how many hours will be spent on each activity? Please give the same information for the West Sunset Playing fields - -how will this change between the current natural grass and if it has artificial turf?" (*Tehmina Khan, email, December 10, 2011 [I-Khan-17]*)

"Project alternatives: ...

Wt. Sunset has 4 soccer pitches, excellent parking (has a lot, schools have lots plus parking on east & west streets of Sunset Blvd.) 3 bus lines are only a block away, new playground and toilets. There is also field space on 41st Ave to build another pitch (or 2) and design for a multi-use field (like So. Sunset Pig. 6 blocks away). ..."

"West Sunset is the proper alternative and an appropriate place for a larger field complex because there are already all the other facilities there that make for family-friendly access to other

resources in one location. It will also not compromise the naturalistic environment in western Golden Gate Park.” (*Andrea & Rick O’Leary, email, December 11, 2011 [I-O’Leary-03]*)

“Project Alternative Number 2, renovating the West Sunset Fields with artificial turf, is a much better plan. There will be no adverse and significant negative historical impact. The neighborhood already has street lighting, and Saint Ignatius school is nearby which also has athletic lighting in place. In addition to SI, Sunset Elementary and Giannini Middle School are nearby and their students could benefit from the use of turf fields. The West Sunset playground has already been renovated, so the costs of creating the proposed adjacent play/recreation area would be unnecessary. While the long-term safety of tire crumb use is still debated, West Sunset Fields are not located in an environmentally sensitive area.

In addition, and importantly, the use of artificial turf fields at West Sunset rather than GG Park would involve not only the creation of more turf soccer fields, but also turf baseball fields. If you are unfamiliar with the rush on registration for SF Little League’s 2012 Spring season, suffice it to say that the demand is so great for baseball in San Francisco that all of the under-12 divisions were fully registered and closed within seven hours of registration opening. While I am not a proponent of playing through inclement weather (having just stood through my son’s soccer game at Crocker in the pouring rain and upper 40 degree temperatures myself a few weeks ago) I always feel it is unfortunate that after a Spring rainstorm, when ‘the sun comes out and the kids are chomping at the bit to play baseball or soccer, fields can remain closed for 24 or more hours after the last drop has fallen because of standing water and ‘Field saturation.

West Sunset is less than 2 miles from the Beach Chalet, is not in an historically protected park, is not in an environmentally sensitive area, and would provide additional access not only to after-school and adult sports teams from all over San Francisco, but school kids from three immediately adjacent schools.” (*Renee Richards, email, December 8, 2011 [I-Richards-10]*)

“The Selected CEQA Alternatives were not adequately investigated and should be further explored. Alternative 2, the West Sunset Playground, was summarily dismissed although it meets most if not all the goals of the project and it would provide a safe, optimal recreational facility and amenities for athletes, spectators, park users, and result in facility compliance with current ADA requirements. Additionally, the playground is not considered a potential historic resource.” (*Cheryl Schultz, letter, December 11, 2011 [I-Schultz-18]*)

“However, under no circumstances should synthetic turf be used at this location [West Sunset] or any location. The failing objections are minimal and pie in the sky requirements such as increasing the size of the parking lot. CEQA Code Section 15125.6 clearly states:

(b) Purpose. Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment (Public Resources Code Section 21002.1), the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impact to some degree the attainment of the project objectives, or would be more costly. [Emphasis added.]” (Cheryl Schultz, letter, December 11, 2011 [I-Schultz-19])

“Lastly, I did want to say that we want kids to play on soccer fields. And the Alternative 2 was a very good alternative. It is the Sunset Park, I believe. I can’t see it here on my notes, but the West Sunset Playground. It met almost all of the requirements, playing field, lighting, and the CEQA Code says that because an EIR must identify ways to mitigate significant effect if it meets alternatives then --” (Cheryl Schultz, public hearing comment [I-Schultz2-04])

Response ALT-3

Several comments notes that EIR Alternative 2 was discussed by public speakers, and also note that renovation of West Sunset Playground has been considered in the past and that the San Francisco Recreation and Parks Department did not pursue that project (Comments A-SFPC-Antonini-01, A-SFPC-Antonini-07). Some commenters indicate that the West Sunset Playground was dismissed although it meets most of the project objectives and would avoid significant and unavoidable cultural resources impacts or that it was dismissed from further discussion because it did not meet one of the project objectives (Comments I-Schultz-18, I-Schultz2-04, O-GGPPA-08). Commenters also note that the alternative was identified as the environmentally superior alternative (A-SFPC-Borden-03), indicated preference for the alternative (I-O’Leary-03 and I-Richards-10), or state that the alternative should be selected for the project (O-GGAS2-36). As discussed in response Alt-1, the Off-site Alternative (and the other CEQA alternatives) were developed to address CEQA requirements: (1) the alternative would attain *most* of a project’s basic objectives; (2) the alternative would *avoid or substantially lessen* one or more of the significant environmental impacts of the proposed project; and (3) the alternative must be potentially *feasible*, emphasis added. The Off-site Alternative was not dismissed from further consideration, but was included in the analysis of impacts of the alternatives, as compared to the proposed project. The San Francisco Recreation and Parks Department Commission may consider approval of the project, or an alternative to the project.

Comments I-Anderson-17 and I-Citron-17 request detailed information regarding maintenance requirements for the Off-site Alternative compared to the proposed project. An EIR need not analyze the impacts of alternatives at an equal level of detail as the proposed project, but shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project (CEQA Guidelines Section 15126.6[d]). Thus, a detailed description of maintenance requirements is not required. However, it is noted that EIR

page VI-7 indicates that the project components under the Off-site Alternative would be similar to the proposed project and it is therefore likely that maintenance requirements would be similar.

Comment I-McGrew-01 indicates that the West Sunset Playground has space and transportation/parking available, and Comment O-GGAS2-36 indicates that access to public transportation and adjacent residences, and reduced traffic congestion in Golden Gate Park should be included in the alternatives analysis. It is noted that the West Sunset Playground field could be reconfigured to serve multi-uses (see EIR page VI-7). Public transportation routes are closer to the West Sunset Playground than routes that are within the vicinity of the Beach Chalet Athletic Fields. It is also acknowledged that the playground has an existing parking lot with approximately 40 existing parking stalls and nearby street parking (compared to 50 spaces and nearby street parking at the existing Beach Chalet Athletic Fields). However, as discussed on EIR page VI-9, impacts associated with increased traffic, transit, parking, and pedestrian access would be similar to or greater than those of the proposed project. It is unknown whether mitigation would be required to reduce this potential traffic impact. With the proximity of two schools and residential uses at the alternative site, there would be greater potential for increased congestion at one or more intersections than with the proposed project, although not necessarily during the peak hours of adjacent street traffic. As discussed in Response GC-2, discussion of project cost, and economic considerations, are not considered under CEQA.

Several commenters opined that the West Sunset Playground alternative would be the most acceptable alternative, if grass turf was used rather than synthetic turf. These opinions are noted. Several commenters indicated that the Off-Site Alternative was not adequately analyzed, but do not give specific examples. These comments are noted. The West Sunset Playground alternative would avoid or reduce the significant and unavoidable historic resources impact of the proposed project, meets some of the project objectives, and is feasible. This alternative was not dismissed and it is noted that the San Francisco Recreation and Parks Commission may consider approval of the project, or an alternative to the project within the range of alternatives considered in the EIR. An EIR need not analyze the impacts of alternatives at an equal level of detail as the proposed project, but shall include sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project (CEQA Guidelines Section 15126.6[d]). EIR Chapter VI, Alternatives includes a comparison of the impacts of the alternative and the proposed project, particularly regarding the significant impacts identified for the proposed project, and includes sufficient information about each alternative to allow meaningful evaluation, analysis, and comparison with the proposed project. Thus, the analysis of the Off-site Alternative is adequate.

Comment O-GGAS2-09 disagrees with the EIR finding that the Off-site Alternative would have biological resources, hydrology and water quality, and hazards and hazardous materials impacts that would be similar to the proposed project. Specifically, the commenter indicates that there is a difference in biological resources and hydrology conditions at the two sites, and notes that the San Francisco Public Utilities Commission plans to use groundwater at the Beach Chalet Athletic Fields project area. It is noted that both the Beach Chalet Athletic Fields and the West Sunset Playground overlie the Westside Groundwater Basin. The San Francisco Public Utilities

Commission proposes extraction of groundwater from the basin for addition to the San Francisco municipal water supply and proposes installation of a well facility at six locations, including the West Sunset Playground (within the existing parking lot) and to the south of the Beach Chalet Athletic Fields (conversion of the existing groundwater well located at the former Richmond-Sunset Water Pollution Control Plant). Hydrologic conditions are similar at the two locations, and impacts associated with hydrology and water quality would be similar to the proposed project. As discussed in response ALT-1, the project would result in significant but mitigable impacts to special-status bat species during construction activities and related tree removal and replacement requirements. The West Sunset Playground is currently a grass turf field (similar to the project area) that is bordered by trees and shrubs. Renovation of the West Sunset Playground could require building renovation that could result in hazardous building materials associated with lead-based paint and asbestos, similar to the proposed project. Therefore, it is likely that similar impacts related to special-status bat species and trees would occur under both alternatives. Less-than-significant impacts associated with habitat loss and lighting effects on birds/wildlife would also be similar.

The commenter notes in comment SFPARKS-34 that the Off-site Alternative would result in greater impacts than the proposed project because of the proximity to sensitive receptors and other synthetic turf fields. As discussed on EIR pages VI-8 and VI-9, due to the proximity of West Sunset Playground to residential land uses, nighttime lighting effects would likely be greater than that of the proposed project (though it is noted that impacts to aesthetic resources are less than significant under the proposed project). Construction-related impacts would be similar to or greater than the proposed project because West Sunset Playground is more proximate to sensitive receptors than the project site. The proposed project and the Off-site Alternative would have similar, less than significant hazardous materials and water quality effects associated with synthetic turf. It is also assumed that impacts associated with traffic congestion could be greater than the proposed project. While the Off-site Alternative would have similar biological resources impacts (bats and tree resources) and hazardous building material exposure impacts, it would avoid significant and unavoidable impacts to historic resources.

O.5 Grass Field Improvements Plus Off-site Alternative [ALT-4]

Issues Raised by Commenters

This response addresses all or part of the following comments, which are quoted in full below this list:

A-SFHPC-10	I-Arack-09	I-de Forest-01	I-Mabutt-01
O-CPF-04	I-Bar-David-01	I-Denefeld-01	I-McCowin-02
O-CSFN-11	I-Bowman-02	I-Dennenberg-01	I-McCowin-06
O-GGAS2-10	I-Buffum-03	I-Dowell-03	I-Pattillo-07
O-GGPPA-11	I-Buhler-04	I-Draper-03	I-Pfister-01
O-PAR3-10	I-Cherny-03	I-Edelson-01	I-Poshumus-03
O-RCA-06	I-Citron-01	I-Foree-Henson-04	I-Richards-01
O-SFAH-02	I-AClark-16	I-Hahn-01	I-Richards-10
O-SFAH-07	I-Clayton-02	I-Hillson-06	I-Romano-09

O-SFOE-01	I-Clayton-03	I-Horton-03	I-Scott-01
O-SFOE/GGPPA-01	I-Clayton-04	I-Hyde-04	I-Shimek-01
O-SFOE/GGPPA-02	I-Clayton-06	I-Khan-02	I-Stern-03
O-SPEAK2-06	I-Clayton-07	I-NLang-03	I-Warriner-06
O-SPEAK3-13	I-Clayton-08	I-LEwis-02	I-Welborn-01
O-SPEAK4-06	I-Clayton2-01	I-NLewis-01	I-Wooding-01
O-SPEAK4-11	I-Darrigrand &	I-Lieb-01	
I-Anderson-01	Clafin-01		

“The HPC believes the best preservation alternative is a combination of parts of preservation alternative no. 2, 3, and 4 which is to improve the soccer fields at Beach Chalet as well as to seek an off-site alternative. The proposed off site alternative holds real potential when considered in a larger context of fields in this part of the city.

Believe that greater investigation could/should have been made in drafting the DEIR to improve use, maintenance and safety of grass fields - better drainage options, turf type and maintenance methods.

The HPC prefers to maintain the natural fields and believes switching to artificial turf is a troubling precedent.” (*Charles Edwin Chase, President, Historic Preservation Commission, letter, December 1, 2011 [A-SFHPC-10]*)

“We believe that another hybrid alternative could meet most of the project objectives. This would include renovating the existing fields with natural turf and limited to no lighting and renovating fields at West Sunset Park.” (*California Preservation Foundation, letter, December 8, 2011 [O-CPF-04]*)

“**Alternative sites** have not been fully investigated. The Coalition for San Francisco Neighborhoods (CSFN) supports an alternative site to protect Golden Gate Park’s Beach Chalet Athletic Fields as a natural turf field within naturalistic parkland, as a multi-use meadow, and as wildlife habitat while providing additional playing hours.

We believe that this can be accomplished by a combination of Alternatives #2, #3, and #4. We ask that the EIR consider a Compromise Alternative as follows:

1. Renovate the West Sunset Playground with an improved playing surface and night lighting for some or all of its fields -
 - o Benefit: extended playing time year-round for all ages in the evenings
 - o Benefit: extended playing time in winter for youth soccer in the late afternoon
 - o Benefit: location in the north-western part of San Francisco
 - o Benefit: restroom facilities and bleachers already in place
 - o Benefit: some night lighting already in place

2. Renovate the Beach Chalet Athletic Fields with natural grass –
 - o use contemporary field construction techniques, such as:
 - good soil structure and soil improvement products for stronger grass roots
 - effective subsurface drainage to cut down on loss of play time due to rain
 - state of the art irrigation to both provide full coverage of the fields and to also save water by irrigating only when needed
 - new sod
 - gophers barriers and an active gopher control program
 - o Fix up restrooms as needed
 - o Introduce ADA access that is sensitive to the overall design concept of the Golden Gate Park and consistent with other meadows in the park
 - o Benefit: increases playing time at Beach Chalet in addition to the increase at West Sunset Playground
 - o Benefit: preserves Golden Gate Park’s parkland and remains consistent with the Golden Gate Park Master Plan and the Secretary of the Interior Guidelines
 - o Benefit: preserves wildlife habitat
 - o Benefit: provides a quality, natural grass field for youth soccer during the day
 - o Benefit: preserves parkland for all other residents who wish to enjoy a grass field and parkland, where enjoyment is not dependent on the ability to participate in active sports
 - o Benefit: preserves the existing trees and park windbreak
 - o Benefit: meets San Francisco’s transit -first policy by not expanding the parking

3. Do not add night lighting to the Beach Chalet Athletic Fields
 - o Benefit: preserves wildlife habitat
 - o Benefit: preserves the beauty of the park during the day and Ocean Beach at night.
 - o Benefit: preserves Golden Gate Park’s parkland and remains consistent with the Golden Gate Park Master Plan and the Secretary of the Interior Guidelines.” (*Coalition for San Francisco Neighborhoods, letter, December 12, 2011 [O-CSFN-11]*)

“We also believe that the Executive Summary underestimates the value to recreational resources that would occur if the West Sunset Playground were selected in conjunction with upgrades at the Beach Chalet. Such an alternative would allow for increased play at both sites, perhaps meeting or exceeding the accommodation of new players anticipated by the Project at the Beach Chalet. Such a hybrid would also reduce some of the need for some project objectives, such as increasing access to the Beach Chalet fields or renovating the parking lot to the degree proposed. Sadly, the DEIR does not consider such a hybrid alternative and, instead, by ‘putting all its eggs in one basket’, is overly biased toward the Recreation and Parks Department’s preferred alternative.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-10]*)

“We support alternatives that protect Golden Gate Park’s historic character while providing more playing hours for youth. We believe that this should include pursuing locations outside of

Golden Gate Park for parts of this project. **One solution is to combine Alternative #2. renovating the West Sunset Playground with an improved playing surface and lighting for some or all of its fields AND parts of Alternatives #3 and #4 - renovating the Beach Chalet Athletic Fields with real grass and no lights.**

This solution would do the following:

- o Increase the amount of playing time at both facilities;
- o Improve some public access to Beach Chalet Athletic fields -- but not as much access would be needed due to the lower use than the proposed project;
- o Provide two good athletic fields close to the northern part of San Francisco available to a wider variety of players;
- o Provide amenities at either Beach Chalet or at West Sunset, as needed by the projected usage (West Sunset already has extensive bleachers);
- o Remain consistent with the Golden Gate Park Master Plan." (*Golden Gate Park Preservation Alliance, letter, November 16, 2011 [O-GGPPA-11]*)

"Alternatives: Are poorly developed. We prefer the alternative of a renovation of the natural grass fields, so that it can be made safer for children to play on, and be able to be longer hours but without lighting. This should be combined with renovating other playing fields outside of Golden Gate Park, to provide more room for play for children all over San Francisco. We ask that the DEIR more completely explore this alternative, and we look forward to working with RPD on accomplishing this goal." (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR3-10]*)

"The best Alternative Plan was not considered and needs to be included:

1. Renovate the West Sunset Playground with an improved playing surface and night lighting for some or all of its fields. Benefits: extended playing time year-round for all ages in the evenings. This extends playing time in winter for youth soccer in the late afternoon. Restroom facilities and bleachers already in place and do not have to be built. Some night lighting already in place
2. Renovate the Beach Chalet Athletic Fields with natural grass: use contemporary field construction techniques, such as good soil structure and soil improvement products for stronger grass roots. Install effective subsurface drainage to cut down on loss of play time due to rain. Install state of art irrigation to provide full coverage of the fields and to also save water by irrigating only when needed. Install new sod and gophers barriers and an active gopher control program. Fix up restrooms as needed. Introduce ADA access that is sensitive to the overall design concept of the Golden Gate Park and consistent with other meadows in the park. Increasing the playing time at Beach Chalet in addition to the increase at West Sunset Playground will greatly benefit youth and adult playing time. Golden Gate Park's parkland will benefit and it will remain consistent with the Golden Gate Park Master Plan and the Secretary of the Interior Guidelines. This will benefit wildlife habitat, preserves

existing trees and park windbreak.” (*Richmond Community Association, letter, December 12, 2011 [O-RCA-06]*)

“Accordingly, Heritage urges the Department to analyze a ‘compromise alternative’ that incorporates elements of Alternatives 2, 3 and 4, as further described below.” (*San Francisco Architectural Heritage, letter, December 12, 2011 [O-SFAH-02]*)

“Heritage strongly believes there is more than one feasible alternative to the proposed project. Alternatives 3 and 4 outlined in the DEIR appear to be feasible because the DEIR acknowledges that they both meet a majority of project objectives. However, we urge the Planning Department to consider an additional ‘compromise alternative’ combining elements of Alternatives 2, 3 and 4 that would adhere to Golden Gate Park Master Plan. The ‘compromise alternative’ would call for the use of natural turf (Alternative 3), no lights (Alternative 4), and renovation of West Sunset Park (Alternative 2). The ‘compromise alternative’ would allow for renovated fields, improved drainage, and natural turf and no or significantly reduced lighting at Beach Chalet, and allow remaining funds to help renovate West Sunset Park with artificial turf and additional lighting. While such an approach does not meet all of the applicant’s desired criteria, it would meet most of the stated objectives while retaining the essence of Golden Gate Park’s historic fields.” (*San Francisco Architectural Heritage, letter, December 12, 2011 [O-SFAH-07]*)

“SF Ocean Edge believes that there is an alternative that will best satisfy the project objectives while preserving the priceless qualities of Golden Gate Park’s naturalistic landscape. We would like to draw your particular attention to the attached letter from Rupert Clayton, describing the Compromise Alternative. This alternative includes:

- Renovating the Beach Chalet Athletic Fields with natural grass and no additional night lighting
- Renovating a second location outside of Golden Gate Park with a new playing surface and some night lighting; this could be the West Sunset Playing Field, as described in the DEIR, or additional playing fields.

This alternative meets the majority of the project objectives while preserving the unique qualities of Golden Gate Park. It provides a win-win situation for everyone. We hope that the Planning Department will seriously consider this alternative” (*San Francisco Ocean Edge, letter, December 12, 2011 [O-SFOE-01]*)

“The Draft EIR is deeply flawed but it contains the seeds of hope. That hope lies in the compromise alternative that we have proposed. Renovate the West Sunset playing fields and

turn the Beach Chalet fields into a high quality natural grass playing field with no lights. We turn to you, the Planning Commission, to help forge the compromise.” (*San Francisco Ocean Edge/Golden Gate Park Preservation Alliance, public hearing comment [O-SFOE/GGGPPA-01]*)

“Secondly, ask the Planning Department to seriously consider the compromise alternative and research it carefully with an eye not to tearing it apart – any idea can be demolished if you work on it hard enough --but to try to find a way to make it work.” (*San Francisco Ocean Edge/Golden Gate Park Preservation Alliance, public comment [O-SFOE/GGPPA-02]*)

“An alternative to the proposed project should be developed which would show how a true restoration and renovation would enhance the historic resources; the EIR should carefully analyze the renovation of the Playing Fields with natural grass without additional lighting combined with the location of a high intensity sports complex to other areas such as the West Sunset Playing Fields” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK2-06]*)

“Alternatives. An alternative to the proposed project should be developed which would show how a true renovation would both restore and enhance the historic resources; the EIR should carefully analyze the renovation of the Playing Fields with natural grass without additional lighting combined with the location of a high intensity sports complex to other areas such as the West Sunset Playing Fields.

SPEAK believes that a suitable Compromise Alternative exists which would meet almost all of the project objectives. SPEAK requests that this alternative should be added to the DEIR to permit decision-makers an ample range of decisions, whether or not the project sponsor wishes it. That alternative is attached.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK3-13]*)

“An alternative to the proposed project should be developed which would show how a true renovation would both restore and enhance the historic resources; the EIR should carefully analyze the renovation of the Playing Fields with natural grass without additional lighting combined with the location of a high intensity sports complex to other areas such as the West Sunset Playing Fields. SPEAK supports the Compromise Alternative developed by Ocean Edge, a local group on which SPEAK has a seat on the Board. That alternative is attached.” (*Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-06]*)

“We support a Compromise Alternative to protect Golden Gate Park’s naturalistic parkland. a multi-use meadow/playing field, and wildlife habitat - while providing more playing hours.”

We believe that this can be accomplished by a combination of the DEIR alternatives. **We ask that the EIR consider a Compromise Alternative as follows:**

1. Renovate the West Sunset Playground with an improved playing surface and night lighting for some or all of its fields -

- Benefit: extended playing time year-round for all ages in the evenings
- Benefit: extended playing time in winter for youth soccer in the late afternoon
- Benefit: location in the north-western part of San Francisco
- Benefit: restroom facilities and bleachers already in place
- Benefit: some night lighting already in place

2. Renovate the Beach Chalet Athletic Fields with natural grass -

- Use contemporary field construction techniques, such as:
 - Good soil structure and soil improvement products for stronger grass roots
 - Effective subsurface drainage to cut down on loss of play time due to rain
 - State of the art irrigation to both provide full coverage of the fields and to also save water by irrigating only when needed
 - New sod
 - Gopher barriers and an active gopher control program
- Fix up restrooms as needed
- Introduce ADA access that is sensitive to the overall design concept of the park and consistent with other meadows in the park
- Benefit: increases playing time at Beach Chalet in addition to the increase at West Sunset Playground
- Benefit: preserves Golden Gate Park’s parkland and remains consistent with the 1998 Golden Gate Park Master Plan and the 2004 National Register for Historic Places designation
- Benefit: preserves wildlife habitat
- Benefit: provides a quality, natural grass field for youth soccer
- Benefit: preserves parkland for all other residents who wish to enjoy a grass field and parkland, where enjoyment is not dependent on the ability to participate in active sports
- Benefit: preserves the existing trees and park windbreak
- Benefit: meet’s San Francisco’s transit-first policy by not expanding the parking

3. Do not add night lighting to the Beach Chalet Athletic Fields -

- Benefit: preserves wildlife habitat
- Benefit: Preserves the beauty of the park during the day and Ocean Beach at night.
- Benefit: preserves Golden Gate Park’s parkland and remains consistent with the Golden Gate Park Master Plan and the Secretary of the Interior Guidelines.” *(Sunset Parkside Education and Action Committee, letter, no date [O-SPEAK4-11])*

"I very strongly oppose the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights. I support the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1st, 2011.

The Compromise Alternative is to renovate the Beach Chalet fields with natural grass and no lighting and to renovate the West Sunset Playground to provide more hours of play for youth soccer. I request that the Planning Department focus on this alternative and work to find a solution that protects Golden Gate Park's parkland." (*Raja Anderson, letter, December 12, 2011 [I-Anderson-01]*)

"Please consider the Compromise Alternative of natural grass and no stadium lights at all, and never any lights such as this at night at the western edge of the park, or anywhere in the park, for that matter. Consider renovating other areas that are truly designed to be soccer playing fields and not public parks for everyone, in other San Francisco areas." (*Patricia Arack, letter, December 12, 2011 [I-Arack-09]*)

"I oppose the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights. I support the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1st, 2011. The Compromise Alternative is to renovate the Beach Chalet fields with natural grass and no lighting and to renovate the West Sunset Playground to provide more hours of play for youth soccer. I request that the Planning Department focus on this alternative and work to find a solution that protects Golden Gate Park's parkland." (*Ilana Bar-David, letter, December 12, 2011 [I-Bar-David-01]*)

"I fully support youth and adult soccer therefore suggest the budget for the proposed Beach Chalet project be used to fix up the Beach Chalet fields with real grass in keeping with the master plan, and then use the rest of the money to fix up other playing fields in San Francisco parks and schools, and/or create new fields or a complex. For example, why not explore creating a major soccer complex at Sharp Park in the rifle range area. Perhaps, a joint project with Pacifica and/or the County of San Mateo. Note that for many people in SF getting to Sharp Park would be easier than getting to Ocean Beach and would free up local fields for more ad hoc neighborhood play.

Any of these options is a win-win solution that protects the character of the parklands and gives kids more nearby places to play while keeping a terrific grass field in a beautiful historic setting: Golden Gate Park." (*Arnita Bowman, letter, December 12, 2011 [I-Bowman-02]*)

“The Compromise Alternative (put forth by the public during the Planning Commission hearing of December 1st, 2011) is to renovate the Beach Chalet fields with natural grass and no lighting, and to renovate the West Sunset Playground to provide more hours of play for youth soccer. I request that the Planning Department focus on this alternative and work to find a solution that protects Golden Gate Park’s natural parkland.” (*Nancy Buffum, letter, December 12, 2011 [I-Buffum-03]*)

“We joined the Historic Preservation Commission in urging the Planning Department to consider an additional hybrid alternative that combines elements of alternatives 2, 3 and 4 including natural grass and reduced lighting. This compromise solution would allow for renovated fields with natural turf and no or significantly reduced lighting at Beach Chalet, as well as renovated fields at West End Sunset Park using artificial turf and additional lighting.

This approach will meet most of the stated project objectives while retaining the essence of the historic naturalistic fields of Golden Gate Park’s western end. Thank you.” (*Mike Buhler, public hearing comment [I-Buhler-04]*)

“I’ve just today read the proposed alternative developed by San Francisco Heritage. I find that proposal to be far superior to the proposal before you. It would improve the existing soccer fields and also provide additional facilities outside Golden Gate Park, thereby preserving the current master plan but also providing much improved soccer facilities. As a grandfather of a girl who seems very interested in soccer, I want the city to have improved soccer facilities. But they should not come at the expense of our world-famous park.” (*Robert Cherny, letter, November 30, 2011 [I-Cherny-03]*)

“I oppose the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights. I support the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1st, 2011. The Compromise Alternative is to renovate the Beach Chalet fields with natural grass and no lighting and to renovate the West Sunset Playground to provide more hours of play for youth soccer. I request that the Planning Department focus on this alternative and work to find a solution that protects Golden Gate Park’s parkland.” (*Ben Citron, letter, December 11, 2011 [I-Citron-01]*)

“I recommend and support a compromise alternative that combines two alternatives: Alternative #2, Off Site Alternative (DEIR pages VI-7-9)) and Alternative #3 Grass Turf with Reduced Lights Alternative (DEIR VI-9-11).

Alternative #2: Off-Site Alternative, West Sunset Playground. Renovation of the West Sunset Playground will meet the needs for children under eight (U 5, 6,8) and children under ten (U 10). The West Sunset Playground will provide safe, accessible, outdoor multiple ball playing athletic

fields and facilities for kids. West Sunset Playground has a large soccer field, three baseball diamonds, two tennis courts, a full basketball court, another playground, restrooms and a small recreation center (DEIR VI-7, SFRPD, 2011). It is located near an elementary school and a middle school. It is accessible by public transit and mitigates the use of cars, trucks and SUV's. It has some lighting for evening use already and can provide extended playing time for children after school and during the school year and summer. It can also provide extended playing time for adults and older teens and for those who ride bikes or need public transit.

To ensure soccer playing time for children under eight years old and under ten years old, the West Sunset Playground must have a soccer playing schedule that provides equal age-related access for young children and has designated guaranteed after-school soccer team reservations for Monday through Friday and designated guaranteed soccer team reservations on Saturdays and Sundays for kids, eight years old and under (U 5, 6, 8) and ten years old and under (U 10).

Alternative #3 Grass Turf with Reduced Lights Alternative: Beach Chalet Athletic Fields. With the combined West Sunset Playground and Beach Chalet Athletic Fields, there will be increased playing time available without the added people and traffic congestion at the western end of Golden Gate Park and its adjacent areas. The result: the environmental impact of people use and traffic use on Golden Gate Park and surrounding areas will be less. Alternative #3 combined with Alternative #2, West Sunset Playground will have five soccer playing fields which will provide constant and consistent year-round access and availability for four soccer fields in play. Alternative #3 recognizes and provides for the necessary maintenance required for the current and proposed scope of the Beach Chalet Athletic Fields. The addition of the fifth field allows for proper maintenance time in order to have four fields available for play year round. Alternative #3 combined with Alternative #2 provides the best environmental protection and historic preservation of Golden Gate Park, our beloved park recognized internationally.

A Win-Win for Children and the Environment. The two alternatives (#2 and #3) combined are a win-win for children and the environment. I believe the Fisher brothers, Bob, Bill and John, will be pleased and happy with the win-win outcome to give every child a place to play ball." (*Ann Clark, letter, December 12, 2011 [I-AClark-16]*)

"The California Environmental Quality Act (CEQA) requires a draft EIR to 'describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives' (CEQA Guidelines Section 15126.6).

The Draft EIR for this project includes the following alternatives: 1) No Project Alternative, 2) Off-Site Alternative, 3) Grass Turf with Reduced Lights Alternative, and 4) Synthetic Turf without Lights Alternative (EIR: Chapter VI). The draft report does not consider the most obvious way to minimize environmental impacts and better meet project objectives-renovating the grass turf fields at the Beach Chalet without night lighting, and also providing additional hours for soccer play at another location." (*Rupert Clayton, letter, December 10, 2011 [I-Clayton-02]*)

“Recommended Components for ‘Compromise Alternative’. I am recommending this alternative because it has great potential to meet the maximum number of project objectives consistent with minimal environmental impact to Golden Gate Park, the additional site, and the wider environment. Similarly, it aims to balance the genuine need for more playing time and better facilities for youth and adult soccer in San Francisco with the needs of other park users, nearby residents and broader environmental mandates. For these reasons, I will refer to this alternative as the ‘Compromise Alternative’.

I ask that the EIR include a Compromise Alternative structured generally as follows:

1. Renovate athletic fields at the West Sunset Playground, including:
 - An improved playing surface for some or all fields
 - Night lighting for some or all fields
2. Renovate the Beach Chalet Athletic Fields with living grass turf:
 - Use contemporary field construction techniques, such as:
 - Good soil structure and soil improvement products for stronger grass roots
 - Effective subsurface drainage to cut down on loss of playing time due to rain
 - State-of-the-art irrigation to both provide full coverage of the fields and to also save water by irrigating only when needed
 - New sod
 - Gopher barriers and an active gopher-control program
 - Fix up restrooms as needed
 - Introduce ADA access that is sensitive to the overall design concept of the park and consistent with other meadows in the park
 - No sports lighting at the Beach Chalet site
 - No expansion of the number of parking spaces (consistent with the requirements of Appendix 41 to the San Francisco Code).
 - Only such new or modified pathways as can be accomplished without significant impact to the historic resources in Golden Gate Park
 - No bleacher-style raised spectator seating

Essentially, the aim here is to remove from the Golden Gate Park portion of the project all those elements that cause it to have a significant adverse environmental impact, and then to provide sufficient additional playing hours at the off-site location to meet the sponsor’s objectives (without causing significant adverse environmental impact at that location either).” (*Rupert Clayton, letter, December 10, 2011 [I-Clayton-03]*)

“There are two aspects of the Compromise Alternative that could be varied somewhat while retaining essentially the same cores aspects:

- There are many possible locations for the off-site portion of the Compromise Alternative. I suggest that for ease of comparison, the EIR focuses on the West Sunset Playground for the off-site portion of the compromise alternative. This location is already considered in the existing Off-Site Alternative, and is located a short distance from the Beach Chalet site. However, the off-site portion of the Compromise Alternative could also be sited elsewhere in the city without greatly changing the analysis. If, for example, there were significant local impacts from development at the West Sunset Playground, then selecting a different location for the off-site alternative could mitigate these. The sponsor’s stated objectives include some geographically specific components. Given that the Compromise Alternative includes expanded hours for daytime play at the Beach Chalet site, relocating the off-site portion elsewhere in the city could prove to be even more convenient for adult soccer players seeking evening playing hours.
- While the Compromise Alternative requires a renovated grass surface for the four Beach Chalet fields (to ensure less than significant impact on historical resources), the surfaces for playing fields at the off-site location should be selected based on the most cost-effective approach that meets CEQA guidelines and overall project objectives. The existing grass fields at West Sunset Playground are well maintained and deliver many hours of daytime play. It may be possible to sufficiently increase playing time simply by lighting the existing grass fields and making some surface improvements. Alternatively, it may be necessary to construct one or more artificial turf fields at West Sunset Playground in order to achieve sufficient playing hours to meet objectives.” (*Rupert Clayton, letter, December 10, 2011 [I-Clayton-04]*)

“... In contrast to the alternatives proposed in the Draft EIR, the Compromise Alternative can reduce environmental impacts to less than significant levels, while meeting the sponsor’s objectives. More basically, it can provide great soccer facilities and retain the environmental and cultural value of Golden Gate Park.

Because the major elements of the Compromise Alternative have already been considered within other alternatives, the incremental work required for the Planning Department to research its impacts will be minimal. However, it is only possible for the sponsor, government agencies and city residents to assess the merits of the Compromise Alternative by including it in the EIR as a distinct alternative.

Two other considerations make strong arguments for analyzing the Compromise Alternative.

- Firstly, many people in San Francisco have asked for consideration of the Compromise Alternative. This approach has been presented to the public as an option by the volunteer group SF Ocean Edge, and has received very strong support. More than 3,000 people have signed a petition requesting the key components – renovated grass fields at the Beach Chalet and no night-lighting. Similarly, 10 of 16 candidates in San Francisco’s November 2011 mayoral election pledged their support to an alternative with these components. No candidate pledged to support artificial turf or night lighting in Golden Gate Park. To present a Draft EIR that fails to include this alternative is self-evidently inadequate.

- Secondly, there are good reasons to view the Compromise Alternative as more cost-efficient than the proposed project. Cost estimates for the planned project have ranged up to \$12 million. Recently, the city renovated seven grass pitches at the Polo Fields for \$1 million-\$1.3 million. From this we can estimate that renovating the four grass pitches at the Beach Chalet might cost less than \$1 million, plus another \$1 million or less for renovated restrooms, ADA-compliant parking and similar improvements. This leaves a substantial budget of perhaps \$10 million to renovate and light fields at another site. There is good reason to think that the Compromise Alternative can deliver greater benefits than the proposed project, at lower cost, and with far less environmental impact.” (*Rupert Clayton, letter, December 10, 2011 [I-Clayton-06]*)

“The Draft EIR identifies the No Project Alternative and Off-Site Alternative as environmentally superior because they would not cause significant, unavoidable impacts to historical resources from the installation of artificial turf, night lighting, bleachers and new pathways within Golden Gate Park (EIR: Table VI-1). **The Compromise Alternative would qualify as Environmentally Superior** for these same reasons.

The Draft EIR identifies no significant environmental impacts in the Off-Site Alternative (EIR: Table VI-1). The Compromise Alternative would have similar or lesser environmental impact at this second site than the Off-Site Alternative presented in the Draft EIR.” (*Rupert Clayton, letter, December 10, 2011 [I-Clayton-07]*)

“The Compromise Alternative would substantially meet all the sponsor’s objectives.

- It would increase athletic playing time at the Beach Chalet, through improvements to the grass surface, drainage and gopher controls. It would also increase athletic playing time at the off-site location through both surface improvements and night-lighting.
- The ancillary improvements to the Beach Chalet site would improve public access as stated in the sponsor’s objectives. This objective also appears to prejudge acceptable designs by stating a requirement for four specific design elements:
 - New pathways-This requirement can be met through careful design of a limited number of new pathways as recommended by the Draft EIR’s cultural resource analysis (EIR: IV.C-23 and Mitigation Measure M-CP-1)
 - Expansion of the parking lot would violate the following provision of Appendix 41 to the San Francisco Code:

No net gain in parking spaces existing as of the effective date of this ordinance, other than those provided for in the Golden Gate Park Master Plan, shall be permitted.

For this reason, neither the Compromise Alternative nor any other alternative is legally permitted to build additional parking in Golden Gate Park. This objective cannot be met by any legally valid version of the project.

- Providing a formal drop-off area-This requirement can be met.
- Providing bicycle racks-This requirement can be met.
- It would substantially increase ground sports opportunities at two nearby sites in the northeast portion of San Francisco.
- It would provide safe facilities for players and visitors at both sites through gopher-proofing, improved drainage, and state-of-the-art athletic field surfaces. Other amenities would be provided as appropriate to the type of use at each site, and in keeping with the goal of preserving the historic and cultural value of Golden Gate Park.
- Properly constructed grass fields with gopher protection would greatly reduce maintenance and resource needs. The sponsor's view that installation of four artificial turf fields at the Beach Chalet site would necessarily reduce maintenance or resource usage needs to be fully substantiated with independent data. Both field types require responsible maintenance, although the type of work clearly differs.
- ADA requirements would be part of the design for both sites, so this objective would be fully met.
- It will be fully consistent with the *Golden Gate Park Master Plan.*" (Rupert Clayton, letter, December 10, 2011 [I-Clayton-08])

"The first part would be to renovate the Beach Chalet site with high quality living grass fields. This component would have a high quality grass playing surface on the four soccer fields in question. This would include a good soil structure and soil improvements for stronger grass roots so that they --the surface stays in place and playable, an effective subsurface drainage to cut down on the loss of playing time due to rain, state-of-the-art irrigation to provide both full coverage of the field but also to save water by irrigating only when needed, new sod, and gopher barriers combined with an active gopher control program because these measures, contrary to what some people have said here, are actually able to control gophers and remove the holes that have been mentioned.

At Beach Chalet, would also propose to fix up the restrooms as needed and to provide ADA access in a way that's sensitive to the design of the Park and consistent with other meadows.

The components, noting the Beach Chalet would be night lighting or expansion of the number of parking spaces, so we're looking for a balanced proposal within the Park.

Then the second component, alongside the Beach Chalet improvements, would be to make improvements at another site. This, for sake of discussion, would be the West Sunset playground. These improvements would include renovations to the playing surface at that other site, four soccer fields, potentially for other athletic fields at that site, and also sports lighting to increase nighttime play.

We do realize that there's a strong need for the soccer within the city, and we believe that these two components taken together would accomplish that. So we feel that this compromise alternative is a fundamentally obvious alternative that the EIR must address and analyze and the Draft as it's currently written does not do that.

Elements of those features are in Alternatives 2, 3 and 4 of the EIR but they're not combining one plan. Therefore, the analysis faults each of those alternatives in various ways. We'd like to see them combined in one plan. Bringing together those components provides a way to have much better youth and adult soccer facilities within San Francisco while avoiding significant environmental impact to Golden Gate Park and the wider environment." (*Rupert Clayton, public hearing comment [I-Clayton2-01]*)

"We have been alarmed by the DEIR for the Beach Chalet Athletic fields renovation. I support the Compromise Alternative proposed at the hearing of Dec 1." (*Jacqueline Darrigrand and William Claflin, Letter, December 9, 2011 [I-Darrigrand & Claflin-01]*)

"I oppose the project, but support the compromise proposed by the public at the Planning Commission's hearing of December 1, viz., that the Beach Chalet fields be renovated with natural grass and no lighting, and the West Sunset Playground be renovated to provide more hours of play for youth soccer. I urge you to concentrate your attention on that proposal, and thereby find a solution that protects the parkland." (*John de Forest, Letter, December 11, 2011 [I-de Forest-01]*)

"Please consider the compromise proposal to renovate the Beach Chalet Soccer Fields with natural grass turf, and use the artificial turf and lighting at West Portal instead." (*Charles Denefeld, Letter, December 12, 2011 [I-Denefeld-01]*)

"I am therefore in support of the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1st, 2011. The Compromise Alternative includes a renovation of the Beach Chalet fields; natural grass and no lighting, and renovations to the West Sunset Playground; providing more hours of play for youth soccer. I request that the Planning Department focus on this alternative and work to find a solution that protects Golden Gate Park's parkland." (*Hava Dennenberg, Letter, December 10, 2011 [I-Dennenberg-01]*)

"And urge you to encourage the Rec Department to look at alternatives as brilliantly proposed by Rupert earlier.

And this isn't a project where it's children versus the environment or we're not pro-gophers here. I grew up playing soccer on adequately maintained soccer fields and I've also been to the hospital because I've stepped in gopher holes. They were not on soccer fields.

This is a project that is viable and --I'm sorry, this project could be very viable and make everyone happy by combining uses. And I believe just this last week SF Environment is now including in their assessments sustain a biological diversity and since sustainability is part of our, I don't know, goals here in the city, layering uses biological diversity which is natural grass, and also recreational opportunities is an excellent example of how we can bring all of these things together.

So, as proposed earlier by Rupert, by combining alternatives and using a better strategy of construction of the soccer fields, we can accomplish all these things. We might not be able to play a million hours all year round as we would on synthetic turf, but we also wouldn't risk the possible health risks on synthetic turf either. And as you know, a lot of times these projects sometimes have to be dug up years later after lawsuits find out, oh, this stuff really is bad.

So it's a big risk we're taking and we have an opportunity to overlap use here in a fabulous way and I think we can accomplish that by rejecting this DEIR and asking that Rec do a better job of looking at alternatives. Thank you very much." (*Jessica Dowell, public hearing comment [I-Dowell-03]*)

"I have been fighting this plan to install lights and artificial turf since I was made aware of it and became a member of San Francisco Ocean Edge in hopes of keeping the athletic fields from being ruined with artificial turf and lights. My boyfriend has been playing soccer at Golden Gate Park for a decade now and so it's not like I don't value the soccer players' point of view. He plays at least once a week and sometimes more. It is one of his favorite things in the world and I am for anything that allows him and his soccer buddies to enjoy the park for soccer games even more than they are already enjoying them. In 2006 he even broke his ankle in a gopher hole during a soccer game at the baseball fields (we know- there is supposed to be no soccer playing on the outfield of the baseball fields! I can't keep him and a hundred other players from doing this, sorry) so I am painfully aware of the dangers of a field riddled with gopher holes and what it can do to a person. That is no reason though to install artificial turf. The Compromise Alternative is a perfectly good plan that will fix the gopher hole problem. The polo fields is the example of how this can work without artificial turf." (*Andrea Draper, Letter, December 12, 2011 [I-Draper-03]*)

"I support the Compromise Alternative put forth by the public during the Planning Commission hearing on December 1, 2011. This Compromise Alternative would renovate the fields with natural grass and no lighting. It would also renovate the West Sunset Playground to provide more hours of play for youth soccer.

I request that the Planning Department focus seriously on this alternative—and work to find a solution that protects the naturalistic aspect of Golden Gate Park.” (*Ellen Edelson, Letter, December 12, 2011 [I-Edelson-01]*)

“I support the Compromise Alternative put forth by the public on Dec 1, 2011.” (*Elizabeth Foree and Ralph Henson, Letter, December 9, 2011 [I-Foree-Henson-04]*)

“I have been a resident of San Francisco since 1989. I strongly oppose the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights because it is inconsistent with The Golden Gate Park Master Plan. I support the Compromise Alternative proposed by the public during the Planning Commission hearing of December 1, 2011. The Compromise Alternative is to renovate the Beach Chalet fields with natural grass and no lighting and to renovate the West Sunset Playground to provide more hours of play for youth soccer.” (*Thomas Hahn, letter, December 9, 2011 [I-Hahn-01]*)

“Perhaps the compromise proposed at the hearing in conjunction with the Sunset Playground is a workable solution.” (*Rose Hillson, letter, December 7, 2011 [I-Hillson-06]*)

“Having grown up in Germany with soccer being the most popular sport, I am glad soccer has won popularity in the United States. However, the location of the proposed Soccer Fields in the western End of Golden Gate Park is not a suitable location and contradicts policies of the Golden Gate Master Plan and General Plan. As alternative to the proposed project I would like to suggest a compromise: the restoration of the natural lawn of the existing soccer fields for daytime use without the introduction of artificial turf and bright night lighting in combination with upgrading the playing fields at the West Sunset Playgrounds would be an excellent solution and would not only served the soccer community but also the students of the adjacent schools.” (*Inge Horton letter, December 1, 2011 [I-Horton-03]*)

“I oppose the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights. I support the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1st, 2011. The Compromise Alternative is to renovate the Beach Chalet fields with natural grass and no lighting and to renovate the West Sunset Playground to provide more hours of play for youth soccer. I request that the Planning Department focus on this alternative and work to find a solution that protects Golden Gate Park’s parkland.” (*Katherine Hyde, email, December 11, 2011 [I-Hyde-04]*)

“For these reasons among others, I support the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1st, 2011. The Compromise Alternative is to renovate the Beach Chalet fields with natural grass and no lighting and to renovate the West Sunset Playground to provide more hours of play for youth soccer. I urge the Planning Department to focus on this alternative and work to find a solution that protects Golden Gate Park’s parkland.” (*Tehmina Khan, email, December 10, 2011 [I-Khan-02]*)

“If there were no reasonable alternatives for kids to play soccer, I would swallow my discontent, remain quiet and hope the sound of children having fun would compensate for all that would be lost. But you can just renovate this field with real grass and forget the ridiculous lights, fix up the West Sunset Playground or come up with some other plan. You don’t have to do this. So please don’t.” (*Nathan Lang, email, December 11, 2011 [I-NLang-03]*)

“I support the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1, 2011. The Compromise Alternative is to renovate the Beach Chalet fields with natural grass and no lighting and to renovate the West Sunset Playground to provide more hours of play for youth soccer.” (*Beth Lewis, letter, December 4, 2011 [I-BLewis-02]*)

“I live in the Sunset and am totally opposed to the proposal to renovate the Beach Chalet Fields with artificial turf and stadium lights that will burn until 10pm. I do support child soccer and support the compromise alternative to renovate the fields with natural grass but no lighting and renovate the Sunset Playground as a better alternative for soccer.” (*Nancy Lewis, letter, December 9, 2011 [I-NLewis-01]*)

“I strongly oppose the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights. It is inconsistent with The Golden Gate Park Master Plan. I support the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1, 2011. The Compromise Alternative is to renovate the Beach Chalet fields with natural grass and no lighting and to renovate the West Sunset Playground to provide more hours of play for youth soccer.” (*Reddy Lieb, letter, December 5, 2011 [I-Lieb-01]*)

“I am writing today in opposition to the planned artificial turf soccer complex at the Beach Chalet soccer fields. The pastoral western end of Golden Gate Park is not an appropriate location for seven acres of artificial turf or 60 foot high stadium night lighting. I find the current EIR to be

deeply flawed and the proposed project to be a direct violation of the Golden Gate Park Master Plan. I support the alternative proposal put forth by the public at the December 1st Planning Commission hearing. You have received extensive testimony, both oral and written, documenting the significant adverse impacts to the people and wildlife that live and visit the area if this project is approved." (*Anmarie Mabbut, email, December 12, 2011 [I-Mabbut-01]*)

"We support the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1, 2011. My daughter and her friends were miserable playing soccer in Palo Alto when they changed the fields to artificial turf." (*Kathleen McCowin, email, December 8, 2011 [I-McCowin-02]*)

"Liz and I request that the Planning Department focus on the compromise alternative and work to find a solution that protects Golden Gate Park's parkland and doesn't hurt the shore.

Thank you for considering Liz and my concerns. We would also like to receive a printed copy of the Comments and Responses and the Final EIR by mail" (*Kathleen McCowin, email, December 8, 2011 [I-McCowin-06]*)

"Part VI of the DEIR offers a number of alternatives that would reduce the impacts on this resource. Regrettably none by itself offers a viable alternative which would meet most of the Project Objectives.

I strongly encourage you to consider a combination of the alternatives #2, #3 and #4, Alternative #2 identifies an alternate location for new fields and should be thoroughly explored - West Sunset Playground has been suggested as a possible suitable location. From Alternative #3 can be taken the proposal for renovating the existing natural grass fields, and from Alternative #4 can be taken again the idea of no lighting. This combination of renovating a field outside of Golden Gate Park while renovating the natural grass at the Beach Chalet fields with real grass and no lights would meet the majority of the project objectives, while retaining the essence of the historic fields." (*Chris Pattillo, letter, December 8, 2011 [I-Pattillo-07]*)

"I live in the Outer Sunset. I am greatly in favor of the Compromise Alternative. I cannot say that I have carefully reviewed the DEIR. However, I looked at two sections, Off Site Alternatives and Aesthetics, and found them to be terribly biased for the full project." (*Charles Pfister, email, December 12, 2011 [I-Pfister-01]*)

“Please include an alternative in the DEIR that restores the Beach Chalet Soccer fields with natural grass and no lights. This alternative, combined with the offsite alternative in the DEIR, would keep the western edge of the Park ‘sylvan’ and ‘pastoral’ and provide more hours of play for youth soccer.” (*Yope (Johannes) Posthumus, email, December 12, 2011 [I-Posthumus-03]*)

“I am a resident of San Francisco, parent of a youth athlete, frequent user of Golden Gate Park and Ocean Beach and former San Francisco Little League parent coach, and I am writing to express my strong opposition to the proposal to cover the natural grass Beach Chalet Soccer Fields in Golden Gate Park with artificial turf and install stadium lighting. Rather, I believe if the proponents of this project really want to do what is best for the City, its residents, and the legacy of Golden Gate Park, the Beach Chalet Fields should be rehabilitated with real turf and no lights like the Polo Fields recently were, and the artificial turf project should be implemented at the West Sunset Playground fields.” (*Renee Richards, email, December 8, 2011 [I-Richards-01]*)

“Project Alternative Number 2, renovating the West Sunset Fields with artificial turf, is a much better plan. There will be no adverse and significant negative historical impact. The neighborhood already has street lighting, and Saint Ignatius school is nearby which also has athletic lighting in place. In addition to SI, Sunset Elementary and Giannini Middle School are nearby and their students could benefit from the use of turf fields. The West Sunset playground has already been renovated, so the costs of creating the proposed adjacent play/recreation area would be unnecessary. While the long-term safety of tire crumb use is still debated, West Sunset Fields are not located in an environmentally sensitive area.

In addition, and importantly, the use of artificial turf fields at West Sunset rather than GG Park would involve not only the creation of more turf soccer fields, but also turf baseball fields. If you are unfamiliar with the rush on registration for SF Little League’s 2012 Spring season, suffice it to say that the demand is so great for baseball in San Francisco that all of the under-12 divisions were fully registered and closed within seven hours of registration opening. While I am not a proponent of playing through inclement weather (having just stood through my son’s soccer game at Crocker in the pouring rain and upper 40 degree temperatures myself a few weeks ago) I always feel it is unfortunate that after a Spring rainstorm, when ‘the sun comes out and the kids are chomping at the bit to play baseball or soccer, fields can remain closed for 24 or more hours after the last drop has fallen because of standing water and ‘Field saturation.

West Sunset is less than 2 miles from the Beach Chalet, is not in an historically protected park, is not in an environmentally sensitive area, and would provide additional access not only to after-school and adult sports teams from all over San Francisco, but school kids from three immediately adjacent schools.” (*Renee Richards, email, December 8, 2011 [I-Richards-10]*)

"I oppose the proposal to renovate the Beach Chalet Athletic Fields with artificial turf and stadium lights. I support the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1st, 2011. The Compromise Alternative is to renovate the Beach Chalet fields with natural grass and no lighting and to renovate the West Sunset Playground to provide more hours of play for youth soccer. I request that the Planning Department focus on this alternative and work to find a solution that protects Golden Gate Park's parkland." (*David Romano, email, December 9, 2011 [I-Romano-09]*)

"...yet want to express my support for the Compromise Alternative put forth at the Planning Commission hearing Dec. 1.

This solution minimizes negative environmental impacts -- including toxic runoff, and disturbance of wild-life as well as neighbors residing near the park, saves energy, and keeps Golden Gate Park close to its mission of serving as a natural urban refuge.

Additionally, dedicated use of parkland for one segment of the population -athletic teams -- is unnecessarily exclusive of other non-athletic uses and constituents; the Compromise Alternative sets up a more inclusive balance among these." (*Diana Scott, email, December 12, 2011 [I-Scott-01]*)

"I am totally opposed to this, as are so many other residents of San Francisco, for all of the reasons you have heard. I am in agreement with all of the reasons Jason Jungreis outlined in his letter to you.

Please consider the Compromise Alternative." (*Mary Lynn Shimek, letter, no date [I-Shimek-01]*)

"Please include an alternative in the DEIR that restores the Beach Chalet Soccer fields with natural grass and no lights. This alternative, combined with the off-site alternative in the DEIR, would keep the western edge of the Park 'sylvan' and 'pastoral' and provide more hours of play for youth soccer." (*Kathleen Stern, email, December 11, 2011 [I-Stern-03]*)

"Soccer recreation is a wonderful asset to offer our children, there is no argument with that. But let's do it in a way that is sustainable for the park's wildlife and other recreational users.

I would like to strongly suggest that the city and the Dept of Recreation and Parks look seriously at the Compromise Alternative put forth by the public during the Planning Commission hearing of December 1st 2011. The Compromise Alternative is to renovate the Beach Chalet fields with natural grass and no lighting and to renovate the West Sunset Playground to provide more hours of play for youth soccer. I request that the Planning Department focus on this alternative and

work to find a solution that protects Golden Gate Park's parkland." (*Joyce Warriner, email, December 8, 2011 [I-Warriner-06]*)

"I would like to point out a couple of defects with this EIR. One of them is that it's missing a comparison of combining grass restoration at this site with installing at West Sunset Playground artificial turf." (*Tes Welborn, public hearing comment [I-Welborn-01]*)

"I love soccer, adult soccer, youth soccer. However, I do not believe that the Beach Chalet soccer fields should become a synthetic field or feature nighttime lights. The field should remain natural with no lights. The West Sunset fields should also be considered an alternative." (*George Wooding, public hearing comment [I-Wooding-01]*)

Response ALT-4

Many commenters indicate that an alternative that includes renovation of the Beach Chalet Athletic Fields with grass turf and no lights, along with renovation of the West Sunset Playground is preferred. The suggested alternative would be within the range of alternatives analyzed in the EIR. The Off-site Alternative presented in the EIR includes renovation of the West Sunset Playground to include synthetic turf, field lights, and amenities similar to those proposed under the project. As described in response ALT-2, the Off-site Alternative would include continued use of the existing grass field at the Beach Chalet Athletic Fields. Under this alternative, turf repair and replacement, gopher control, and other maintenance activities would continue to occur and could include use of improved turf maintenance, as available. Thus, the Off-site Alternative incorporates the potential for consideration of an Off-site Alternative, with renovation of the Beach Chalet Athletic Fields with grass turf and no lights. Under this alternative, active play fields would remain at the existing size. Currently, there is staffing capacity for one 1/3 full-time equivalent employee for maintenance of the fields on a continual basis. Under the Off-site Alternative, it is unlikely that additional playing time could occur at the Beach Chalet Athletic Fields based on the existing level of available maintenance staffing. It is acknowledged that improved natural turf maintenance options have been developed; however, natural turf has play time limitations and improved turf maintenance would not increase play time at the Beach Chalet athletic fields (an objective of the project) because the degradation of grass is caused by the high volume of play rather than lack of appropriate maintenance.

Other comments indicate that a variation that includes no or reduced lights at Beach Chalet Athletic Fields would be preferred. In addition, several other commenters indicate that renovation of the Beach Chalet Athletic Fields along with improvements at off-site locations other than West Sunset Playground should be considered. In accordance with CEQA, an EIR need not consider every

conceivable alternative, but must consider a reasonable range of alternatives that will foster informed decision-making and public participation. The EIR includes analysis of an off-site alternative (West Sunset Playground) that would: (1) attain *most* of the project's basic objectives; (2) *avoid or substantially lessen* one or more of the significant environmental impacts of the proposed project; and (3) be feasible. The EIR also presents alternatives to the proposed project that would meet the above-listed criteria with different options at the Beach Chalet Athletic Fields. Evaluation of additional variations of the Off-site Alternative would not further foster informed decision-making and public participation beyond that presented in the EIR. Further, many of the alternative off-site locations identified by commenters would not meet many of the project objectives. Some alternative locations identified by commenters would require actions not under the control of the project proponent, since they would be located on land that is owned and/or operated by other parties. The feasibility of such alternatives is unknown. However, it is noted that the San Francisco Recreation and Parks Commission may consider approval of the project, or an alternative to the project.

Several comments requested information regarding the difference in maintenance requirements if natural grass is planted at the Beach Chalet Athletic Fields and the difference in maintenance between grass and synthetic turf fields for West Sunset Playground. As described on EIR page II-10, there is currently staffing capacity for one 1/3 full-time equivalent employee for maintenance of the fields, responsible for field, fence, and restroom maintenance. At this time, staffing capacity is not sufficient to maintain the grass fields at a condition that would allow for increased playing time. Currently, one of the four existing fields is always out of use for rest and re-growth and the fields are closed to the public for several months each year to re-grow. Under the proposed project, staffing capacity would remain at one 1/3 full-time equivalent for cleaning and repair of the synthetic turf, maintenance of fences, restrooms, and other support facilities. However, because synthetic turf maintenance requirements are less than grass turf, the field conditions would support increased field use. Maintenance requirements at West Sunset Playground under existing conditions with grass turf and with synthetic turf would be similar to the Beach Chalet Athletic Fields under similar conditions.

O.6 Other Alternative Locations [ALT-5]

Issues Raised by Commenters

This response addresses all or part of the following comments:

A-SFPC-Antonini-01	I-D'Anne-02	I-Lampert2-02	I-Murphy-11
A-SFPC-Sugaya-03	I-FDavis-06	I-Lampert2-03	I-Ray3-09
O-GGAS2-34	I-Fukuda-04	I-Lampert2-04	I-Reid-01
O-GGAS3-04	I-Ivanhoe-02	I-NELewis-03	I-Solow2-02
O-PAR2-11	I-Jungreis2-34	I-Lounsbury-02	I-Soulard-02
I-JClark-03	I-Kukatla-01	I-McGrew-01	I-Wuerfel-05

"So that being said, I guess what we have to talk about is are there alternatives? There are alternatives. I thought they summarized them well based upon the project itself. I know other

alternatives have been brought up by you regarding West Sunset and other places that could be used in lieu of this.” (*Michael Antonini, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Antonini-01]*)

“That said, like alternative sites, I don’t know. If this is a facility that’s supposed to serve the entire city, then maybe the EIR needs to take a look at not just sites around Golden Gate Park and the western part of the city but McLaren and other parts of the city as well.” (*Hisashi Sugaya, Commissioner, San Francisco Planning Commission, public hearing comment [A-SFPC-Sugaya-03]*)

“An EIR must include an adequate discussion of alternatives to ensure informed decision making in the selection of one alternative over another. (*See San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.AppAth 713, 735 [‘A major function()1 an EIR ‘is to ensure that all reasonable alternatives to proposed projects are thoroughly assessed by the responsible official.’ (citation omitted)]; *see also* Pub. Resources Code, § 21002.1(a) (a) [purpose of EIR includes identifying alternatives to the project].) The ‘reasonableness’ of alternatives, which is assessed in part on their financial and physical feasibility. (Pub. Resources Code, § 21061.1)

The alternatives proposed must be designed to reduce or avoid one or more of a proposed project’s potentially significant impacts. (CEQA Guidelines, § 15126.6.) The explanation provided by the lead agency for the selection of an alternative must be adequate to ensure a informed public discussion. (*Stand Tall on Principles v. Shasta Union High Sch. Dist.* (1991) 235 Cal.App.3d 772, 786.) The ‘EIR must explain why each suggested alternative either does not satisfy the goals of the proposed project, does not offer substantial environmental advantages[,] or cannot be accomplished.’ (*San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.AppAth at 737; *see also* CEQA Guidelines, § 15091(c) [stating that when an agency finds that alternatives are infeasible, it must ‘describe the specific reasons for rejecting’ the alternatives].)

The DEIR does not discuss an adequate range of reasonable alternatives and mischaracterizes the differences between the proposed project and the alternatives, with the effect of downplaying the benefits of the alternatives and the environmental impacts of the project. As discussed in detail below, the DEIR must be revised to (1) reflect a real range of reasonable alternatives and (2) include an honest, independent discussion of alternatives that is not dictated by the project sponsors.

A. The DEIR Fails to Discuss an Adequate Range of Reasonable Alternatives. The list of alternatives provided in the DEIR does not constitute an adequate consideration of reasonable alternatives. (*San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.AppAth at 735) While CEQA does not require every conceivable alternative be assessed, it does require a full review of available alternatives. By failing to provide adequate alternatives and discussion thereof, the DEIR is fatally flawed and must be revised.

First, the Beach Chalet Athletic Fields renovation is intended to serve regional soccer needs, not just those in the western or northern part of the city. (*See, e.g.,* DEIR at II-I [‘The Beach Chalet Athletic Fields are one of three primary ground sports athletic facilities citywide ’], and at II-10) The list of alternatives fails to include any other sites that would also serve ‘citywide’ (though users from outside the city are anticipated as well). Instead, the alternatives analysis is limited to only one, relatively limited site nearby the fields, the West Sunset Playground. At a minimum, the EIR must be revised to include other alternatives that could meet the citywide need for more playing fields.

...By failing to forthrightly analyze these alternatives, the DEIR is unfairly skewed toward the proposed project.” (*Golden Gate Audubon Society, letter, December 12, 2011 [O-GGAS2-34]*)

“It also fails to provide adequate mitigation measures, for example, nothing to replace the grasslands. Does nothing for the lights. And it does not consider alternatives. This will serve a regional audience. They should look at alternatives on a regional basis, not just the western end of the Park. Thank you for your consideration.” (*Michael Lynes, Golden Gate Audubon Society, public hearing comment [O-GGAS3-04]*)

“The Selected CEQA Alternatives were not adequately investigated and should be further explored. For example, there is no analysis of the perceived under utilization of the Polo Field for day time soccer or Kezar Stadium for night-time soccer since the Recreation and Parks Department implemented its new, higher hourly fee schedules. Those fee schedules, not limited availability of playing fields, may well be the problem.” (*Planning Association for the Richmond, letter, November 11, 2011 [O-PAR2-11]*)

“I mean, I’m not opposed to having it somewhere also but, I mean, I just oppose the project and I’d ask the Planning Commission to extend the public comment period. Thank you.” (*Janet Clark, public hearing comment [I-JClark-03]*)

“Please find somewhere else for a soccer field that does not disturb what little wild life is left in Golden Gate Park and most especially does not disturb the overall envelope of nature with its sounds, smells, beauty, biological diversity and tranquility.” (*Denise D’Anne, Letter, November 16, 2011 [I-D’Anne-02]*)

"If for some political reason it had to be built, might I suggest that City Hall Plaza would be a much more fitting location?" (*Fred W. Davis, Letter, July 15, 2011 [I-FDavis-06]*)

"Alternative sites have not been fully investigated. The entire park needs to be fully investigated and the west Sunset Park. So please provide another 60 days for this review. Thank you." (*Hiroshi Fukuda, public hearing comment [I-Fukuda-04]*)

"Many of the public comments in favor of the project at the December 1st hearing mentioned that the project would help meet the needs of children from the Southern part of the City (Bayview, Hunters Point, and Mission) who do not have adequate soccer fields in their neighborhoods. Although probably beyond the scope of this EIR, perhaps the Off-Site Alternative should consider renovations in these neighborhoods, as well as the West Sunset Playground." (*Richard Ivanhoe, letter, December 13, 2011 [I-Ivanhoe-02]*)

"The plan must include alternatives: there is insufficient analysis of City policy to encourage school playing-field facilities to be used during non-school hours (these facilities are located where the demand is, and using local school playing-fields develops community relationships)." (*Jason Jungreis, email, November 21, 2011 [I-Jungreis2-34]*)

"I am writing to inform you of my opposition to the proposed renovation of the Beach Chalet Athletic Fields with artificial surface and artificial lighting. I am in favor of an alternative that would put artificial surface playing fields on top of building roofs and parking garage roofs. This alternative would renovate the Beach Chalet fields with natural grass (without artificial lighting) and renovate the building roofs and parking garages roofs with artificial surface and artificial lighting, thus providing more hours of play for youth soccer. I respectfully request that the Planning Department focus on this latter alternative and preserve Golden Gate Park's parkland." (*Rakesh Kukatla, email, December 11, 2011 [I-Kukatla-01]*)

"Can you compare the environmental cost of locating the complex at the Beach Chalet vs. locating it closer to where soccer players actually live?" (*Gabriel Lampert, email, December 4, 2011 [I-Lampert2-02]*)

"In particular, is there any idea of where players do live? If, say, it is the Pacific Heights/Laurel Heights/Presidio Heights area of the city, then can you compare the environmental impact of the

Beach Chalet proposal vs. a location in the Presidio?" (*Gabriel Lampert, email, December 4, 2011 [I-Lampert2-03]*)

"Can you compare the Beach Chalet location's impact vs. modifying the existing facilities at Kezar Stadium, which is far more centrally located?" (*Gabriel Lampert, email, December 4, 2011 [I-Lampert2-04]*)

"I believe our communities are better served by renovating smaller sites in each district to facilitate soccer play by our children. They will be accessible to local schools and parents won't have as far to drive and pick up their kids." (*Nancy Lewis, letter, December 9, 2011 [I-NLewis-03]*)

"We need more fields.

We have ask for there to be added fields to the inventory, whether by converting an underused Golf Course, or locating Public land that could be converted.

This has not happened.

So if we're not going to find new space to make into fields then this is the best possible alternative- to add more playing time to existing fields by turfing them and lighting them." (*Jill Lounsbury, email, December 6, 2011 [I-Lounsbury-02]*)

"Project alternatives: Why was Kezar Stadium not researched? The stadium already has night lightening, stadium seats, parking, mass transit and toilets.

Candlestick Park. The 49ers will be gone by 2013 the area has parking, stadium lights and has massive spaces to expand. Why no plans for Candlestick Park as a Soccer Complex.

Boxer stadium. all of the above reasons.

... Larsen Park. good Muni transportation, good parking, new playground and new toilets

Community playgrounds. If this project is about 'kids' why not put one in every supervisorial district?" (*Shana McGrew, email, no date [I-McGrew-01]*)

"I would also suggest extending the soccer fields south into the site of the former sewage treatment plant. By doing so they could add an additional soccer field and perhaps 2." (*Dan Murphy, letter, December 12, 2011 [I-Murphy-11]*)

“If we need to further increase access for playing fields, we should partner with local schools so that our children can play their weekend games in their neighborhoods. Potentially walking or riding a bike to their games, rather than having to be driven to the westernmost edge of the city, hunting for ages for a parking space, and adding to the car congestion in the park. Many school fields, parking lots and bleachers are un-used on weekends. Cities throughout the country utilize school fields for children’s weekend games. Why can’t we?

RPD claimed to have started a pilot program with schools to encourage athletics and fitness amongst their students. What happened to this program? City Fields (Fisher bothers) clearly want the focus to stay on building their sports complex, not viable alternatives.” (*Jamie Ray, letter, no date [I-Ray3-09]*)

“If a soccer stadium is desirable in San Francisco, a location must be found where a natural green environment does not exist, a location where 60 ft. tall stadium lights and greatly increased traffic would not diminish the enjoyment of the park and of ocean beach.” (*Patricia Reid, email, November 28, 2011 [I-Reid-01]*)

“I also utterly reject the NIMBY alternative of building the Beach Chalet Soccer Field complex in another location.

If there is another location in San Francisco where a soccer field complex could be built, we need to build a soccer complex at that location IN ADDITION to renovating Beach Chalet with artificial turf and field lights, NOT instead.” (*Andrew Solow, email, December 1, 2011 [I-Solow2-02]*)

“San Francisco has a history of being unique, this eye-sore screams cookie cutter. Please reconsider your proposal and place the complex somewhere else in the urban jungle rather than within one of the few peaceful sanctuaries in the city limits.” (*Chris Soulard, email, December 7, 2011 [I-Soulard-02]*)

“The faulty DEIR analysis did not produce alternatives that would better protect GGP while meeting the project goals. The DEIR did not reference the fact that the proposed water treatment plant is being located on the site where the fifth soccer field was proposed in the GGP master plan. A soccer field is much more consistent with the purpose of GGP, than is a water treatment plant that can be located elsewhere and is specifically mentioned in the master plan as something to be removed. The DEIR should consider this site as part of a new alternative that has all Beach Chalet soccer fields as natural grass, and incorporates a fifth field of natural grass to facilitate

more play time while other fields rest. This new alternative should have no lights on any of the five soccer fields. If night soccer play with lights and/or use of synthetic turf is needed, a second site should be developed at West Sunset Playground as an adjunct to the five Beach Chalet fields. This combination of alternatives will meet the stated goals." (*Nancy Wuerfel, letter, December 11, 2011 [I-Wuerfel-05]*)

Response ALT-5

Others commenters suggested additional locations for implementation of the proposed project. Some commenters generally indicated that other locations should be considered, while other commenters suggested specific locations. It is noted that one of the locations suggested by commenters, Polo Fields, was included in the EIR Alternatives chapter as an alternative considered but rejected from further consideration because the alternative would not reduce any of the significant impacts of the project. Primarily, it would also result in significant and unavoidable historic resources impacts. Other alternative location suggestions are noted. In accordance with CEQA, an EIR need not consider every conceivable alternative, but must consider a reasonable range of alternatives that will foster informed decision-making and public participation. The EIR includes analysis of an off-site alternative (West Sunset Playground) that would: (1) attain *most* of the project's basic objectives; (2) *avoid or substantially lessen* one or more of the significant environmental impacts of the proposed project; and (3) be feasible. The EIR also presents alternatives to the proposed project that would meet the above-listed criteria with different options at the Beach Chalet Athletic Fields. Evaluation of additional off-site alternatives would not further foster informed decision-making and public participation beyond that presented in the EIR. Further, many of the alternative off-site locations identified by commenters would not meet many of the project objectives. Some alternative locations identified by commenters would require actions not under the control of the project proponent, since they would be located on land that is owned and/or operated by other parties, and therefore the feasibility of such alternatives is not known. However it is noted that the San Francisco Recreation and Parks Commission may consider approval of the project, or an alternative to the project.

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CHAPTER XI

Draft EIR Revisions

This chapter presents revisions to the text, tables, and figures of the Beach Chalet Athletic Fields Renovation Draft EIR, published on October 26, 2011. These changes include both (1) revisions made in response to comments on the Draft EIR which are presented in Chapter X, as well as (2) staff-initiated text changes to correct minor inconsistencies, to add minor information or clarification related to the project, and to provide updated information where applicable. None of the revisions or corrections in this chapter change the analysis and conclusions presented in the Draft EIR.

The chapter includes all revisions to the Draft EIR, in the sequential order by chapter - section - page that they appear in the document. Multiple text changes to the same EIR paragraphs, tables, or figures are compiled and shown together. Preceding each revision is a brief explanation for the text change, either identifying the corresponding response topic codes, such as Response PD-1 where the issue is discussed in Chapter X or indicating the reason for a staff-initiated change. Deletions in text and tables are shown in strikethrough (~~strikethrough~~) and new text is shown in underline (underline). Figures and tables are noted as “(Revised)” next to the figure or table number.

A. Changes to the EIR

Table of Contents

City staff has revised page ii of the Table of Contents:

VII. EIR Preparers ~~and Persons and Organizations Contacted~~

VII-1

Acronyms, Abbreviations, and Glossary

In response to Comment I-Koivisto-12, EIR pages ix through xiii, has been revised to include the following:

Environment. The complex of physical, chemical, and biotic factors (as climate, soil, and living things) that act upon an organism or an ecological community and ultimately determine its form and survival.

Sustainable. Of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged.

In response to Comment I—Spoelstra-10, the EIR Glossary page xi has been revised to include the following:

Light Spillover - Lighting that extends beyond the targeted area.

Executive Summary

In response to Comments I-Ivanhoe-01 and I-Ivanhoe2-02, EIR page ES-1 has been revised to include a new paragraph 2:

Project Sponsor's Objectives

The objectives of the proposed project include the following:

- Increase the amount of athletic play time on the Beach Chalet Athletic Fields by renovating the existing athletic fields and adjacent warm-up areas.
- Improve public access to the Beach Chalet Athletic Fields by adding new pathways, increasing the size of the existing parking lot, providing a formal drop-off area, and providing bicycle racks.
- Increase ground-sports athletic opportunities on the north side of San Francisco commensurate with improvements elsewhere in San Francisco.
- Provide a safe, optimal recreation facility and amenities for athletes, spectators, and park users by renovating the existing Beach Chalet Athletic Fields and the existing restroom building, adding bleachers, and installing a new plaza area with visitor amenities.
- Reduce ongoing maintenance and resource needs.
- Comply with current Americans with Disabilities Act (ADA) requirements.
- Improve safety and increase nighttime use of the west end of Golden Gate Park by installing new lighting and bringing more recreation facility users to the area.
- Remain consistent with the *Golden Gate Park Master Plan*.

In response to comment I-Learner-05, EIR page ES-3, paragraph 1, has been revised:

The proposed project would have the following significant unavoidable impacts:

- The proposed project would cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code. The proposed project would materially impair in an adverse manner many of the character defining features of the Beach Chalet Athletic Fields, a contributor to the Golden Gate Park National Historic District. Alterations to the Athletic Fields, including the addition of spectator seating, synthetic turf, circulation paths, and field lights would collectively result in a significant impact. Although no individual project component would result in the total loss of integrity of the resource, these components would collectively cause the Fields to lose historic integrity to the degree that its significance

would no longer be apparent, resulting in a significant adverse impact to a historical resource per CEQA Section 15064.5. Because the installation of spectator seating, synthetic turf, circulation paths, and field lights are crucial to the implementation of the proposed project, there are no mitigation measures that would reduce the level of impact to a less-than-significant level while continuing to meet the project objectives. Therefore, the impact is considered significant and unavoidable.

In response to comments O-GGAS2-12 and O-GGAS2-37, EIR page ES-5, paragraph 2, has been revised:

The Grass Turf with Reduced Lights Alternative would have similar construction-related impacts as the proposed project. With the exception of construction activities associated with synthetic turf installation, it is assumed that all other construction activities would be the same as those for the proposed project. Like the proposed project, this alternative would be compatible with existing zoning and land use designations since the location of this alternative is the same as the proposed project. The installation of the reduced number of lights would result in less visual impacts on surrounding residences as the proposed project (though it is noted that aesthetic resources are less than significant under the proposed project). Since the Grass Turf with Reduced Lights Alternative would entail similar restroom renovations as the proposed project, hazards and hazardous material impacts associated with hazardous building materials in structures are anticipated to be comparable to those determined under the proposed project.

In response to comments O-GGAS2-12 and O-GGAS2-37, EIR page ES-5, paragraph 4 has been revised:

Installation of new grass turf fields would eliminate the potential for less than significant water quality and hazards and hazardous materials impacts related to the installation of synthetic turf (i.e., potential for contaminants in runoff from the synthetic fields, ~~and~~ groundwater quality degradation, and environmental hazards). Therefore, impacts to traffic, recreation, and hydrology, ~~and~~ water quality and hazards and hazardous materials, with the exception of hazardous building materials would be less than those identified for the proposed project (which are less than significant).

I. Introduction

In response to Comment O-GGAS2-05, EIR page I-1, paragraph 2 has been revised:

The San Francisco Planning Department, serving as lead agency responsible for administering the environmental review on behalf of the City and County of San Francisco (CCSF), published a categorical exemption from environmental review for the proposed project on April 8, 2010. An appeal of the categorical exemption was filed on April 28, 2010. At the request of the SFRPD, the Planning Department reviewed the appeal letter, and additional information that was made available regarding the proposed project and existing resources within the project area, and determined that the preparation of an EIR was needed.

II. Project Description

In response to a number of comments regarding the character of the west end of the park, EIR page II-9, paragraph 2 has been revised:

The project site is located at the western end of the park, which is less intensely developed than the eastern end of the park and conveys a more pastoral and sylvan character than parklands further east. ~~yet~~ This end of the park also contains several active recreational areas, including the Polo Fields, the Beach Chalet Athletic Fields, the golf course, the archery field, the Bercut Equitation Field, and the 45th Avenue playground. The recreational features in the western end of the park are generally located in the lowland meadows, while the hills are typically woodland areas. The western end of the park contains eight lakes, with open grassy areas at the golf course, Speedway Meadow, Elk Glen Meadow, Lindley Meadow, Polo Fields, Bison Paddock, Disc Golf Course, and the archery field. See Section IV.E, Recreation, for further discussion of Golden Gate Park recreational resources.

City Staff has revised EIR page II-12, Figure II-6 to include previously omitted elements 13 (Landscape Areas) and 17 (Pedestrian Pathway Lighting). See page XI-5.

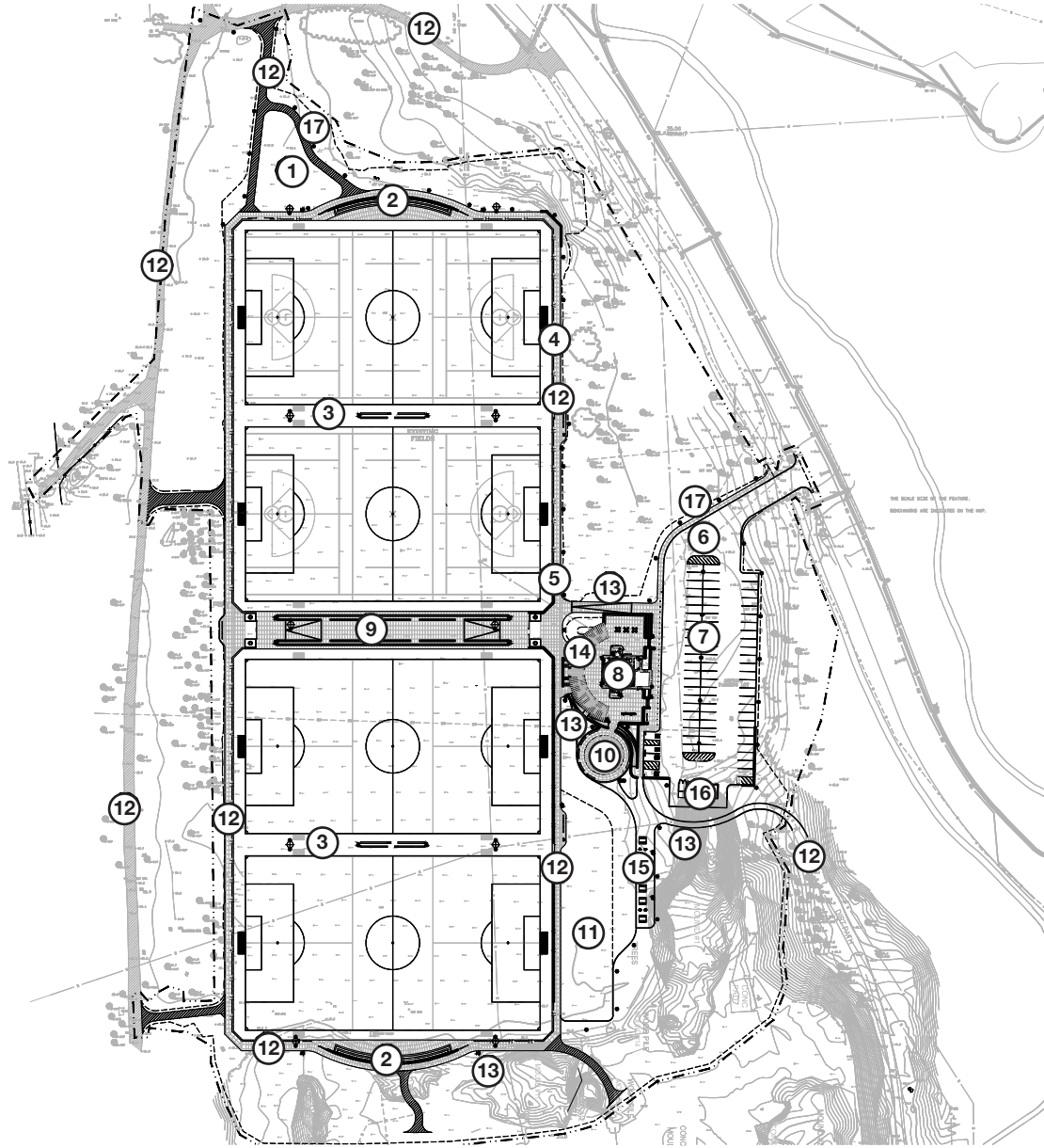
City staff has revised EIR page II-13, Table II-2, as shown on page XI-6:

In response to Comment A-SFPUC-3, EIR page II-15, paragraph 2 has been revised:

Because the project includes greater than 5,000 square feet of ground disturbance, the project would need to comply with the CCSF Stormwater Design Guidelines described in Section IV.H, Hydrology and Water Quality, for the management of stormwater following construction. In accordance with these guidelines, the project must implement a stormwater management approach to prevent the stormwater flow rate and volume from exceeding existing conditions (except for fields). Accordingly ~~Based on SFPUC guidance,~~ stormwater runoff from the impervious portions of the parking lot and other impervious areas would be conveyed to ~~the combined sewer system, or would be drained into the ground, and eventually to the groundwater basin below.~~ Infiltration swales or other naturalized control measures ~~would be implemented~~ to reduce the peak runoff rate and runoff volume prior to discharge to the combined sewer system.

City staff has revised the EIR page II-17, paragraph 5:

Seating for approximately ~~190~~ 150 spectators would also be provided in the plaza area adjacent to the field, in the form of benches and outdoor chairs connected to the plaza tables. All facilities would meet ADA accessibility guidelines.



Legend

- | | |
|---|--|
| ① WARM UP AREA (NORTH OF FIELDS, 4000 SF) | ⑪ WARM UP AREA (EAST OF FIELDS; 13,850 SF) |
| ② SPECTATOR SEATING (250 SEATS) | ⑫ PEDESTRIAN PATHWAYS |
| ③ SYNTHETIC TURF (4 FIELDS; 314,000 SF) | ⑬ LANDSCAPE AREAS |
| ④ 16' BLACK VINYL FENCE (BEHIND GOALS) | ⑭ SEATING PLAZA |
| ⑤ 42" BLACK VINYL FENCE (ALL OTHER AREAS) | ⑮ PICNIC TABLES/BBQ |
| ⑥ PARKING LOT (21,610 SF) | ⑯ MAINTENANCE SHED WITH GARBAGE AREA |
| ⑦ PARKING STALLS (12,450 SF PERMEABLE PAVEMENT WITH LIGHTING, 18' HEIGHT) | ⑰ PEDESTRIAN PATHWAY LIGHTING (15' HEIGHT) |
| ⑧ RESTROOM BUILDING | |
| ⑨ SPECTATOR SEATING (606 SEATS, 8 ACCESSIBLE) | |
| ⑩ PLAY STRUCTURES | |



SOURCE: Verde Design

Case No. 2010.0016E: Beach Chalet Athletic Fields Renovation Project

Figure II-6 (Revised)
Proposed Site Plan

**TABLE II-2
PROJECT CHARACTERISTICS**

	Existing Facility	Proposed Project
Physical Components		
Athletic Fields Area	Approximately 294,700 square feet 6.8 acres 60,000 square feet per field	Approximately 314,000 square feet 7.2 acres 64,350 square feet per field
Lawn Type	Grass turf	Synthetic turf
Parking Lot	25,320 square feet 50 spaces	34,060 square feet 70 spaces
Lighting	None	Ten 60-foot-tall field lights; 47 approximately 15-foot-tall pedestrian pathway lights; and 13 approximately 18-foot-tall parking lot lights
Spectator Seating	None	Up to 1,046 1,006
Fencing	8-foot-tall metal chain link fence	3.5-foot-tall black vinyl fencing (fencing behind goals would be 16 feet)
Other Proposed Changes	Current restrooms contain 5 women's restroom toilet stalls with 2 sinks, as well as 3 men's restroom toilet stalls and 2 urinals, with three sinks	Renovated restrooms to include 11 women's restroom toilet stalls with 6 sinks as well as 5 men's restroom toilet stalls and 4 urinals, also with 6 sinks and diaper changing stations New play structures and BBQ areas with picnic tables Community Room Storage and mechanical room Note: amplified sound would not be included
Total Project Site	409,500 square feet 9.4 acres	485,000 square feet 11.2 acres
Operations		
General Hours of Operation	Closed Mondays Closed at sun down Athletic fields closed when not reserved Closed during and following rain events Open for reserved use otherwise	Open year round for reserved use and open play Lights would operate from sunset to 10:00 p.m.
Hours Available for Field Reservations	Winter: 9 a.m. – 5 p.m. Fall/Spring: 8 a.m. – 7 p.m. Summer: 9 a.m. – 8 p.m. (Reservations are not typically requested on weekdays before 3:00 p.m.)	Year-round: 8:00 a.m. or 9 a.m. to 10 p.m. (Reservations are not typically requested on weekdays before 3:00 p.m.)
Maximum Annual Play	4,738 hours per year	14,320 hours per year

SOURCE: Verde Design, 2010

III. Plans and Policies

In response to comments A-SFPC-Moore-04, O-CSFN3-01, and I-Mosgofian2-01, EIR page III-3, paragraph 3, has been revised:

The Recreation and Open Space element policies include development, preservation, and maintenance of open spaces; preservation of sunlight in public open spaces; elimination of nonrecreational uses in parks and reduction of automobile traffic in and around public open spaces; maintenance and expansion of the urban forest; and improvement of the western end of Golden Gate Park for public recreation. The San Francisco Planning Department is preparing an update to the Recreation and Open Space Element, which is scheduled for adoption in late 2012. There are no potential inconsistencies between this project and new policies or changes identified in the draft Recreation and Open Space Element.

In response to Comment I-KHoward-08, EIR page III-3, paragraph 5 has been revised:

Further, trees removed as part of the project would be replaced in the vicinity of the removed trees. Thus, the proposed project would be consistent with the policy regarding maintenance and expansion of the urban forest and reforestation (see discussion of the reforestation program below) of the western end of the park. Finally, the proposed improvements at the Beach Chalet Athletic Facility would maintain and expand the existing recreational uses in the western end of Golden Gate Park.

The Golden Gate Park Reforestation Program is discussed on page 4-13 of the Golden Gate Park Master Plan, where it is stated:

Reforestation efforts have prevented serious forest decline since 1980. From 1980 to 1993, 12,000 new trees were planted. Planting continues today at a rate of approximately 1,000 trees per year. The reforestation program, however, has not entirely reversed the trend of forest decline. Most of the effort thus far has targeted the western part of the park where the windbreak is in need of immediate replanting. Reforestation has been more limited in other areas of the park. The primary constraint on reforestation has been the lack of personnel to implement it. Potential sites have been restricted also by a desire to avoid the visual disturbance caused by reforestation in areas of more intense use by park visitors. The number of young trees in areas where reforestation has occurred has greatly increased and most of these trees are in good to excellent condition — a reversal of conditions observed in 1979. The reforestation program is operating at a 50-year replacement cycle, instead of the originally intended 25- to 30-year cycle outlined in the 1980 FMP. The inventory data confirm that reforestation should continue to be concentrated in the west end of the park, but that it is also needed in the other forest areas.

In response to Comments A-SFPDHPC-01, I-GGAS2-15, O-SPEAK4-04, I-Jungreis2-13, I-Schultz-10, O-GGAS2-18, O-GGAS2-20, and A-SFPC-Moore-04, EIR page III-4 has been revised to include new paragraphs 2 and 3:

The Environmental Protection Element of the General Plan addresses the impact of urbanization on the natural environment. As stated in the Environmental Protection Element, in highly urban San Francisco, environmental protection is not primarily a process of shielding untouched areas from the initial encroachment of a man-made environment but achieving a more sensitive balance, repairing damage already done, restoring some natural amenity to the city, and bringing about productive harmony between people and their environment. The environmental protection element, therefore, gives natural environmental amenities and values appropriate consideration in urban development along with economic and social considerations.

The policies and objectives contained in this element are generally broad but those that could apply to the proposed project include those seeking for a proper balance among conservation, utilization, and development of San Francisco's natural resources (Objective 1), those seeking maintenance and improvement of the quality of the bay, ocean, and shoreline areas (Objective 3), and which seek assurance that the land resources in San Francisco are used in ways that both respect and preserve the natural values of the land and serve the best interests of all the city's citizens, and others (Objective 7). The proposed project would make improvements to an existing site already used for recreation, and would do so in a way that minimizes impacts on any natural resources. It would be consistent with some of the policies of the Environmental Protection Element and may be perceived as inconsistent with others. Whether a project is consistent with particular plans will be determined at the time of project approval by the agency charged with making that consistency determination (in the case of the General Plan, the San Francisco Planning Commission).

In response to CommenO-CPF-02 and O-SFAH-05, EIR page III-8, paragraph 1 has been revised :

Other Park Master Plan policies that would apply to the proposed project include Objective II, Policy A, Item 1, which requires that all activities, features, and facilities in Golden Gate Park respect the unique design and character of the park, and Objective II, Policy A, Item 2, which states that the "major design feature of Golden Gate Park and the framework within which all park activities occur is its pastoral and sylvan landscape."⁷ The proposed project would be generally consistent with these policies because ~~the project it~~ would be implemented ~~entirely within the boundaries~~ at the location of the existing complex (as indicated in the Project Description, the project site would be expanded from 9.4 to 11.2 acres), the proposed turf would be consistent with the character of the use as an athletic field complex, any trees or shrubs removed would be replaced at a ratio of at least 1-to - 1, and the project would not diminish or encroach upon the surrounding open space. The project would also be consistent with Policy F, Sustainable Landscape Principles, which requires efficient use of water resources; minimization of chemical fertilizers, pesticides, and herbicides; and selection of low-maintenance and ecologically appropriate construction materials. This would result from the fact that proposed synthetic turf would require less water to maintain than the existing grass turf, and would not require chemical fertilizers, pesticides, or herbicides to maintain. Furthermore, as stated in Chapter II, Project Description, of this EIR, the synthetic turf would be returned to a turf manufacturer for reuse/recycling at the end of its lifespan.

⁷ SFRPD, *Golden Gate Park Master Plan*; p. 3-9.

In response to comment A-NPS-02, EIR page III-10, paragraph 2 has been revised:

Other Plans and Policies

~~Golden Gate National Recreation Area~~ National Park Service Management Policies 2006

The National Park Service (NPS) is a bureau of the U.S. Department of the Interior that was created following the signing of the “Organic Act” by President Woodrow Wilson in 1916. The NPS manages the 394 areas called “units” of the National Park System. The NPS also helps administer dozens of affiliated sites, the National Register of Historic Places, National Heritage Areas, National Wild and Scenic Rivers, National Historic Landmarks, and National Trails. The “Organic Act” states that the fundamental purpose of the NPS “is to conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

In response to this Comment I-KHoward-07, EIR page III-11, paragraph 1 has been revised:

Other Park Master Plan policies that would apply to the proposed project include Objective II, Policy A, Item 1, which requires that all activities, features, and facilities in Golden Gate Park respect the unique design and character of the park, and Objective II, Policy A, Item 2, which states that the “major design feature of Golden Gate Park and the framework within which all park activities occur is its pastoral and sylvan landscape.”¹¹ The proposed project would be generally consistent with these policies because the project would be implemented entirely within the boundaries of the existing complex, the proposed turf would be consistent with the character of the use as an athletic field complex, any trees or shrubs removed would be replaced at a ratio of at least 1-to-1, and the project would not diminish or encroach upon the surrounding open space. The project would also be consistent with Policy F, Sustainable Landscape Principles, which requires efficient use of water resources; minimization of chemical fertilizers, pesticides, and herbicides; and selection of low-maintenance and ecologically appropriate construction materials. This would result from the fact that proposed synthetic turf would require less water to maintain than the existing grass turf, and would not require chemical fertilizers, pesticides, or herbicides to maintain. Furthermore, as stated in Chapter II, Project Description, of this EIR, the synthetic turf would be returned to a turf manufacturer for reuse/recycling at the end of its lifespan.

IV. Environmental Setting and Impacts

In response to comment I-Elias-04 and as a City staff initiated text change, Table IV-1, EIR pages IV-5 to IV-8, has been revised as shown on the following pages.

¹¹ SFRPD, *Golden Gate Park Master Plan*; p. 3-9.

**TABLE IV-1
CUMULATIVE PROJECTS AND IMPACTS IN OR NEAR THE BEACH CHALET ATHLETIC FIELDS RENOVATION PROJECT (from north to south, west to east)**

Lead Agency	Project Name	Project Description	Potential Cumulative Impact Topics	Approximate Distance to Project Site	Potentially Affected Project Components/ Areas of Overlap ^a	Estimated CEQA/ Construction Schedule
San Francisco Planning Department	San Francisco Westside Recycled Water Project	The primary purpose of the project is to reduce San Francisco's reliance on potable water for nonpotable uses, such as irrigation, through the production and distribution of highly treated recycled water.	<p>On February 28, 2012, the <u>San Francisco Public Utilities Commission</u> announced that a <u>new the recycled water treatment plant location outside Golden Gate Park</u> was being pursued. However, as a worst-case scenario and because the <u>recycled water project Notice of Preparation is still on file with the Planning Department as being sited in Golden Gate Park, this EIR continues to consider the recycled water treatment plant in Golden Gate Park as a potential cumulative project.</u></p> <p>Construction-related traffic impacts on access roads and associated air quality and noise impacts; sensitive habitats and species; water quality; aesthetics; recreation; geology; and public services.</p> <p>Long-term impacts on Hydrology and Water Quality.</p>	Project located in the proposed project vicinity.	Athletic Fields, Golden Gate Park	<p>Status of environmental review: NOP published in September 2010.</p> <p>Construction schedule: 2016 through 2018</p>
San Francisco Planning Department	Murphy Windmill/ Millwright's Cottage Restoration	Renovation of the Murphy Windmill will be completed in two phases. The first phase, already in progress, consists of the windmill cap removal and refurbishment by Lucas Verbij in the Netherlands, with the remaining structure documented, partially dismantled, and stored for reuse. The second phase consists of the stabilization and restoration of the tower structure, interior structures, and internal mechanisms so the windmill can function as it was originally designed. Interpretive panels to educate the public about the windmill and how it works will be installed at the site.	<p>Construction-related traffic impacts on access roads and associated air quality and noise impacts; sensitive habitats and species; water quality; aesthetics; recreation; and public services.</p> <p>Long-term impacts to recreation and aesthetics.</p>	Project located in the proposed project vicinity.	Athletic Fields, Golden Gate Park	<p>Status of environmental review: Completed August 2009</p> <p>Construction schedule: <u>Phase 1 complete; Phase 2 to be completed late 2012/early 2011</u>November 2011 June 2011</p>

TABLE IV-1 (Continued)
CUMULATIVE PROJECTS AND IMPACTS IN OR NEAR THE BEACH CHALET ATHLETIC FIELDS RENOVATION PROJECT (from north to south, west to east)

Lead Agency	Project Name	Project Description	Potential Cumulative Impact Topics	Approximate Distance to Project Site	Potentially Affected Project Components/ Areas of Overlap ^a	Estimated CEQA/ Construction Schedule
San Francisco Planning Department	Murphy Windmill/ Millwright's Cottage Restoration (cont.)	Renovation of Millwright's Cottage would include the structural retrofit of the building, restroom remodel, ADA compliance work, and minor interior repair work. SFRPD envisions a full-service restaurant to operate within the Millwright's Cottage.				
San Francisco Groundwater Supply Project	San Francisco Groundwater Supply Project	<p>The project would provide an average of 4 mgd of groundwater to San Francisco's municipal water supply. Groundwater would be blended with San Francisco's existing municipal water supply for distribution within San Francisco. The groundwater would be pumped from the North Westside Groundwater Basin, which is located within the larger Westside Groundwater Basin, which underlies parts of San Francisco and San Mateo Counties. The Groundwater Supply Project includes following components:</p> <ul style="list-style-type: none"> • Construction of six groundwater well facilities, including the conversion of two existing irrigation well facilities in Golden Gate Park to potable groundwater well facilities and the construction of four new groundwater well facilities. Each facility would include a groundwater production well and a pump station. Disinfection equipment would be included at the Lake Merced and West Sunset well facilities. • Construction of a distribution system (including pipelines and connection points) to connect five of the groundwater well facilities to Sunset Reservoir. The sixth groundwater well would connect to the Lake Merced Pump Station, and would require a short length of distribution piping to make this connection. <p>The project would be implemented in two phases: (1) construction and operation of the four new groundwater well facilities to supply an annual average of approximately 2.5 to 3.0 mgd of groundwater, and (2) construction of well facilities required to convert the two existing irrigation well facilities to potable groundwater well facilities and</p>	Construction-related traffic impacts on access roads and associated air quality and noise impacts; sensitive habitats and species; water quality; hydrology and water quality; aesthetics; recreation; and public services. Long-term impacts to hydrology and water quality.	Project located in the proposed project vicinity.	Athletic Fields, Golden Gate Park	<p>Status of environmental review: NOP published February 2011</p> <p>Construction schedule: Fall 2013 – Spring 2015</p>

TABLE IV-1 (Continued)
CUMULATIVE PROJECTS AND IMPACTS IN OR NEAR THE BEACH CHALET ATHLETIC FIELDS RENOVATION PROJECT (from north to south, west to east)

Lead Agency	Project Name	Project Description	Potential Cumulative Impact Topics	Approximate Distance to Project Site	Potentially Affected Project Components/ Areas of Overlap ^a	Estimated CEQA/ Construction Schedule
San Francisco Planning Department	San Francisco Groundwater Supply Project (cont.)	operation of the converted irrigation wells to provide an additional annual average of approximately 1.0 to 1.5 mgd of groundwater.				
San Francisco Planning Department	San Francisco Botanical Garden	Replacement of two greenhouses with a one-story, 13,000-square-foot Center for Sustainable Gardening. Project is located at the San Francisco Botanical Gardens on Martin Luther King Jr. Drive in Golden Gate Park. The new facility would consist of a greenhouse, shadehouse, and headhouse; meeting spaces and restrooms. The new facility would replace 10 parking spaces and remove a number of trees for enlarged building footprint.	Construction-related traffic impacts on access roads and associated air quality and noise impacts; sensitive habitats and species; water quality; aesthetics; recreation; geology; and public services.	Project located east of the proposed project.	Golden Gate Park	Status of environmental review: PMND published August 2011 Construction schedule: begin construction in the winter of 2012
San Francisco Planning Department	Golden Gate Park Tennis Courts	Renovation of the existing tennis courts complex located on Middle Drive East in Golden Gate Park. 16 new courts and clubhouse would be relocated and replaced with a larger facility.	Construction-related traffic impacts on access roads and associated air quality and noise impacts; sensitive habitats and species; aesthetics; recreation; and public services.	Project located east of the San Francisco Groundwater Supply Project.	Golden Gate Park	Status of environmental review: Completed May 2007 Construction schedule: Spring 2011
San Francisco Planning Department	San Francisco Bicycle Plan	The 2009 Bicycle Plan includes minor and long-term improvements for the bicycle route network within San Francisco. The project would include the following improvements in the project area: <ul style="list-style-type: none"> • Martin Luther King Jr. Drive • John F. Kennedy Drive • Great Highway • 34th Avenue • Lake Merced Boulevard • Kirkham Street 	Minimal construction-related traffic impacts on access roads and associated air quality and noise impacts; aesthetics; recreation; and public services.	Project located in the proposed project vicinity.	Golden Gate Park	Status of environmental review: Published June 2009 Construction schedule: 5 years after approval; no schedule for long term improvements

TABLE IV-1 (Continued)
CUMULATIVE PROJECTS AND IMPACTS IN OR NEAR THE BEACH CHALET ATHLETIC FIELDS RENOVATION PROJECT (from north to south, west to east)

Lead Agency	Project Name	Project Description	Potential Cumulative Impact Topics	Approximate Distance to Project Site	Potentially Affected Project Components/ Areas of Overlap ^a	Estimated CEQA/ Construction Schedule
San Francisco Urban Planning + Urban Research Association (with assistance from the Ocean Beach Task Force and Ocean Beach Vision Council, and funding from the California State Coastal Conservancy, SFPUC and National Park Service.	Ocean Beach Master Plan	The recent erosion events south of Sloat Boulevard and ongoing community efforts have created unprecedented momentum for a sustainable long-range plan. Drawing on the work of the Ocean Beach Vision Council and others, the plan will address the impact of rising seas, the physical and ecological processes shaping the beach, and improved integration with its natural, recreational, and urban contexts.	Construction-related traffic impacts on access roads and associated air quality and noise impacts; sensitive habitats and species; water quality; aesthetics; recreation; geology; and public services.	Project located in the proposed project vicinity.	Athletic Fields	Status of environmental review: Draft Plan published January 2012; final Plan and environmental analysis to follow anticipated by the end of 2011 final scheduled for early 2012 Construction schedule: TBD
National Park Service	GGNRA General Management Plan	The GGNRA Management Plan creates the vision and framework that will guide the management of the park for the next 20 years, including land use policies, etc.	Construction-related traffic impacts on access roads and associated air quality and noise impacts; sensitive habitats and species; water quality; aesthetics; recreation; geology; and public services.	Project located north and west of the proposed project.	Athletic Fields	Status of environmental review: Plan approved Construction schedule: Implementation of approved plan winter 2011
San Francisco Planning Department	Significant Natural Resource Areas Management Plan	Fragments of unique plant and animal habitats within San Francisco and Pacifica, known as Significant Natural Resource Areas, have been preserved within parks that are managed by the San Francisco Recreation and Park Department (SFRPD). The management areas (MAs) have been designated by differing levels of sensitivity, species presence, and habitat complexity within the 31 Natural Areas. Three levels of MAs have been defined as MA-1, MA-2 and MA-3. Lake Merced is designated as an MA-1 natural area. Management actions within areas designated MA-1 may include:	Construction-related impacts on sensitive species and sensitive habitats; aesthetics; recreation; and public services, primarily related to invasive species removal.	Project located north (Balboa Street and Great Highway) and east (east of Crossover Drive) of the proposed project.	Golden Gate Park	Status of environmental review: Draft EIR published in August 2011 Implementation schedule: 2012 or later

TABLE IV-1 (Continued)
CUMULATIVE PROJECTS AND IMPACTS IN OR NEAR THE BEACH CHALET ATHLETIC FIELDS RENOVATION PROJECT (from north to south, west to east)

Lead Agency	Project Name	Project Description	Potential Cumulative Impact Topics	Approximate Distance to Project Site	Potentially Affected Project Components/ Areas of Overlap ^a	Estimated CEQA/ Construction Schedule
	<p>Significant Natural Resource Areas Management Plan (cont.)</p>	<ul style="list-style-type: none"> • <u>The most focused restoration work, possibly to the degree of manipulating individual plants and vegetation series;</u> • <u>Reintroduction of sensitive species;</u> • <u>Tree removal in conformance with forestry statements;</u> • <u>Implementation of erosion-control measures as problems arise, including the closure of informal and social trails; and</u> • <u>Prohibition of planting nonnative species.</u> 				

^a Construction schedules for cumulative projects were estimated based on information obtained in project-related documents, such as initial studies and EIRs; city, county, and regional agency websites; and communication with representatives from local jurisdictions in spring 2011. All other cumulative planned or approved projects have been confirmed. However, as with all proposed development projects, estimated construction schedules are subject to revisions and delays, and therefore could vary from the time periods indicated.

ADA = Americans with Disabilities Act
 CCSF = City and County of San Francisco
 GGNRA = Golden Gate National Recreation Area

mgd = million gallons per day
 NOP = notice of preparation
 PMND = Preliminary Mitigated Negative Declaration
 SFPUC = San Francisco Public Utilities Commission
 TBD = to be determined

IV.A, Land Use

In response to comment A-NPS-03, EIR page IV.A-3, paragraph 2 has been revised:

The Great Highway, a four-lane road that runs the length of the San Francisco's western shoreline, is located about ~~one thousand~~ 250 feet west of the project site. It contains several crossings to Ocean Beach and, south of Lincoln Boulevard, is bordered to the east by a berm containing a paved multi-use trail that is used for walking, jogging, biking, and dog-walking.

IV.B, Aesthetics

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-3, paragraph 2 has been revised:

Photos are included in this section to demonstrate the publicly accessible short-range, medium-range, and long-range views of the project site, and are indicated on **Figure IV.B-1**. For purposes of analysis in this EIR, short-range views are from public vantage points no more than 0.25 mile away; medium-range views are from public vantage points between 0.25 mile and 0.50 mile away; and long-range views are from public vantage points greater than 0.50 mile away. The photographs depicting existing conditions are presented in **Figures IV.B-2a through IV.B-2fe**.

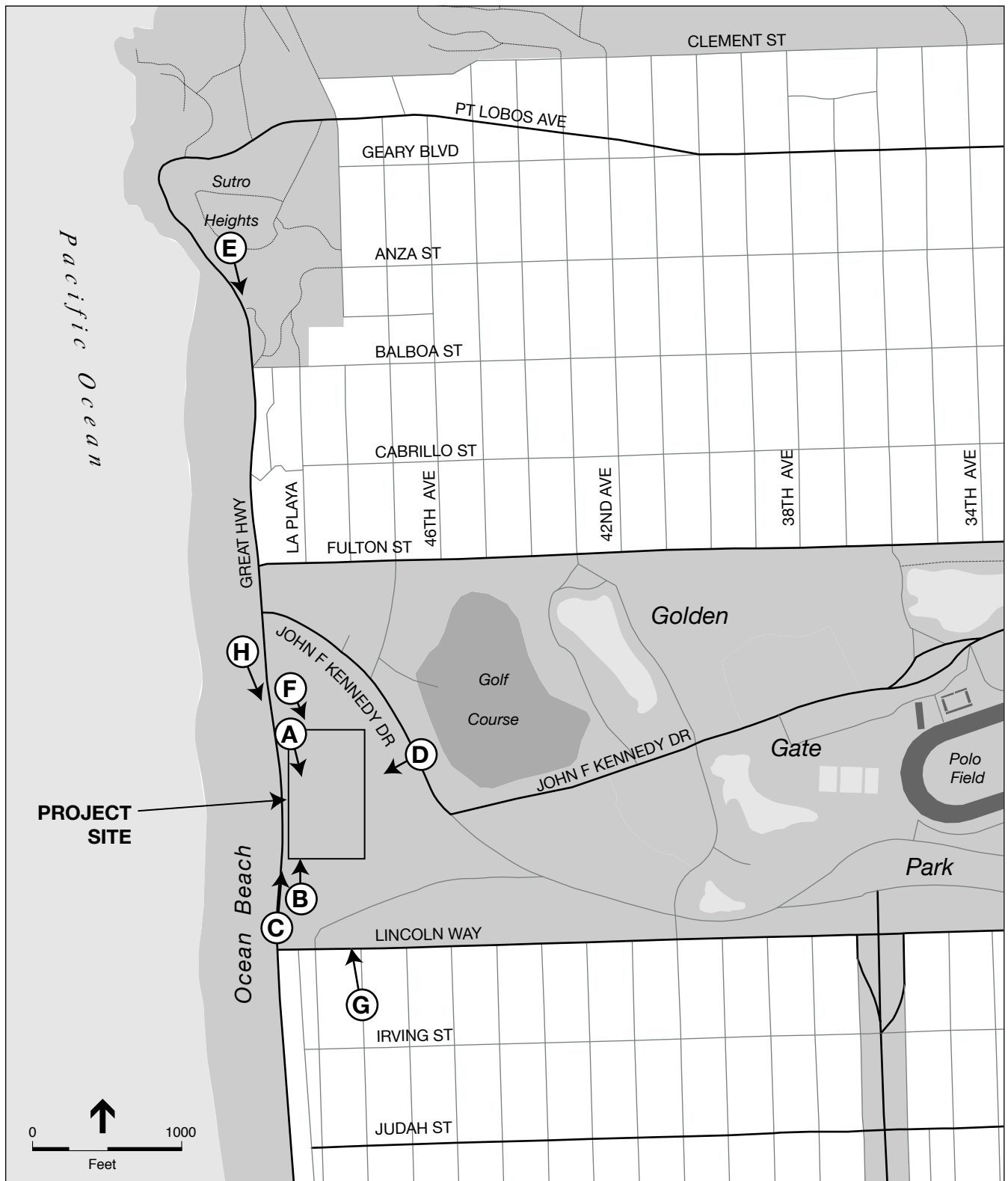
In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-4, Figure IV.B-1 has been revised (see following page).

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-9a had been added to include, Figure IV.B-2f (see page XI-17).

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-10 has been revised, as shown on page XI-18.

In response to Comment A-NPS-01, the following text has been added on page IV.B-13 of the EIR, after the third paragraph (after the discussion of the Sutro Height Park evening views):

It is also noted that the dark skies constitute a unique resource in the project vicinity. The Ocean Beach and adjacent coastal areas (Lands End, Sutro Heights Park, and Lincoln Park) of San Francisco have a much lower outdoor lighting intensity than the interior and urban center of the city. Specifically, along the coast, Lands End is the core of the city's dark sky zone and is used as a gathering area by local astronomers for night sky observing. Sufficient darkness in these sections of the sky is very rare elsewhere in the heavily light-polluted inner bay area. This visitor use is promoted by and is a management emphasis under the National Park Service (NPS) Management Policy on Dark Skies. NPS Management Policies direct the NPS to work cooperatively with neighbors and local government agencies to prevent or minimize the intrusion of artificial light into the night scene of the ecosystems of parks.



SOURCE: ESA

Case No. 2010.0016E: Beach Chalet Athletic Fields Renovation Project

Figure IV.B-1 (Revised)
Viewpoint Location Map



Existing View from Viewpoint H at Ocean Beach public sidewalk looking southeast toward the Project Site

SOURCE: ESA

Case No. 2010.0016E: Beach Chalet Athletic Fields Renovation Project
Figure IV.B-2f
Existing View of the Project Area

**TABLE IV.B-1 [REVISED]
VISIBILITY AND VISUAL SENSITIVITY OF THE PROJECT SITE**

Scenic Resources and Other Public Viewpoints in Project Vicinity	Representative Viewpoint Location Used in Visual Simulation	Figure Number	Overall Visual Sensitivity ^a	Visibility of Project Site from Selected Viewpoint
Daytime Views				
Areas within the boundaries of the project site.	Northern boundary at the midfield line of the athletic fields.	IV.B-2	Medium	Direct and unobstructed views of the project site are available.
Public trails and walkways immediately to the south and southwest of the project site.	Public trail near Murphy Windmill.	IV.B-3	Medium	The project site is not visible from this vantage point.
Public areas along the western shoreline, particularly the paved walkway along Ocean Beach.	Beachside walkway along the Great Highway, approximately 800 feet southwest of the project site.	IV.B-4	High	The project site is not visible from this vantage point.
Public sidewalk along John F. Kennedy Drive, east of the project site.	Sidewalk along John K. Kennedy Drive.	IV.B-5	Medium	Limited views of the site are available through breaks in vegetation.
Public trails within Sutro Heights Park.	Public trail within Sutro Heights Park.	IV.B-6	High	Scenic long-range views of the coastline and the park are available, with project site a small feature in the distance.
Areas immediately to the west of the project site, east of the Great Highway.	Beach Chalet Restaurant outside patio area.	IV.B-7	Medium	The project site is not visible from this vantage point.
Nighttime Views				
Public trails within Sutro Heights Park.	Public trail within Sutro Heights Park.	IV.B-8	High	Scenic long-range views include the coastline and the Great Highway. The park appears as a dark void in the distance, and the project site is not visible from this vantage point.
Residential areas to the south of the project site	Lincoln Way and 48th Avenue.	IV.B-9	Low	The project site is not visible from this vantage point.
<u>Public areas along the western shoreline.</u>	<u>Beachside walkway along the Ocean Beach public sidewalk, approximately 1,000 feet north of Viewpoint C.</u>	<u>IV.B-11</u>	<u>High</u>	<u>The project site is not visible from this vantage point; the site was included to assess visibility of night lighting and glare.</u>

^a *Visual Sensitivity* is the overall measure of a site's susceptibility to adverse visual changes. Visual sensitivity is rated as high, moderate, or low and is determined based on the combined factors of visual quality, viewer types and volumes, and visual exposure to the proposed project.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-13 has been revised to include a new paragraph, following the section on Sutro Heights Park:

Ocean Beach Public Sidewalk

Views toward the site from the Ocean Beach Sidewalk, approximately 1,000 feet north of Viewpoint C, depict the expanse of the Great Highway in the foreground, with the Beach Chalet Restaurant clearly visible just beyond. The light emanating from the restaurant interior is one of the dominant features of this view and serves as a contrast to the darkness of the paving of the road in the foreground. The street lights, which line the Great Highway along both east and west sides, can be seen into the distance and cast yellow glows in regular intervals along the Great Highway, diminishing in strength into the distance. The project site is located just beyond vegetation in the right field of the photograph, but is blocked from view by the intervening treeline and appears dark. Several vehicles with headlights on can be seen travelling along the Great Highway (this feature varies from one minute to the next in terms of how much it contributes to this view at any given time).

In response to Comments I-Learner-04 and I-Learner-08, EIR page IV.B-15, paragraph 3 has been revised:

The park lighting section of the Park Master Plan's Utilities and Infrastructure element describes the existing lighting system in the park as antiquated and in need of replacement.⁵ According to the Master Plan, different areas of the park will be lighted to different levels based on amount of use and safety considerations. The Beach Chalet Athletic Fields are not listed in the Master Plan as a "night use" area. The closest "night use" area to the project site is the Beach Chalet Restaurant, immediately west of the project site.

In response to Comment I-KHoward-07, EIR page IV.B-29, paragraph 2 has been revised:

In terms of changes to the surrounding vegetation, as noted in Chapter II, Project Description, the proposed project would require the removal of 16 trees (in the northeast side of the field, just outside the existing fence line) and approximately 44 shrubs (along the southern and southeastern edge of the fencing). The project would replace each tree ~~and shrub~~ removed at a one-to-one or greater replacement ratio. Tree replacement locations would include the southern edge of the project area and other appropriate areas, as determined by the SFRPD Urban Forestry supervisor and Natural Areas manager. While tree removal and replacement has the potential to alter the visual character of the project site, the number of trees ~~and shrubs~~ proposed for replacement is minor compared with the number that surround the project site and would be retained. Even if some portions of the site result in a reduced tree and shrub coverage, as compared with existing conditions, it is

⁵ SFRPD, *Golden Gate Park Master Plan*; p. 9-5.

expected that all sides of the existing fields would continue to have abundant vegetation, which is one of the site's primary defining visual characteristics. Therefore, the removal of trees and shrubs and replacement of trees ~~and shrubs~~ would not have a significant adverse impact on the visual character or quality of the project site.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-30, paragraph 3 has been revised:

~~Three~~^{Two} evening visual simulations were prepared to assess potential impacts of lighting on public views. One visual simulation is presented from the sidewalk at 48th Avenue near Lincoln Way to represent the effects on proximate residential areas, while the second depicts views from the public trail within Sutro Heights Park. In addition, one simulation is presented from the Ocean Beach Sidewalk. "Before" and "after" images from these vantage points are presented in the lower images of **Figures IV.B-9 through**~~and IV.B-110~~.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-32a had been added to include, Figure IV.B-11 (see following page).

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-33 has been revised to include a new paragraph 2:

As shown in Figure IV.B-11, views from the Ocean Beach Sidewalk would appear very similar to what is seen under existing conditions. The main difference would be the field lights above the tree canopy that would be visible against the dark backdrop of the evening sky. The proposed lights would appear somewhat brighter and 'whiter' than the street lights along the Great Highway; however, it is unlikely that they would dominate this view since the number of proposed light standards visible from this vantage point would be similar to the number of existing street lights in the project area and the additional field lighting would not overwhelm the views. While the color and intensity of the proposed lights would introduce a more 'urban' element to this view, such changes would not be enough to result in a significant adverse visual impact. No other elements of the proposed project would be visible from this vantage point. It is also noted that this visual simulation represents one possible view from the project area and that the proposed lights may appear more intense from other locations along the Ocean Beach Public Sidewalk (i.e., closer to the project site), with some standards visible and others hidden from view by vegetation. However, because this view allows for the entire length of the field to be visible, it is considered a relatively conservative viewpoint for assessing visual impacts.



Existing View



Proposed View

As requested, EIR page IV.B-33, paragraph 3 has been revised:

Comparison of Two Fields. The similarities that exist between the Crocker Amazon site and the proposed project are that both include synthetic turf, contain a similar number of soccer fields situated within a larger park setting (Beach Chalet contains four fields, while Crocker Amazon contains five fields), and are screened by surrounding landscaping. In addition, both sites are visible from the surrounding hillsides. The proposed project would use the same type of shielded lighting standards (Musco brand) as already employed at the Crocker Amazon site during evening games. The light standards are capped units that emit 134,000 lumens per lamp, and have been designed specifically for sports fields, with the goal of lighting the field evenly while minimizing the spread of light upward. At the Crocker Amazon site, the lamps are arranged in assemblies of six lamps per assembly, with some of the poles having two back-to-back assemblies to illuminate multiple fields. At the Beach Chalet site, the proposed light poles would have assemblies containing 10 lamps per assembly, seven of which would be used during regulation game play and practice sessions, while all 10 assemblies would be used during tournaments (there could be up to 6 tournaments per year). The light assemblies at Beach Chalet would be installed at a height of 60 feet above ground level, while those at the Crocker Amazon facilities are installed at 80 feet above ground level.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-34, paragraph 2 has been revised:

Description of Elevated Views. The evening view of Beach Chalet from Sutro Heights, as presented in Figure IV.B-10, is from a distance of approximately 3,500 feet. For comparison, an evening photograph of the Crocker Amazon field was taken from Alta Vista Way, approximately 3,000 feet away. As depicted in the lower image of **Figure IV.B-121**, most of the Crocker Amazon soccer fields, as well as all 11 light assemblies, are visible from this vantage point. This figure also illustrates that the back-to-back assemblies in the center of the fields appear to be no brighter than the single assemblies that illuminate single fields. Based on this, it is likely that back-to-back assemblies at the Beach Chalet facility would also not appear brighter than the single assemblies and that lighting levels would be fairly constant throughout the fields. It also is noted that, as one descends in elevation from this vantage point (at Alta Vista Way), even less of the field and the lights would be visible. It is further noted that the presented photographic analysis of the Crocker Amazon site is conservative, in that more trees exist between the Beach Chalet facility and the nearby residential areas (enough to completely screen the facility from vantage points at 48th Avenue and Lincoln Way) than what appear in photographs of the Crocker Amazon site.

In response to Comments A-NPS-06, A-NPS-10, I-Koivisto-23, I-Kohn2-07, I-Learner-18, I-GMiller2-05, I-GMiller2-06, I-GMiller2-07, EIR page IV.B-35 has been revised (see following page).



View from La Grande



View from Alta Vista Way

SOURCE: ESA

Case No. 2010.0016E: Beach Chalet Athletic Fields Renovation Project

Figure IV.B-12

Views of Crocker-Amazon Athletic Fields During Nighttime Use

IV.C, Cultural Resources

In response to Comment I-KHoward-07, EIR page IV.C-22, paragraph 3 has been revised:

The stands of vegetation that surround the field area are character-defining features of the Beach Chalet Athletic Fields. Some of the individual trees and shrubs within these character-defining stands would be removed as part of the proposed project. Approximately 16 Monterey cypress/Monterey pine and 44 myoporum shrubs would be removed to accommodate the project. Although these character defining elements of the landscape would be removed, they trees would be replaced in kind at a 1:1 ratio, which would generally maintain these features upon completion of the project and over time. For informational purposes, replacement of significant trees ~~and shrubs~~ in-kind and at a 1:1 ratio would also be consistent with the guidance provided in the Standards. As such, the integrity of the Athletic Fields' trees and shrubs would be generally maintained.

IV.E, Recreation

In response to Comment I-Goggin-02, EIR page IV.E-1, paragraph 3 has been revised:

The majority of the public space and recreational resources in the project area that could be affected by the proposed project are managed by the San Francisco Recreation and Parks Department (SFRPD). The SFRPD manages over 230 parks, playgrounds, and open spaces throughout San Francisco that are open to the public. The area also contains several Golden Gate National Recreation Area (GGNRA) sites, which are designated by the U.S. Department of the Interior and administered by the National Park Service (NPS). Several of the paved recreational trails in the project vicinity are maintained and managed by the San Francisco Department of Public Works (SFDPW). Areas that are open to the public at night are informally used for astronomy observations, with Land's End to the north particularly recommended for astronomy use by field enthusiasts (such as the San Francisco Amateur Astronomers club).

In response to Comment I-Koivisto-43, EIR page IV.E-3, the fifth paragraph has been revised:

Murphy Windmill and Millwright's Cottage

The Murphy Windmill is located on Lincoln Drive, at the southwest corner of Golden Gate Park. The windmill was the largest in the world when it was built in 1908 and was able to pump 40,000 gallons of water per day to irrigate the park.⁸ Currently, the windmill is closed to the public; however, ~~there are plans to renovate~~ the windmill, is undergoing restoration activities, including ~~which would include~~ restoring its sails, replacing rotting wood, and earthquake proofing the structure before opening the area to Golden Gate Park visitors. Similar to the Dutch Windmill, the interior of the Murphy Windmill would not be open to public access.

⁸ Western Neighborhoods Project website, available online at: http://www.outsidelands.org/murphy_windmill.php, accessed on April 5, 2011.

IV.F, Biological Resources

In response to comment I-Koivisto-54 EIR page IV.F-5, paragraph 2 has been revised:

Tree Resources

A tree and large shrub report was prepared for the proposed project by HortScience, Inc., in March, 2010.⁷ Trees and large shrubs at the project site were surveyed in September 2009. The survey included all woody plants with a trunk(s) measuring larger than 6 inches in diameter at breast height (dbh). The survey also evaluated the health and structural condition of each plant, and rated each tree or shrub for its suitability for preservation. The suitability for preservation considered each plant's health, age, and structural condition, as well as its potential to remain an asset to the site in the future. The details for each surveyed tree and shrub included in this report are incorporated into the EIR by reference. A total of 130 trees and large shrubs were surveyed and evaluated. All 130 plants had been installed as part of landscape development. None of the species are native to San Francisco.

Because the improvements proposed under the Significant Natural Resource Areas Management Plan would occur one mile or further from the project site, no cumulative effects would be anticipated.

In response to comment I-Elias-04, EIR page IV.F-5, paragraph 5 has been revised:

Several of the cumulative projects discussed are likely to require the removal of trees within Golden Gate Park. In particular, the San Francisco Westside Recycled Water Project in western Golden Gate Park, including a proposed recycled water project on the parcel immediately south of the athletic fields, would require the removal of a number of Monterey pine and Monterey cypress trees. In addition, the Recreation and Parks Department's proposed Significant Natural Resource Areas Management Plan would result in invasive species removal activities east of Crossover Drive, in the eastern portion of Golden Gate Park. However, trees would be replaced as part of the cumulative projects or as mitigation. In addition, the Golden Gate Park Forest Management Plan has plans for long-term care and replacement of trees within the park. Many of the trees in Golden Gate Park are nearing or at maturity and are in a state of decline. These trees would need to be replaced and the Golden Gate Park Forest Management Plan addresses this. In addition, the Golden Gate Park Master Plan states that individual large trees should be replaced in-kind with similar species. The proposed project, as well as other projects within Golden Gate Park, would need to be consistent with both the Forest Management Plan and the Master Plan.

⁷ HortScience, Inc., 2010, *Tree and Large Shrub Report: Golden Gate Park Soccer Fields*. This document is available for review at the Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2010.0016E.

In response to Comment I-KHoward-09, EIR page IV.F-8, paragraph 2 has been revised:

Special-Status Plants

Table IV.F-1 presents the name, status, habitat, and potential to occur of special-status plant species known from the general project area (San Francisco North quadrangle) that includes and surrounds the project site. None of the special-status plant species are considered to have a high potential to occur in the project area, and no special-status plant species were observed during a January 2010 biological resources site assessment (May & Associates, 2010) or the February 2011 site visit. Although these site assessments were conducted outside the blooming period for most of the special-status plants in Table IV.F-1, the overall potential of the site to support special-status plant species is considered low based on the lack of dominance by native plants and lack of intact natural communities native plant habitats, and on the disturbed and heavily managed condition of the area.

In response to comments O-GGAS2-30, O-SCSFBC-07, O-SCSFBC-33, and I-Elias-01, EIR page IV.F-8, paragraph 3 has been revised:

Special-Status Animals

Of the special-status animals presented in **Table IV.F-2**, the only species classified as having a moderate or high potential for occurrence in the project area were considered in the impact analysis. Species addressed in detail include the following:

- Bank swallow
- American kestrel
- Cooper’s hawk
- Great horned owl
- Red-tailed hawk
- Red-shouldered hawk
- Barn owl
- Western red bat

In response to comments O-GGAS2-30, O-SCSFBC-07, O-SCSFBC-33, and I-Elias-01, EIR pages IV.F-12 through IV.F-15 (Table IV.F-2) have been revised, as shown on the following pages.

In response to comments O-GGAS2-30, O-SCSFBC-07, O-SCSFBC-33, and I-Elias-01, EIR page IV.F-16, has been revised to include a new third paragraph:

Great horned owl (*Bubo virginianus*). Great horned owls occur throughout North America and are found in a variety of wooded habitats. These large raptors prey on small to medium-sized mammals such as voles, rabbits, skunks, and squirrels. Great horned owls can often be seen and heard at dusk, perched in large trees. They roost and nest in large trees such as pines or eucalyptus. They often use the abandoned nests of crows, ravens, or sometimes squirrels. Great horned owls may use large eucalyptus or Monterey cypress located within or adjacent to the project area for roosting or nesting and may forage over the athletic fields for gophers and other small mammals.

**TABLE IV.F-2 [REVISED]
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR
WITHIN OR ADJACENT TO THE BEACH CHALET ATHLETIC FIELDS PROJECT**

Common name Scientific name	Listing Status USFWS/CDFG	Habitat	Potential to Occur ^a
Species Listed or Proposed For Listing			
Invertebrates			
San Bruno elfin butterfly <i>Callophrys mossii bayensis</i>	FE/--	Coastal scrub.	Absent; no suitable habitat present.
Bay checkerspot butterfly <i>Euphydryas editha bayensis</i>	FT/--	Serpentine grasslands.	Absent; no suitable habitat present, nearby CNDDDB occurrences on the San Francisco peninsula have been extirpated.
Mission blue butterfly <i>Plebejus icarioides missionensis</i>	FE/--	Grassland with <i>Lupinus albifrons</i> , <i>L. Formosa</i> , and <i>L. varicolor</i> .	Absent; no suitable habitat present.
Callippe silverspot butterfly <i>Speyeria callippe callippe</i>	FE/--	Found in native grasslands with <i>Viola pedunculata</i> as larval food plant.	Absent; no suitable habitat present.
Amphibians			
California red-legged frog <i>Rana draytonii</i>	FT/CSC	Freshwater ponds and slow streams with emergent vegetation for egg attachment.	Absent; While suitable habitat and recorded occurrences are present in ponds in Golden Gate Park, the nearest pond with recorded occurrences is more than 1.5 miles east of the project area. The project area does not contain aquatic habitat or undisturbed upland habitat suitable for this species.
Reptiles			
San Francisco garter snake <i>Thamnophis sirtalis tetrataenia</i>	FE/CE	Freshwater ponds and slow streams with emergent vegetation.	Absent; no suitable habitat present and this species is likely extirpated from San Francisco County.
Birds			
Western snowy plover <i>Charadrius alexandrinus nivosus</i>	FT/CSC	Nests and forages on sandy beaches on marine and estuarine shores—requires sandy, gravelly, or friable soils for nesting.	Absent; no suitable habitat present at the project site. <u>Snowy plover are present on Ocean Beach, primarily to the south of the project area for most of the non-breeding season. Due to the distance from the project site (400 feet at its closest) no light or noise impacts on snowy plover are anticipated.</u>
California black rail <i>Laterallus jamaicensis coturniculus</i>	--/CT	Tidally influenced, heavily vegetated, high-elevation marshlands.	Absent; no suitable habitat present.
California brown pelican <i>Pelecanus occidentalis californicus</i>	FE/3511	Nests on coastal islands of small to moderate size that affords protection from predators.	Low; no suitable nesting habitat present, individuals foraging along the shore may fly over the project area.
California clapper rail <i>Rallus longirostris obsoletus</i>	FE/CE	Salt marsh wetlands along the SF Bay.	Absent; no suitable habitat present.

**TABLE IV.F-2 [REVISED]
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR
WITHIN OR ADJACENT TO THE BEACH CHALET ATHLETIC FIELDS PROJECT**

Common name Scientific name	Listing Status USFWS/CDFG	Habitat	Potential to Occur ^a
Species Listed or Proposed For Listing (cont.)			
<i>Birds (cont.)</i>			
Bank swallow <i>Riparia riparia</i>	--/CT	Colonial nester on sandy cliffs near water, marshes, lakes, streams, the ocean. Forages in fields.	Moderate; no suitable nesting habitat present, however, this species nests nearby at Ocean Beach and may forage over the existing Beach Chalet Athletic Fields.
California least tern <i>Sterna antillarum brownii</i>	FE/CE	Colonial breeder on bare or sparsely vegetated flat substrates, including sand beaches, alkali flats, land fills, or paved areas.	Absent; no suitable habitat present.
<i>Mammals</i>			
Salt marsh harvest mouse <i>Reithrodontomys raviventris</i>	FE/CE	Salt marshes along San Francisco Bay.	Absent; no suitable habitat present.
Federal Species of Concern or State Species of Special Concern			
<i>Invertebrates</i>			
Incredible harvestman <i>Banksula incredula</i>	--/--	Franciscan sandstone talus slope.	Absent; only known from San Bruno Mountain (CDFG, 2011). No suitable habitat present.
Tomales isopod <i>Caecuditea tomalensis</i>	FSC/--	Localized freshwater ponds or still streams.	Absent; collected in 1984 from Lake Merced (CDFG, 2011). No suitable habitat present.
Sandy beach tiger beetle <i>Cicindela hirticollis gravida</i>	FSC/*	Sandy areas around water; larva live in burrows in sand along sea beaches, creeks, seepages, and lake shores.	Absent; known population of this species near the project area has been extirpated (CDFG, 2011). No suitable habitat present.
Monarch butterfly <i>Danaus plexippus</i>	--/*	Eucalyptus groves (winter sites).	Low; Nearest records of this species in Golden Gate Park (CDFG, 2011) are historical. There are no large trees in the project area that could support wintering colonies.
Stage's dufourine bee <i>Dufourea stagei</i>	--/--	Ground-nesting bee. Habitat otherwise unknown.	Low; known range is south of the project area (this species is only known from San Bruno Mountain and Santa Cruz County).
Leech's skyline diving beetle <i>Hydroporus leechi</i>	FSC/--	Found in freshwater ponds, shallow water of streams marshes and lakes.	Absent; no known populations of this species in project vicinity, and no suitable habitat in project area.
Bumblebee scarab beetle <i>Lichnanthe ursina</i>	FSC/--	Inhabits coastal sand dunes.	Low; suitable habitat not present within the project area, and CNDDB records of this species along Ocean Beach are historic (CDFG, 2011).
A leaf-cutter bee <i>Trachusa gummifera</i>	--/--	Habitat preferences are unknown.	Low; no records of this species in the project area (CDFG, 2011).
Marin hesperian <i>Vespericola marinensis</i>	--/--	Moist areas in coastal brushfield and chaparral vegetation, in Marin County.	Absent; no suitable habitat within the project area; known range is north of the proposed project area.

**TABLE IV.F-2 [REVISED]
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR
WITHIN OR ADJACENT TO THE BEACH CHALET ATHLETIC FIELDS PROJECT**

Common name Scientific name	Listing Status USFWS/CDFG	Habitat	Potential to Occur ^a
Federal Species of Concern or State Species of Special Concern (cont.)			
<i>Birds</i>			
Cooper's hawk <i>Accipiter cooperi</i>	--/3503.5	Typically nests in riparian growths of deciduous trees and live oak woodlands. Becoming more common as an urban breeder.	Moderate; Large trees near the existing athletic fields could support nests for this species, and individuals could forage for birds on the existing field and in surrounding shrubs and trees.
<u>Great-horned owl</u> <u><i>Bubo virginianus</i></u>	<u>--/3503.5</u>	<u>Often uses abandoned nests of corvids, such as crows or ravens, or squirrels; nests in large oaks, conifers, eucalyptus</u>	Moderate; <u>Large trees near the existing athletic fields could support nests for this species, and individuals could forage for small mammals on the existing field.</u>
Red-tailed hawk <i>Buteo jamaicensis</i>	--/3503.5	Almost any open habitat, including grassland and urbanized areas.	Moderate; Large trees near the existing athletic fields could support nests for this species, and individuals could forage for small mammals on the existing field.
Red-shouldered hawk <i>Buteo lineatus</i>	--/3503.5	Forages along edges of marshes and grasslands; nests in mature trees in a variety of habitats.	Moderate; Large trees near the existing athletic fields could support nests for this species, and individuals could forage for small mammals on the existing field.
American kestrel <i>Falco sparverius</i>	--/3503.5	Frequents generally open grasslands, pastures, and fields; primarily a cavity nester.	Moderate; Large trees near the existing athletic fields could provide nesting cavities for this species, and individuals could forage for small mammals on the existing field.
Salt-marsh common yellowthroat <i>Geothlypis trichas sinuosa</i>	FSC/CSC	Inhabits tidal salt and brackish marshes in winter, but breeds in freshwater brackish marshes and riparian woodlands during spring to early summer.	Low; riparian woodland and other suitable habitat is not present in the project area. Possibly present on a transient basis during migratory or dispersal periods.
Alameda song sparrow <i>Melospiza melodia pusillula</i>	--/CSC	Salt marshes of eastern and south San Francisco Bay.	Low; no suitable habitat is present for this species in the project area. Possibly present on a transient basis during migratory or dispersal periods.
San Pablo song sparrow <i>Melospiza melodia samuelis</i>	--/CSC	Salt marshes of eastern and south San Francisco Bay.	Low; no suitable habitat is present for this species in the project area. Possibly present on a transient basis during migratory or dispersal periods.
Double-crested cormorant <i>Phalacrocorax auritus</i>	--/--	Nests along coast on isolated islands or in trees along lake margins.	Low; freshwater habitats for this species are not present onsite, but individuals moving between Golden Gate Park and the Pacific Ocean may fly over the project area.

**TABLE IV.F-2 [REVISED]
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR
WITHIN OR ADJACENT TO THE BEACH CHALET ATHLETIC FIELDS PROJECT**

Common name Scientific name	Listing Status USFWS/CDFG	Habitat	Potential to Occur ^a
Federal Species of Concern or State Species of Special Concern (cont.)			
<i>Birds (cont.)</i>			
<u>Barn owl</u> <i>Tyto alba</i>	--/3503.5	<u>Found in open and partly open habitats, especially grasslands. Nests in tree cavities or buildings.</u>	<u>Low to moderate; potential nesting habitat is available in large diameter trees in the project area and the species may forage over the athletic fields. Reported as observed in western Golden Gate Park.</u>
<i>Mammals</i>			
Pallid bat <i>Antrozous pallidus</i>	--/CSC	Roosts in caves, old buildings, and under bark. Forages in open lowland areas, and forms large maternity colonies in the spring.	Low; Potential roosting habitat is available in large-diameter trees in Golden Gate Park, but this species was not detected during recent surveys in the Park (Krauel, 2009). Not expected to breed here but may be present on a transient basis.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	FSC/CSC	Roosts in caves, buildings, bridges, rock crevices, and hollow trees.	Low; no buildings or hollow trees suitable for roosting are present in the project vicinity.
Western red bat <i>Lasiurus blossevillii</i>	--/CSC	Roosts in tree/shrub foliage, particularly in riparian areas.	Moderate; roosting habitat is available in tree/shrub foliage in Golden Gate Park. In recent surveys, this species was one of the most commonly encountered bat species in San Francisco (Krauel, 2009), but the lack of waterbodies in the immediate vicinity of the existing playing fields may preclude occurrence of this species.

In response to comments O-GGAS2-30, O-SCSFBC-07, O-SCSFBC-33, and I-Elias-01, EIR page IV.F-17 has been revised to include a new second paragraph:

Barn owl (*Tyto alba*). The barn owl is one of the most widespread of all terrestrial birds and can be found in a number of open habitats, including grassland and farmland. Barn owl specialize in hunting small mammals, and the majority of their food consists of small rodents, including voles, pocket gophers, shrews, mice, and rats. The species would nest in buildings as well as in tree cavities or nest boxes. This species has been observed in Golden Gate Park. The athletic fields provide foraging habitat, and potential nesting habitat is available throughout the western end of the Park in abandoned and underused buildings and mature eucalyptus and Monterey cypress.

In response to comments O-GGAS2-30, O-SCSFBC-07, O-SCSFBC-33, and I-Elias-01, EIR page IV.F-17 paragraph 2 has been revised:

These three hawk species have been observed in the project area and may well use the area for foraging. In addition, members of the public and organizations assert that great horned owls nest in Golden Gate Park and that barn owls have also been observed in the park, though no specific data has been provided regarding these observations. These species may also use the fields for foraging. No large stick nests and few cavities were observed in trees immediately adjacent to the project site or in large trees within line of sight of the athletic fields during ESA's 2011 reconnaissance and nesting bird surveys.

In response Comment I-KHoward-07, EIR page IV.F-20 has been revised to include a new second paragraph:

Golden Gate Park Forest Management Plan

The Golden Gate Park Forest Management Plan (Plan) was prepared in 1980 to guide the management of the Park's 600 acres of forest resources. The Plan includes a forest inventory, a history of the Park's afforestation, and reforestation requirements and guidelines. These recommendations and guidelines are applicable to the Beach Chalet athletic fields project and include silvicultural and arboricultural techniques for tree removal and to enhance survival of replacement trees, irrigation techniques, tree species to be used, soil amendments, disease control, equipment to be used, and nursery practices.

In response to these Comments I-Bridges-02, I-Hall-01, I-Richards-03, and I-Weeden-01, EIR page IV.F-23, paragraph 5 (continuing on page IV.F-24) has been revised:

The proposed project would result in the replacement of approximately 9 acres of mowed turfgrass with synthetic turf (approximately 7.2 acres, based on the project site plan, as shown in Figure II-6, and based on modern athletic field size standards) and other surfaces or structures, including new pathways and spectator seating, as well as the addition of play structures and a picnic area (approximately 1.8 acres, based on the project site plan, as shown in Figure II-6). This would remove approximately 9 acres of habitat for rodents, such as gophers and voles, and a variety of insects and other invertebrates, which are typical prey for both special-status and common wildlife, including hawks and other birds, bats, and other mammals found in Golden Gate Park, such as raccoons and opossum. The loss of foraging habitat (and prey) for raptors and other birds protected under the California Fish and Game Code, as well as for special-status bats, could be considered significant; however, there are over 200 acres of similar habitat in Golden Gate Park, including the nearby golf course, archery range, and bison paddock. These habitats are considered similar based on presence of open, short grassy habitat, periods of reduced human disturbance, and at least small populations of raptor prey. Additional open-space areas are available to wildlife throughout San Francisco, including Lake Merced, Stern Grove/Pine Lakes Park, McCoppin Square, Sutro Heights Park, and Lincoln Park, as well as at Fort Funston, the Presidio, and nearby Golden Gate National Recreation Area lands. The

loss of approximately 9 acres of turfgrass represents a loss of approximately 4.5 percent of similar habitat in Golden Gate Park²⁹ and 0.3 percent of similar available foraging habitat (e.g. turf grass and grasslands) for raptors and special-status bats in the project region.³⁰ Furthermore, section 3503.5 of the CDFG Code does not extend protection to raptor foraging habitat, and no legal requirement to compensate for removal of such foraging habitat exists. Therefore, this loss is not considered substantial in either the local or regional context, ~~and~~ is not expected to affect raptors and special-status bats in any significant way, ~~and does not require compensatory mitigation.~~

In response Comment I-KHoward-07, EIR page IV.F-33, paragraph 1 has been revised:

The 16 trees proposed for removal are under the jurisdiction of the San Francisco Recreation and Parks Department. Five of the trees were recommended for removal in the 2010 HortScience report because of their poor health or they are dead. The remaining 11 trees are within the project footprint and would need to be removed prior to construction. The Golden Gate Park Forest Management Plan^{63a} has plans for long-term care and replacement of trees within the park and includes details on tree removal techniques, replacement planting, irrigation, species to be used, and monitoring. This plan is incorporated by reference into the EIR and is available from the San Francisco Planning Department for review upon request. Many of the trees in Golden Gate Park are nearing or at maturity and are in a state of decline. Consistent with *Section 4.06—Removal of Trees, Wood, Etc.*, the SFRPD must grant approval for any trimming or removal of trees in the project area. Although the SFRPD does not have a policy or ordinance that specifically identifies tree significance or requires tree replacement, in practice SFRPD has implemented the policies summarized above relating to forest management and removal and replacement of trees, and the management of wildlife habitat as requiring replacement of trees removed from SFRPD-managed lands at a 1 to 1 ratio. As described in Chapter II, Project Description, trees removed under the proposed project would be replaced at a 1 to 1 ratio, consistent with SFRPD practice.

In response to comment I-Koivisto-05, EIR page IV.F-33, paragraph 3 has been revised:

Mitigation Measure M-BI-3: Plant Replacement Trees. The SFRPD shall replace the trees removed within SFRPD-managed lands with trees of equivalent ecological value (i.e., similar species providing the same general microhabitat characteristics for wildlife species) to the trees removed. If trees of equivalent ecological value are not feasible or available, removed trees shall be replaced at a ratio of 1 inch for 1 inch of the diameter at breast

²⁹ May and Associates (2010) estimated approximately 200 acres of similar “grassy” habitat in Golden Gate Park.

³⁰ The amount of potential foraging habitat in the project vicinity was determined by reviewing aerial photographs and calculating a rough acreage for each significant area of open space within a five-mile radius of the project area. The total amount of open space within a five-mile radius, inclusive of the Project area, is roughly 7,050 acres. The amount of grassland habitat within the same area, including turfgrass and open space grasslands, is approximately 2,650 acres.

^{63a} State of California Resources Agency. Department of Forestry. 1980. Golden Gate Park Forest Management Plan. Sacramento, CA. This document is available for review at the Planning Department, 1650 Mission Street, Suite 400, in Case File No. 2010.0016E.

height of the removed tree. SFRPD shall monitor tree replacement plantings annually for a minimum of three years after completion of construction to ensure establishment of the plantings and, if necessary, shall replant to ensure the success of the replacement plantings.

City staff has revised page IV.F-33, paragraph 5:

Improvement Measure I-BI-3: ~~In addition to Mitigation Measure M-BI-3. Although no significant impacts were identified,~~ the following improvement measures could be implemented to provide protection for trees and shrubs to be retained onsite during construction activities for the Beach Chalet Athletic Fields Renovation Project.

In response to Comment I-Koivisto-62, EIR IV.F-36, paragraph 3 has been revised:

The current impact analysis has shown that the project, after mitigation, would result in relatively minor and less-than-significant impacts on biological resources within and in the vicinity of the project site. When considered relative to the existing state of biological resources in the project area, the project would add only a minor, incremental contribution. In terms of habitat loss, the project would result in the loss of approximately 9 acres of turfgrass, as well as less than an acre of trees and shrubs within the project area. With the exception of trees around the perimeter of the site, the proposed recycled water treatment project area to the south of the athletic fields is regularly disturbed and consists of bare ground, refuse piles, composting vegetative matter, soil piles, and existing structures. While this area may support low levels of raptor foraging (much like other disturbed areas of the park), it is not considered substantial foraging habitat because of constant disturbance of soil and lack of vegetation; therefore, so the combined projects would not result in a cumulative loss of ~~grassland~~ raptor foraging habitat beyond that described for the project. In addition, new landscaping, including tree planting, is proposed as part of the project. As noted previously in this document, the amount of similar grassland habitat (including turfgrass, golf courses, and open space grasslands) within a 5-mile radius of the project site, is approximately 2,650 acres. The project's incremental contribution to grassland habitat loss in the cumulative geographic context amounts to 0.03 percent of available similar habitat, an amount that is not considered cumulatively considerable.

IV.G, Hydrology and Water Quality

In response to Comments A-SFPUC-02 and A-SFPUC-03, EIR page IV.G-26, paragraph 3 has been revised:

With implementation of the monitoring program described above to evaluate runoff quality from the playfields, and compliance with the Stormwater Design Guidelines once approval is obtained to infiltrate stormwater runoff, impacts related to additional sources of polluted runoff from the play fields would be less than significant.

The proposed project would also increase the area of the parking lot from 25,320 square feet to 34,060 square feet. However, approximately 12,450 feet of the parking lot would be

constructed of permeable pavement, resulting in a net total of 21,610 square feet of impervious surfaces. This is 3,710 square feet less than existing conditions, but any runoff could still contain common stormwater pollutants such as sediments, metals, oil and grease, and trash. The project would also include construction of less than 1 acre of impervious surfaces, including pathways and other site improvements. These new impervious surfaces would also be potential sources of stormwater pollutants. In accordance with the Storm Water Design Guidelines, the SFRPD would construct infiltration swales or other measure that would prevent the stormwater runoff flow rate and volume from exceeding existing conditions (except for fields) and provide treatment for stormwater pollutants. Compliance with the Stormwater Design Guidelines would require that SFRPD prepare a stormwater control plan describing the BMPs that would be implemented, including a plan for post construction operation and maintenance of the BMPs. With compliance with the Stormwater Design Guidelines, impacts related to additional sources of polluted runoff from the parking lot and new impervious surfaces would be less than significant.

VI. Alternatives

In response to comments O-GGAS2-12 and O-GGAS2-37, EIR page VI-11, paragraph 3 has been revised:

Impacts of the Grass Turf with Reduced Lights Alternative Compared to Those of the Proposed Project

Because the Grass Turf with Reduced Lights Alternative and the proposed project share several components, this alternative would result in similar impacts as the proposed project. Like the proposed project, this alternative would be compatible with existing zoning and land use designations because the location of this alternative is the same as the proposed project. The installation of the reduced number of lights would result in reduced visual impacts compared to the proposed project (though it is noted that aesthetic impacts are less than significant under the proposed project). In addition, because the Grass Turf with Reduced Lights Alternative would entail similar restroom renovations as the proposed project, hazards and hazardous materials impacts involving release of hazardous building materials in structures are anticipated to be comparable to those identified for the proposed project.

In response to comments O-GGAS2-12 and O-GGAS2-37, EIR page VI-11, paragraph 5 has been revised:

Installation of new grass turf fields would eliminate the potential for less than significant water quality impacts and hazards and hazardous materials related to the installation of synthetic turf (i.e., potential for contaminants in runoff from the synthetic fields, ~~and~~ groundwater quality degradation, and environmental hazards). Therefore, in light of the discussion above, impacts to traffic, recreation, ~~and~~ hydrology and water quality, and hazards and hazardous materials, with the exception of hazardous building materials would be less than those identified for the proposed project (which are less than significant).

VII. EIR Preparers

City staff has revised page VII-1, chapter title and paragraph 1:

CHAPTER VII

~~EIR Preparers and Persons and Organizations Contacted~~

A. EIR Authors

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