# SCHLAGE LOCK VISITACION VALLEY DEVELOPMENT PHASE 1 APPLICATION FINAL SUBMITTAL

APRIL 28, 2017



## **CONTRIBUTORS:**

#### **OWNER DEVELOPER:**

#### **BAYSIDE DEVELOPMENT, LLC**

150 EXECUTIVE PARK BLVD, SUITE 4000 SAN FRANCISCO, CA 94134 CONTACT: BRAD MOONEY, PROJECT DIRECTOR PHONE: (415)468-6676 X 271 EMAIL: BMOONEY@BSDSF.COM

#### **ARCHITECTURE:**

#### **PYATOK ARCHITECTS**

1611 TELEGRAPH AVE., SUITE 200 OAKLAND, CA 94612 CONTACT: PETER WALLER, PRINCIPAL PHONE: (510) 465-7010 X 110 EMAIL: PWALLER@PYATOK.COM

#### **MBH ARCHITECTS**

960 ATLANTIC AVE ALAMEDA, CA 94501 CONTACT: JOHN COLE EMAIL: JCOLE@MBHARCH.COM

#### LANDSCAPE ARCHITECTURE:

#### GLS

2677 MISSION STREET #200 SAN FRANCISCO, CA 94110 CONTACT: DEAN WILLIAMS EMAIL: DEAN@GLSARCH.COM

#### **GROUNDWORKS OFFICE**

1804 5TH STREET BERKELEY, CA 94710 CONTACT: BRENNAN COX PHONE: (510) 833.2111 EMAIL: brennan@groundworksoffice.com

#### **ENGINEERING:**

#### **KPFF CONSULTING ENGINEERS**

221 MAIN ST., SUITE 800 SAN FRANCISCO, CA 94105 CONTACT: MARC PRESS, PRINCIPAL PHONE: (415) 989-1004 EMAIL: marc.press@kpff.com

#### **INTEGRAL GROUP**

427 3RD STREET OAKLAND, CA 94612 CONTACT: TYLER BRADSHAW EMAIL: TBRADSHAW@INTEGRALGROUP.COM

#### **BKF ENGINEERS**

255 SHORELINE DR. REDWOOD CITY, CA 94065 CONTACT: JAMES DALLOSTA PHONE: (650) 482-6300 EMAIL: Jdallosta@bkf.com

#### **BRIGHT GREEN STRATEGIES**

150 FELKER ST. SANTA CRUZ, CA 95060 CONTACT: SHARON BLOCK, CEO PHONE: (510) 863-1109 X 1 EMAIL: sharon@brightgreenstrategies.com

#### **RGA DESIGN**

6400 VILLAGE PARKWAY, NO. 204 DUBLIN, CA 94586 CONTACT: SCOTT HARDESTER PHONE: (408) 676-7526 EMAIL: <u>Sth@rgadesign.com</u>

# CONTENTS

1. INTRODUCTION	1
2. REGULATORY CONTEXT	1
3. Phase Application Requirements	
(per Development Agreement - Exhibit G Checklist)	
a. PHASE SUMMARY TABLE	2
b. PROJECT DESCRIPTION AND NARRATIVE	2
1. SITE PLAN	5
2. UNIT QUANTITIES WITH SQUARE FOOTAGES	7
3. AFFORDABLE HOUSING.	7
4. LAND TO BE DEDICATED TO THE CITY AND COUNTY OF SAN FRANCISCO	8
5. COMMUNITY IMPROVEMENTS AND MITIGATION MEASURES	8
6. PROPOSED INFRASTRUCURE IMPROVEMENTS	10
a. Completion of Infrastructure Plan to Date	10
b. Implementation of Infrastructure Work completed during Phase	11
c. Right of way dedication	11
d. Proposed low pressure water system	11
e. Proposed combined sewer system	11
f. Proposed storm drain system	12
g. Proposed dry utilities	12
h. Design of Pedestrian and Multi-Modal Access to Caltrain	14
7. SEQUENCING OF PRIVATE DEVELOPMENT	
AND COMMUNITY IMPROVEMENTS	15
8. MODIFICATION TO DEVELOPMENT PHASE DOCUMENTS	16
9. AFFIDAVIT AND PROOF OF PRE-APPLICATION MEETING	16
10. NEIGHBORHOOD NOTIFICATION AND POST-APPLICATION MATERIALS	16
11. AFFIDAVIT CONFIRMING ACCURACY	17
4. ADDITIONAL REQUIREMENTS	17
1. PLAN FOR HISTORIC BUILDING.	17 19
2. SUSTAINABILITY	
4. FIRE SUPPRESSION OBLIGATION	21 21
5. TRANSPORTATION DEMAND MEASURES	21 22
6. DEVELOPMENT OF PHASE HYDROLOGY AND HYDRAULICS PLAN	22
7. DESIGN REVIEW APPROVALS AS PART OF THE PHASE APPLICATION PROCESS	23 23
7. DESIGN REVIEW AT I ROVALS ASTARTOF THE FRASE AT LICATION ROCESS	20
5. SUMMARY	23

- 1 Development Agreement Section 3.4 Development Agreement Exhibit G,
  - Additional Requirements to Phase Application Requested by City Agencies Site Map
- Site Map
   Proposed Low Pressure Water System Map
- 4 Proposed Combined Sewer Plan Map
- 5 Proposed Storm Drain, Grading, and Overland Release Map
- 6 Proposed Dry Utilities
- 7 Proposed Pedestrian Connection to Caltrain
- 8 Modification to, or Deviations from Development Phase Documents / Conformance with Design Guidelines
- 9 Affidavit Confirming Pre-Application Meeting
- 10 Pre-Application Meeting Materials
- 11 Design Review Meeting Materials
- 12 Park Design Meeting Materials
- 13 Affidavit Confirming Submission is Accurate and that Additional Submissions may be required.
- 14 LEED Checklist
- 15 First Source Hiring Memorandum of Understanding
- Combined Sewer Capacity Analysis
   Overland Flow Analysis
   Stormwater Management Analysis
   Maintenance Assessment Analysis
- 17 Historical American Buildings Survey (abbreviated)
- 18 National Park Service: Brief 31 Mothballing Historic Buildings
- 19 City Comments to 'Design for Development Compliance Request for Clarification'

### 1. INTRODUCTION

Bayside Development LLC, in conjunction with Visitacion Development LLC and Universal Paragon Corp, is proud to submit this application for the first Phase of the Visitacion Valley / Schlage Lock mixed-use residential development. Information contained herein has been compiled and is accurate as of the date of this submittal, but it must be known, understood, and accepted, that specific values and quantities are subject to change within the bounds of the governing documents as set forth in Section 2.

To that end, the goal of this application is to generally define the scope and scale of the first phase of development in support of our efforts to advance and complete civil infrastructure for the entire site. These efforts are focused on delivering public improvements several years ahead of our obligations in order to efficiently prepare the site for future development.

### 2. REGULATORY CONTEXT:

The overall objectives and policies governing the development of the Visitacion Valley / Schlage Lock site are set forth in the Development Agreement (DA) entered into by the City and County of San Francisco and Visitacion Development LLC. Applicable zoning regulations are outlined by the Visitacion Valley / Schlage Lock Special Use District ("Special Use District") which is found in Section 249.45 of the Planning Code. The Special Use District references the Design for Development (D4D) and the Open Space and Streetscape Master Plan (OSSMP), also adopted by the Planning Commission, for more detailed design standards and guidelines for development. As set forth in the Special Use District, the Special Use District, Design for Development, Open Space and Streetscape Master Plan, and Development Agreement supersede the San Francisco Planning Code in its entirety except as otherwise expressly noted therein.

The DA sets forth Developer Obligations that include the submission and approval of a Phase Application prior to the commencement of any particular Development Phase. Section 3.4 of the DA describes the parameters of a Development Phase and Section 3.4.4 and Exhibit G, outline requirements and structure of the Phase Application itself. This document has been organized to comply with said requirements and includes additional information requested by City officials; Section 3.4, DA Exhibit G, and additional requirements are attached hereto as <u>Attachment 1</u>. Exhibit G has been used as the primary structure of this document.

# **3.a PHASE SUMMARY TABLE**

Parcel	Assessor's Block	Block in D4D	Height / Bulk District	Proposed Height	Units	Parking
1	5087-003 / 5087-003A	5&6	Special Use District	55'	143	174 residential
2	5087-003 / 5087-003A	3 & 4	Special Use District	64'	165	105 residential
3	5087-003 / 5087-003A	1 & 2	Special Use District	72'	266	216 residential 82 retail
Totals					574	495 residential 82 retail

## 3.b PROJECT DESCRIPTION AND NARRATIVE

#### **PROJECT DESCRIPTION:**

Project Type: New Cor Present or Previous Use: Industrial Proposed Use: Mixed-Use

New Construction Industrial Mixed-Use Residential & Open Space

#### NARRATIVE:

OVERVIEW -

This application pertains to Phase 1 of the Visitacion Valley / Schlage Lock Project (the "Project"). This application is submitted in accordance with the Project's Development



Agreement, which requires the project sponsor to submit a Phase Application for approval by the Planning Department and affected City Agencies prior to the submittal of site permits for each such phase of the Project. Terms used herein and not otherwise defined shall have the meaning ascribed to such terms in the Development Agreement.

Phase 1 is comprised of parcel numbers 1, 2, and 3, Leland Park, Caltrain pedestrian access, and the vast majority of civil infrastructure across the entire site. The parcels subject to Phase 1 are shown on the attached site plan diagram (see also Attachment 2) and further described by block number and area

on this application. In addition, as described in more detail below, Phase 1 will include a number of Public Improvements, Community Improvements and CEQA Mitigation Measures as required by the Schlage Lock Development Project Phasing Plan.

#### HISTORY AND BACKGROUND -

After more than a decade of negotiations between public agencies, community groups, and private parties, the mixed-use development complex proposed for the Old Schlage Lock factory site in Visitacion Valley is finally ready to take the next step towards becoming a reality. Since the California Redevelopment Agency began closing its doors in 2009, taking millions of dollars in public funding with it, Universal Paragon Corp. (UPC) and Visitacion Development LLC have worked with various designers, engineers, and agencies, to reinforce the project's feasibility and nurture the hope of bringing much needed residential and commercial development to the southern extent of San Francisco. Now, Bayside Development LLC has been charged to manage the formal design review and approval process and take the project through to completion.

The Visitacion Valley condo project is located on a 20-acre brownfield located in the southeast quadrant of San Francisco, just north of the San Francisco / San Mateo County line. The cities of Brisbane and Daly City lie to the south and west of the site. The site is located between the Visitacion Valley and Little Hollywood neighborhoods, bounded by Bayshore Boulevard on the west and Tunnel Avenue and the Southern Pacific Railroad to the east.

The property was formerly the site of the Schlage Lock Company's manufacturing facility, which started operations on the site during the 1920s. The company settled on this location due to its proximity to the Southern Pacific Railroad freight station, also formerly on the site and constructed in the early 20th century. The railroad tracks from the Southern Pacific Railroad now serve Caltrain, providing rail service between San Francisco and San Jose. The Schlage Lock Company factories operated at the site until 1999. Currently, only the former headquarters remains, as all other buildings have been demolished.

The surrounding neighborhoods primarily consist of older, single-family detached homes. Within half a mile from the property is Visitacion Valley School & Playground, a San Francisco branch public library, the SF Recycling & Disposal Center and the Korean First Presbyterian Church. Along Leland Avenue, directly west of the site, are existing and recently improved neighborhood-serving retail outlets.

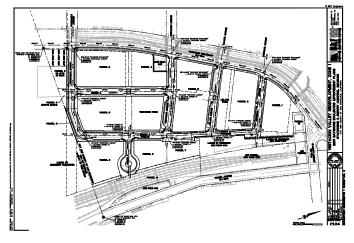
One of the project's strongest attributes is its close proximity to several public transportation options. The San Francisco Municipal Transit Authority (SFMTA) Light Rail 'Tline' has two stops directly adjacent to the project across Bayshore Blvd. These stops connect future residents with the 3rd Street corridor, downtown, and eventually the entire City. Also across Bayshore Blvd are several bus stops for the SFMTA's #8, #9, and #56 bus lines that connect riders to all corners of the City. Plans are also being discussed for a new Bus Rapid Transit (BRT); currently referred to as the 'Geneva-Harney BRT', this new system could create improved access to not only the City, but the entire Bay Area region as a whole.

Additionally, permanent pedestrian access to the Bayshore Caltrain station adjacent to the project will be established as part of the first phase of construction. Caltrain offers expedited access to downtown San Francisco, Silicon Valley, San Jose and several cities as far south as Gilroy. The site also has convenient access to Highway 101 (north) which is only a quarter mile away and Highway 101 (south) is easily accessible to the east.

Design parameters outlined in the Development Agreement (DA), Open Space and Streetscape Master Plan (OSSMP), and Design for Development (D4D) documents, establish the major design variables and obligations for the entire project.

#### HORIZONTAL DEVELOPMENT:

The Horizontal Development Phase (HDP) phase consists of rough grading, major utility extensions, and installation of new public streets with upgrades to existing sidewalks. The permitting approval process for these scopes of work fall into four major categories: Utility Master Plan (UMP), Site Improvement Plan (SIP), Final Map, and the Public Improvement Agreement (PIA). The order in which these documents need to be submitted and approved follows the order in which they are listed above: UMP – SIP – Final Map – PIA. The UMP was formally submitted in March of 2015. The SIP was formally submitted in August of 2015 and the team is awaiting the second round of comments. The Final Map has been drawn and will be submitted shortly, a draft of the PIA will be made available for review by the end of Q1 2016.



In an effort to expedite work onsite and keep the project moving forward, prior to SIP approvals being received and the Final Map submittal, we hope to extract specific permits for rough grading, the large retaining wall at the eastern extent of Parcels 1 & 2, and combined-sewer deep utilities. This will allow us to mobilize onsite and get a head start on the initial elements of construction. The present design of the Street F cul-de-sac and shortened Sunnydale Ave are intended as interim conditions until a permanent Multi-modal facility can be established.

#### VERTICAL DEVELOPMENT:



Vertical Development Phase 1 (VDP 1) consists of three separate new building parcels including approximately 574 residential units, one Public Park, major and minor retail components, new pedestrian access to Caltrain, and stabilization of the Old Schlage Lock Historical Office Building. Bayside has

retained MBH Architects as the lead designers and Architects of Record for Parcels 1 and 2. Pyatok Architects will be the lead designers and Architects of Record for Parcel 3.

Typical design process phases, consisting of Conceptual, Schematic, Design Development, Construction Documentation, and Construction Administration, will be followed by the design team of architects, engineers, and consultants. The DA outlines specific points within the design process where Community and City Agency input is required. Although these points of input do not directly correlate to the typical design process phases, Bayside is working with City Agencies to ensure both the obligations within the DA and the internal design process obligations are each met in a timely, rational, and sequential manner.

## **3.1 SITE PLAN AND OTHER MAPS**

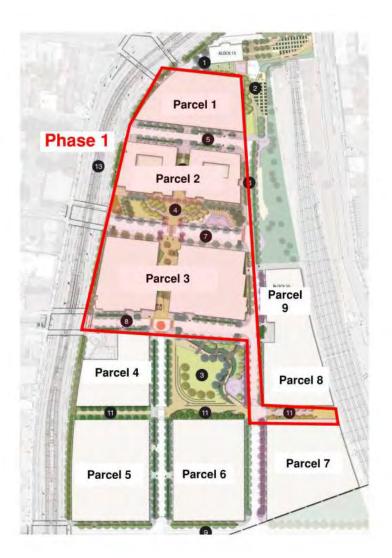
See <u>Attachment 2</u>



Aerial photo of project site and San Francisco



Aerial photo of project site with Phase 1 outline



Phase 1 with Parcel Numbering



Phase 1 aerial rendering

# **3.2 UNIT QUANTITIES AND SQAURTE FOOTAGES.**

Residential Units				
Parcel 1	143			
Parcel 2	165			
Parcel 3	266			
Total Phase 1	574			
Subtotal Net Residential Square Footage	610,485			
Subtotal Gross residential Square Footage	912,585			

Gross Retail and Commercial Square Footage				
Parcel 1	2,600			
Parcel 2	5,030			
Parcel 3	39,410			
Parcel 3 Retail parking	27,765	(82 spaces)		
Subtotal retail Gross Area	74,805	(includes flex space & parking)		
Total Phase 1 Gross Square Footage	987,390			

(ALL VALUES AND QUANTITIES NOTED ABOVE ARE APPROXIMATIONS, SUBJECT TO CHANGE, AND FOR REFERENCE ONLY.)

## **3.3 AFFORDABLE HOUSING**

Section 4.2 and Exhibit K of the Development Agreement (DA) between the City and County of San Francisco and Visitacion Development LLC outlines parameters and obligations for affordable housing units as part of the overall project scope. The DA limits the onsite Inclusionary requirement to 15% for 55% AMI, whereas the pending Charter amendment and trailing legislation are likely to increase the requirement to 25%, broken into two tranches of inclusionary units: Iow income (15%) and moderate income (10%).

Section 3, of Exhibit K makes several options available to the developer to satisfy the City's requirement(s), the "Inclusionary Housing Program Requirements" include onsite, offsite, fee, and land dedication as options and the required affordable housing percentages are different depending on the alternative selected. Visitacion LLC is pursuing option (i) 'construction of BMR Units within the Principal Project.' The exhibit further defines the obligation whereby 'BMR units delivered through options (i), (ii), or (iii) may satisfy a Principal Projects' Inclusionary Housing Program requirement by providing BMR units Onsite at a rate that equals 15% of the total units in the Principal Project.'

Currently, 86 affordable housing units are planned to be delivered in Phase 1; if the total number of units changes, Visitacion LLC will adjust the BMR unit quantities to reflect no less than 15% of the revised total number of units. If Visitacion LLC decides to offer units forlease instead of for-sale, a minimum of 15% of the for-lease units will be made available to below market rate tenants through the MOHCD's 'Below Market Rate Rental Program' per similar terms as described above.

Phase 1 currently does not include any in-lieu fee payments or planned off-site affordable units. If Visitacion LLC later decides to pursue off-site or in-lieu fee payments, the 2/3 onsite requirement would be based on 15% of project's total units, the remaining fee would be calculated based on 20% of the principal project's units. Additionally, if option (ii) of the DA was to be pursued, such a building would be 100% affordable regardless of

## 3.4 LAND TO BE DEDICATED TO THE CITY AND COUNTY OF SAN FRANCISCO

Description and approximate square footage of any land to be dedicated to the City in the proposed Development Phase.

Consistent with Exhibits F & M of the DA, 'Linear Park', otherwise referred to as 'Leland Park' will be delivered within Phase 1.

#### LELAND PARK:

Located on the north side of Leland Avenue, this 32,500 square feet, linear open space acts as a critical open space link to the existing community and businesses west of Bayshore Boulevard. The park will be developed with its three supporting street frontages, and will include paved seating areas, a potential area for public art, attractive lighting and will be enjoyed by patrons of the nearby retail anchor, smaller shops and cafes, as well as by residents of the surrounding neighborhood. Layers of wind-break trees and shrubs provide protection from prevailing west winds. The central portion of the park accommodates public gatherings and events. A children's play area with structure and shade trellis is provided on the east end of the park.

#### **PUBLIC STREETS**

Although extensions of public streets including, but not limited to, Raymond, Leland, and Visitacion Avenues are being built during Phase 1, the permitting process does not allow us to fully dedicate those streets until the permit is closed and all work is complete. To that end, the civil infrastructure Site Improvement Plan (SIP) and subsequent permit includes work for areas outside Phase 1 that will be completed at a later date; thus, dedication of those streets will not occur until the SIP is closed and complete.

All streets, sidewalks, etc. adjacent to Phase 1 buildings will be complete and open for public use in accordance with the DA Phasing Plan Exhibit F and Attachment 1.

# 3.5 COMMUNITY IMPROVEMENTS AND MITIGATION MEASURES

Consistent with Exhibits C, F, and I of the DA, certain public and/or community improvements, and mitigation measures are required to be delivered concurrent with Phase 1. As noted earlier, the fundamental goal of this Phase Application is to facilitate approval of the site wide civil infrastructure Site Improvement Plan (SIP) and deliver public improvements to the neighborhood well ahead of our obligations. These public improvements include street extensions, sidewalks, pedestrian and bicycle safety upgrades, utilities and other activities as identified in Exhibit C of the DA. Exhibit C also describes the difference between 'public improvements' and 'community improvements'.

Public Improvements included in Phase 1:

- New Street Construction
  - Street 'A' (portions of Street 'A' may remain 'private')
- Existing Street Extensions
  - Leland
  - Raymond
  - Visitacion
- Sidewalks
  - Adjacent to streets noted above
  - East side of Bayshore Blvd improvements
  - Caltrain pedestrian connection / Alley F
- Bicycle parking as required within buildings
- Utilities
  - New combined sewer
  - New low pressure water
  - New electrical services
  - New street lights as required
  - New storm drain system

Community Improvements include both privately owned and to-be-public areas throughout the site. Exhibit F of the DA further identifies delivery sequence of these improvements as they relate to adjacent parcel completion and occupancy.

Community Improvements included in Phase 1:

- Pedestrian access through Parcel 2, during business hours
- Pedestrian access through Parcel 3, 24 hours a day
- Open space surrounding the historical building
- Parks
  - Leland
  - Historic Building Open Space
- Historic Building
  - Stabilized for future use

#### Mitigation Measures:

Mitigation Measure 10-1: Destruction or Degradation of Historical Resources; 10.1.a. Visitacion has already completed a Historic American Building Survey (HABS) for the Old Schlage Office Building at 2201 Bayshore Blvd (see Attachment 17). Visitacion will assign an individual to undertake the oral history project as described in DA Exhibit I, 10.1.b. Visitacion LLC views items 10-1.c. thru 10-1.f. as not applicable to this phase or project.

Mitigation Measure 10-2: Disturbance of Known Archeological Resources; Visitacion LLC hired City and County of San Francisco approved archeological consultant, William Self Associates, to provide services as required in DA Exhibit I. Three of the four scheduled Archeological Data Recovery Programs (ADRP) have been completed and the fourth ADRP plan will be submitted for CCSF review by mid-May, 2016, along with archeological monitoring plans (AMP) for upcoming site activities. Mitigation Measure 10-3: Disturbance of Unknown Archeological Resources; Visitacion LLC hired City and County of San Francisco approved archeological consultant, William Self Associates, to provide services as required in DA Exhibit I.

Mitigation Measure 10-4: Accidental Discovery; Visitacion LLC hired City and County of San Francisco approved archeological consultant, William Self Associates, to provide services as required in DA Exhibit I.

Mitigation Measure 10-5: Disturbance of Paleontological Resources; Visitacion LLC will monitor site activities and respond to any encounter with paleontological resources as outlined in this measure.

Mitigation Measure 13-2: Project-Facilitated Ground borne vibration levels; Charles Salter Associates is scoped to provide vibration analysis as part of their environmental vibration report. This report will be completed prior to submittal of our Design Review application.

Mitigation Measure 13-3: Potential Exposure of New, Project-Facilitated Noise-Sensitive Development to Ambient Noise Levels Exceeding Standards; Charles Salter Associates is scoped to provide acoustical noise analysis as part of their environmental acoustical report. This report will be completed prior to submittal of our Design Review application.

Mitigation Measure 15-1: Solid Waste Diversion Impacts; Building plans are designed to provide three-bin recycling containers.

## 3.6 PROPOSED INFRASTRUCTURE IMPROVEMENTS (AS REQUIRED BY DPW AND CONSISTENT WITH INFRASTRUCTURE PLAN)

- a. Completion of Infrastructure Plan to Date
- b. Implementation of Infrastructure Plan completed during Phase
- c. Right of way dedication
- d. Proposed low pressure water system
- e. Proposed combined sewer system
- f. Proposed storm drain system
- g. Proposed dry utilities
- h. Additional infrastructure systems, if any

#### a. Completion of Infrastructure Plan to Date

The 'Site Improvement Plan' (SIP), prepared by BKF Engineers, which includes all infrastructure was originally submitted to the City in September of 2015, comments were received and a revised 95% Construction Document set was resubmitted in December of 2015. CCSF comments to the 95% CD set have been received and Visitacion expects to submit a 100% CD set by mid-May 2016. It is noted that the infrastructure will be constructed in one phase. It is also recognized that grading permits may be pursed early provided that all existing easements are honored.

#### b. Implementation of Infrastructure Plan Work completed during Development Phase

All infrastructure required to support the first three building parcels, adjacent streets, and Leland Park as defined by Exhibit F – Phasing Plan of the DA will be implemented. This includes, but is not limited to sidewalks, pedestrian walkways, parks, open space, utilities, landscaping, and street lights.

#### c. Right of Way Dedication

Due to the fact that the SIP includes infrastructure for all three development phases but is a single permit, public right-of-ways as identified in the Final Map will be delivered and operational in accordance with Exhibit F and maintained by the developer in accordance with the DA, but formal dedication will not occur until the SIP permit is complete.

#### d. Low Pressure Water...See also Attachment 3

The design of the low pressure water system is based on the design criteria established in the City of San Francisco Subdivision Regulations. The low pressure water system will serve the potable water demands and the fire flow demands for the Project. The low pressure water system was designed to supply the average day demand, peak hour demand, and maximum day demand plus fire flow demand at a reasonable level of pressure.

The domestic water supply and fire protection system consists of ductile iron pipe mains, low pressure fire hydrants, valves, fittings, and appurtenances. The system will be designed and constructed by the Developer, then owned and operated by the SFPUC upon construction completion and improvement acceptance by the SFPUC. Along Bayshore Boulevard, four new water connections will line up with the Project's proposed public street connections to provide an on-site looped system.

The potable water infrastructure will be located within the public street pavement. Vertical and horizontal separation distances between adjacent combined sewer system, potable water, and dry utilities will conform to the requirements outlined in Title 22 of the California Code of Regulations and the State of California Department of Health Services Guidance Memorandum 2003-02

#### e. Combined Sewer...See also Attachment 4

The proposed combined sewer system is intended to convey both storm runoff and sanitary sewer flow from the Project site. The combined sewer system will be designed to convey, at a minimum, the stormwater runoff from the 5-year storm from the Project parcels and streets

The system will connect to the 78-inch combined sewer line in Sunnydale Avenue at three different existing manholes, and to the combined sewer in Bayshore Boulevard at an existing manhole in Visitacion Avenue. The pipe material will be HDPE, with sizes ranging between 12-inches and 24-inches. The system will be designed and constructed by the Developer, then owned and operated by the SFPUC upon construction completion and improvement acceptance by the SFPUC. The proposed combined sewer mains will split the center of streets with the water main such that they maintain a 10-foot separation based on the current Title 22 and SFPUC – Water Enterprise requirements.

#### f. Storm Drain System – Grading, Overland Release, and Combined Sewer...See also <u>Attachment 5</u>

Proposed grading designs for the Project will match the existing north to south drainage pattern of the existing site. To ensure proper overland release and provide Americans with Disabilities Act (ADA) accessible pathways throughout and adjacent to the site, a new street grid with interconnected open space and pathways will be constructed to link Blanken Avenue with Sunnydale Avenue in the north-south direction and Bayshore Boulevard with Caltrain the east-west direction. Throughout the site, grades less than 5 percent are provided.

Conceptual grading designs generally conform to the existing grades along the northern interface with Blanken Avenue and the existing Historic Office Building and the existing grades along Bayshore Boulevard at the western edge of the project. At the southern boundary of the Project, a new segment of Sunnydale Avenue will be constructed, requiring the placement of 1 to 5 feet of fill to provide overland release and drainage.

At the eastern edge along the boundary shared with the Union Pacific Rail Road (UPRR), a large grade differential exists. To accommodate the 25-foot to 30-foot grade differential between the UPRR property and the Project, a single or tiered retaining wall will be installed. Where buildings are directly adjacent to the UPRR Property, retaining elements will be incorporated into the private development parcel building foundations. Accessible paths of travel and sidewalks within the Project site will be provided to connect to the adjacent Bayshore Caltrain Train Station accessible entrances. Grading solutions to accommodate the development of each Parcel will be based on recommendations provided by the project Geotechnical Engineering consultant.

The proposed on-site street grid will be graded to provide overland release for the Project. As required by the SFPUC, grading and hydrology designs will be developed such that the 100-year HGL is contained within the top of curb elevations on opposite sides of a street throughout the Project site.

At street intersections, grades will be tabled at a maximum slope of 2% to provide an accessible path of travel in crosswalks. In addition, vertical curves within the streets will be designed to both begin and end outside the limits of the crosswalk areas.

The existing 0.17-acre parcel, APN 5100-007, at the southeast corner of the intersection of Bayshore Boulevard and future Visitacion Avenue is not part of the Project. Therefore, the new grade at Visitacion Avenue must conform to the existing elevations adjacent to the Parcel, including a low point of elevation 17.1 in the future Visitacion Avenue.

#### g. Proposed Dry Utilities...See also Attachment 6

<u>Electric</u>

The proposed electric system is designed to provide electrical service to all parcels by way of a looped underground distribution system as dictated by the PG&E design standards. The majority of the planned secondary service will provide the requested service for parcels 1-3 with the remainder of the site constructed to PG&E distribution standards for future

development. All planned service is per PG&E Rule 15/16 standard underground electric service.

The electrical transformers for these services will be standard Pad mounted transformers located within transformer rooms designed to PG&E standard 057521 for indoor installed pad mount transformers. Additional single phase electrical services required throughout the site will be distributed as necessary within the joint trench to provide service to the public street lighting and other required single phase services throughout the site, including but not limited to, irrigation controls, site lighting, public park service areas and telecommunication pedestals. Electrical conduits will also be stubbed at future parcel locations for future development.

The existing overhead pole lines located in the southern portion of the site are not identified to belong to PG&E and therefore at this time are called to remain, or be removed as determined by their rightful owner. At this time there is no known requirement for underground or relocation of existing electric infrastructure within the site itself.

#### Gas ... See also <u>Attachment 6</u>

The currently proposed gas system is designed to provide the requested gas loads to each proposed building per the building demand. The projected gas service will be located from the existing gas main along the southern side of Bayshore Boulevard and continue south along Visitacion Ave where it will then proceed west along Street A and Street B to future parcels before branching east to service Buildings 1, 2 and 3.

Proposed gas meters for each buildings are located on the building perimeter of the south side of each building, their placement as required by PG&E Greenbook standards per Section 2. Additional gas meters have been allocated for Parcels 1 and 3 for future retail spaces. Their specific gas demands will be calculated with occupancy. All gas meters are to be serviced with 2 PSI, elevated gas pressure, as provided by PG&E. All gas metering will be as required by PG&E Rule 18.

At this time and through PG&E review, there is no known relocation of existing gas facilities or betterment identified or necessary as part of the planned service to this development.

#### CATV....See also Attachment 6

The proposed cable service has been identified in the area as carried by Comcast. Comcast has provided design feedback identifying the nearest point of service for this project as located along the South side of Bayshore Boulevard at the intersection with Leland Ave. Service point vault would provide a distribution feed to future parcels and all proposed buildings by way of proceeding into the site via Visitacion Ave where conduits within the Joint Trench would proceed west along Street A and Street B, as well as provide service to Building 3 MPOE rooms at the western perimeter of Building 1.

Cable services to Building 1 and 2 will be provided by the same tie in location with distribution proceeding east along Bayshore Boulevard before proceed to individual MPOE room locations currently proposed along the perimeter of Bayshore Boulevard within Buildings 1 and 2.

<u>Telephone</u>...See also <u>Attachment</u> 6

The current proposed telephone service has been identified in the area as carried by AT&T. AT&T has provided design feedback identifying the nearest point of service for this project as located adjacent to the intersection at the south side of Bayshore Boulevard and proposed Visitacion Avenue, along the frontage of existing building APN 5100-007.

This vault would provide a distribution feed to future parcels and all proposed buildings by way of proceeding into the site via Visitacion Ave where conduits within the Joint Trench would proceed west along Street A and Street B, as well as provide service to Building 3 MPOE rooms at the western perimeter of Building 1.

Services to Building 1 and 2 will be provided by the same tie in location with distribution proceeding east along Bayshore Boulevard before proceed to individual MPOE room locations currently proposed along the perimeter of Bayshore Boulevard within Buildings 1 and 2.

#### <u>Street Lighting</u>...See also <u>Attachment 6</u>

All street lighting for public streets within the development have been designed to meet the City of San Francisco street lighting standards as outlined in IES residential for a .4 -.6 foot candle average and 6:1 uniformity ratio. This includes standard City lights, poles, foundation, boxes, and conduit. Conduit will be distributed to all proposed street light locations by way of the proposed joint trench as is permitted by standard. The currently proposed street lighting plan extends the perimeter of all proposed streets planned for horizontal development with the exception of Sunnydale Ave on the western perimeter of the site. No revisions to the existing street lighting along Bayshore Boulevard are proposed, all existing street lighting poles, boxes and services are to remain.

All proposed street light locations have been located such to meet or exceed those are required by the City of San Francisco photometric standard. Additional requirements such as clearances from utilities and trees have been incorporated into the current layout.

#### DTIS....See also <u>Attachment</u> 6

As required by the City of San Francisco, a DTIS system has been integrated into the currently proposed project Joint Trench system as allowed by public utility trench occupancy guidelines permit. The DTIS conduit system will join the Joint Trench and be circuited to continue to each fire alarm pull box locations as dictated by the city.

Conduit for a DTIS system will also be included in the Joint Trench distribution extending down the proposed Street A and Street B to allow for connection points in further developments.

#### h. Design of Pedestrian Connection to Caltrain...See also Attachment 7

Currently, no pedestrian access to the Bayshore Caltrain station exists across the site. Bayside will establish such access by the completion of first building onsite and maintain that access throughout the balance of construction. The present design of the Street F cul-de-sac and shortened Sunnydale Ave are meant to be interim conditions until such point a permanent Multi-modal facility is established.

# 3.7 SEQUENCING OF PRIVATE DEVELOPMENT AND COMMUNITY IMPROVEMENTS.

Bayside intends to begin infrastructure improvements on-site by the end of May 2016. As noted earlier, our civil engineers, BKF, have been working with City agencies to coordinate the Site Improvement Plan (SIP) which is currently 95% complete and under review. In an effort to further expedite installation of infrastructure, we have engaged the DPW Task Force in an effort to confirm feasibility of receiving individual permits for initial infrastructure scope prior to final SIP approval. These initial activities and permits will likely include the site retaining wall, rough grading, and deep-utilities.

It is our hope to have all grading, utilities, street foundations, curbs, and gutters installed site wide (for all three phases) prior to, or shortly after, commencement of construction for vertical development elements of Phase 1. Doing so will allow our civil contractor to maximize their efficiency on-site while also simplifying site logistics for future vertical contractors.

Our current intent is to begin vertical construction with the smallest building on Parcel 1, six to eight months later we will begin Parcel 2, then another six to eight months after that we will begin parcel 3.

In compliance with the DA Exhibit F, 'Phasing Plan', all Community Improvements noted in Section 3.5 of this Application will be completed during Phase 1 vertical build-out. Improvements must be complete before the parcel directly adjacent to the improvements is eligible to receive initial Temporary Certificate of Occupancy (TCO). As noted above, Community Improvements must be complete prior to an adjacent building's occupancy, so construction and delivery of said improvements will follow the delivery of adjacent buildings with the exception of access to the Caltrain Bayshore Station. Pedestrian access to the Caltrain Bayshore Station must be complete prior to TCO of the first building in Phase 1, regardless of the building's location.

Leland Park will be delivered concurrent with the first occupancy of Parcel 2.

Parcel 3 contains the full-service grocery store that is required to have at least received a permit for tenant improvement prior to issuance of any building permits for Phase 2. Visitacion LLC engaged retail brokerage firm, Colliers International, to act on our behalf and publicize the grocery opportunity to a variety of potential tenants. Initial market feedback indicated a potential for significant difficulties to finding a suitable tenant considering historic problems with similar pursuits in nearby neighborhoods. Additionally, all prospective tenants would need to see occupancy of as many new housing units as possible before they would consider opening a new store. To that end, Parcel 3 and the embedded grocery will be built near the end of Phase 1 in order to substantiate and support the required tenant. AT the moment, we expect to build Parcel 1 first, and move south through the project building parcel 2 second, with Parcel 3 the last to be completed.

## 3.8 MODIFICATIONS TO OR DEVIATIONS FROM DEVELOPMENT PHASE PLAN DOCUMENTS / CONSISTENCY WITH DESIGN CONTROLS:

<u>Attachment 8</u> to this application is a letter written by Architects of Record (Pyatok) that outlines specific elements of the current design where confirmation of conformance with design constraints is required. The letter, spreadsheet, and relevant exhibits were submitted to the City in August of 2015. As of February 29<sup>th</sup>, 2016, the City provided a response to the above mentioned request for conformation that generally stated the proposed modifications were not consistent with the adopted Deign for Development and that each proposed modification would require alteration approval per Planning Code Section 249.45 (Visitacion Valley/Schlage Lock Special Use District). No other modifications to, or deviations from, plan documents is requested at this time.

# 3.9 AFFIDAVIT CONFIRMING PRE-APPLICATION MEETING

See <u>Attachment</u>9.

# 3.10 NEIGHBORHOOD NOTIFICATIONS AND POST-APPLICATION MEETING MATERIAL

The first design process obligation outlined in the DA requires Bayside to host a <u>Pre-Phase</u> <u>Application Meeting</u> with the local community. The intent of this meeting is to inform the community of the current project status, potential delivery schedule, and the general attributes of the first phase of development. This meeting was held at the Visitacion Valley Public Library on Saturday May 30th, 2015 and the required documentation is attached hereto as <u>Attachment 10</u>.

The next step in the community engagement process is a formal design review of the architectural styles and characteristics of the buildings. Pyatok Architects and MBH Architects presented building elevations and initial parcel landscaping designs to the community to solicit their input during another Design Review Meeting held on July 25<sup>th</sup>, **2015** Meeting minutes and slides of the <u>Design Review</u> presentation are attached as <u>Attachment 11.</u>

The Phase Application approval process also requires the sponsor to host a <u>Post-Phase</u> <u>Application Community Meeting</u>. The intent of this meeting is to allow the community to review elements of the Phase Application as they relate to previous input and recommendation made by the community as well as the results of negotiations between the City and sponsor. The meeting is to be held within the 30-ay public review period that formally begins once the City accepts the Final Phase Application as complete. Although specific meeting materials are not available at this time, the sponsor will provide updated schedules and images in an effort to highlight the most impactful changes to the application that have occurred since the initial Pre-Phase Application meeting was held in late 2015.

In addition to the review of the building designs, a formal engagement process and review of the public parks design is also required. The San Francisco Recreation and Parks Department (SF Rec), in cooperation with GLS Landscape Architects and Bayside Development LLC, has held three Community Meetings to address public-park and public right of way landscape designs. The first meeting was held in conjunction with the Design Review meeting on July 25<sup>th</sup>, 2015; a smaller second meeting was held on September 29<sup>th</sup>, 2015; and the third meeting occurred on October 24<sup>th</sup>, 2015, slides presented during the third meeting are attached as <u>Attachment 12</u>.

The third

## 3.11 AFFIDAVIT CONFIRMING SUBMISSION IS ACCURATE AND ADDITONAL SUBMISSIONS MAY BE REQUIRED

See <u>Attachment 13.</u>

# **4. ADDITITONAL REQUIREMENTS**

Per requests made by various City Agencies (see <u>Attachment</u> 1), the following sections provide supplemental information on a variety of topics.

# 4.1 PLAN FOR HISTORIC OFFICE BUILDING REHABILITATION: DA Section 4.6

Section 4.6 and Exhibit Q of the DA outlines developer obligations regarding rehabilitation of the Old Schlage Lock Historical Office Building located at 2201 Bayshore Blvd. The associated Phasing Plan only requires the developer to stabilize and 'mothball' the building during Phase 1 development. Full rehabilitation and subsequent community use access is not required until the developer delivers the 1,200th housing unit concurrent within delivery of Phase 3. Despite the lack of obligation to rehabilitate the building during Phase 1, Bayside analyzed various timing and pricing scenarios regarding delivery of the building that might benefit both the community and Bayside. The analysis that follows supports our hope to renovate the building as part of Phase 1, however, considering the renovation at this time is proving difficult and elusive. In order for Phase Application approval to proceed without delay, we cannot promise delivery of the building during Phase 1 without funding in place; <u>our current intent is to simply mothball the building in preparation for future rehabilitation consistent with the requirements set forth in the DA Section 4.6, Exhibit F section 3, and the 'National Park Service Preservation Brief No. 31-</u>

# Mothballing Historical Buildings: Documentation, Stabilization, and Mothballing' (see Attachment 18) as referenced therein.

The mothballing strategies to be employed include, but are not limited to: documenting the current condition of the building, identifying any structural elements that need to be stabilized to insure against any potentially unsafe or compromising condition(s), identifying potential pest infiltration problems and developing plans to prevent such infiltrations, securing and weatherizing the exterior, providing adequate ventilation through the building to prevent mold, and developing a monitoring and maintenance plan to ensure these strategies remain intact and operational.

The information that follows represents our efforts and conclusions regarding the future renovation of the building, not the near term process.

#### **ANALYSIS:**



Bayside analyszed obligations and opportunities rehabilitating the old office building presented at various points throughout the development timeline. The conclusion was to try and fast-track design, permitting, and rehabilitation to occupy the building as soon as possible if economically feasible.

To that end, Bayside Development LLC has received a permit to rehabilitate the building.

The permit will be pursued under the California Historical Building code and all rehabilitation improvements shall be reviewed and approved by the City, and will comply with the Secretary of the Interior's Standards for the Rehabilitation of Historic Buildings.

#### **DESIGN:**

The exterior of the building will be renovated to a condition and appearance that resembles its original state as closely as possible; the goal is to bring the building back to life just as it looked when it was built in 1929. Methods and materials used to renovate the exterior include: patching and repairing stucco, replacing all windows with energy efficient models that reflect the original aesthetic, repairing of damaged brick stairs at the main entry, new lighting that reflects the character of the original fixtures, installing new ADA accessible elevator, and improving the adjacent landscaping and plantings all of which will be fully accessible from either Bayshore Blvd via a pedestrian ramp adjacent to Parcel 1, or through the historical building's lowest level via the building's internal elevators and ADA elevator at the front of the building.

#### USE:

The entire building will be renovated to a level that establishes adequate life safety systems, accessibility, structural integrity, and building systems performance. Architectural

details will be preserved and/or replicated to the fullest extent possible as determined by the preservation code, feasibility, and cost.

The current renovation plan includes installation of elevator access to the three (3) main floors, restrooms on the three main floors, and a small kitchen area on each of the three main floors. All floors will be left un-programmed and available for future tenant improvement per the community's requirements. As noted in the DA, 'community use' can be defined in a variety of ways and does not presuppose that a typical 'community assembly room' is required. Qualifying community uses can be provided by, but are not limited to, child care services, access to office space for non-profit tenants, or public classrooms.

Bayside is mindful of the variety of potential future uses of the building, so the current design incorporates strategic upgrades to structural, accessibility, and life safety components to ensure the building's core and shell can accommodate a diverse pool of tenants and use.

#### PROCESS:

These tenants and uses will be vetted by the Community through a series of public meetings, questionnaires mailed to local residents, and a web-site that will be set up as the renovation nears a construction start.

#### **OPERATIONS & MAINTENANCE:**

Although the terms and structure of tenant obligations regarding operations and maintenance of the building have yet to be defined, Bayside envisions the material and labor costs required for general maintenance be shared equally by all tenants based on the ratio of square feet each tenant has leased. Costs for common area maintenance will be embedded in the lease rate accordingly. A community meeting room or classroom would be considered 'common area' and general maintenance costs would be assumed by the lease paying tenants.

## **4.2 SUSTAINABILITY EVALUATION:**

In addition to requirements outlined in Exhibit G of the Development Agreement (DA), Section 6.5 of the DA identifies parameters of an extensive Sustainability Evaluation required to be performed prior to the commencement of each Development Phase.

In accordance with Chapter 13 of the City and County of San Francisco Building Code as well as Title 24 Part 11 of the California Green Building Code, newly constructed buildings must meet or exceed a level of efficiency identified within the LEED or GreenPoint rating systems.

Bayside engaged Sharon Block and her team at Bright Green Strategies, Inc. to assist in the compilation and evaluation of site, system, and district variables that contribute to the projects overall sustainability profile. A formal analysis of project variables was performed under the LEED rating system and is attached as <u>Attachment 14</u> and summarized below.

Per DA Section 6.5:

(i). The structural design, roof layout, and MEP engineering of each building integrates considerations for future photovoltaic and/or solar thermal panels and systems. Support for, and conduits to locations of photovoltaic panels will be installed during construction despite the lack of installation or commissioning of a full PV system.

(ii). Solar thermal panels and systems, however, will be installed and fully operational concurrent with the delivery of each building within Phase 1. Plans for the structural supports, etc. of both systems can be found in Exhibit 9.

(iii). Given the excessive costs, noise, unreliability, and space required for on-site wind turbines and equipment in relation to their output and benefit relative to the sizable electrical loads Phase 1 buildings demand, these technologies are not feasible for Phase 1 and will not be incorporated.

Photovoltaic (PV) roof panels, although less expensive than wind-turbine technology, still add an significant initial costs to the project, and considering the our efficiency calculations do not require the addition of this variable to our overall building systems to achieve our project goals, PV panels will not be installed at this time.

(iv). At least 25% of rainwater that falls within the building footprint (roofs, courtyards, etc) will collected in large cisterns and used for as gray water supply for residential and common area lavatories. Collected rainwater will not be used for irrigation due to the fact the majority of our plantings will be draught tolerant and we've concluded recycled distribution throughout the building will be a better use of the resource.

In addition to the building systems identified above, the 'Visitacion Valley / Schlage Lock Design for Development' addresses sustainability goals throughout the site that could potentially add to the overall efficiency of the project; some of these goals are as follows:

Brownfield Remediation: Visitacion LLC developed a Remedial Action Plan (RAP) which was approved by the California Department of Toxic Substances Control (DTSC). The RAP outlined procedures for cleaning up contaminated soils and containing the effect of these contaminants on groundwater below the site. Visitacion LLC recently completed the fourth and final phase of remediation in preparation for future site development.

Energy Efficiency: Building models noted above will take the performance of site structures to new levels of efficiency by integrated lighting controls, high performance insulation, passive solar management considerations, and Energy Star appliances, to decrease the project's overall energy footprint. Beyond the building's footprints however, greater site wide energy efficiency will be achieved through the use of LED street light fixtures and integrated site wide photo sensor controlled ground lighting.

Storm water Management: Along with the capture and re-use of storm water collected on building roofs, other site-specific considerations will be employed to manage the effects of storm water run-off. Particularly, permeable pavement and bio-swales will be used as much as possible to minimize the amount of water tracking to the storm sewers and to slow the migration of water through the site into the water table. Renewable energy: Despite the current lack of need for photovoltaic panels to be installed on our buildings in order to meet Title-24 regulations, the roof structure has been designed to accommodate additional loads PV panels might create in the future. Additionally, conduits and raceways will be installed in preparation for future PV installation.

As noted earlier, electrical power generation via wind turbines is not feasible for this project.

Considering the density of our site and its close relationship to public parks, few other onsite renewable energy options are available.

## **4.3 FIRST SOURCE HIRING**

See Memorandum of Understanding <u>Attachment 15.</u>

## **4.4 FIRE SUPPRESSION OBLIGATIONS**

Section 6.16 of the Development Agreement obligates the Developer to provide low pressure water system elements meeting the Uniform Fire Code requirements as described in Exhibit L of the DA. The low pressure water supply system incorporates a network of pipes and hydrants that will be connected to the public water supply and support fire-sprinkler systems throughout the buildings on-site.

In addition, the Developer is obligated to contribute to the design and installation of a high pressure fire suppression system as selected by the SFPUC and SFFD. The two main options per the DA for the high pressure system are an 'AWSS' (Auxiliary Water Supply System) or PWSS (Portable Water Supply System). Section 11.3 of DA Exhibit L outlines components of each system which basically involve a large cistern located in the public right of way for the AWSS and a system of hose and portable hydrants for the PWSS.

The Infrastructure Plan as designed, does not make accommodations for any cisterns in the public-right-of-way due to space and clearance constraints between required public utilities and adjacent structures and development. Thus, a PWSS alternative becomes the obvious choice. It is our intent to comply with the obligation outlined in the DA to contribute up to \$1,500,000 towards the acquisition of a new, or expansion of an existing, PWSS within the timeframe defined therein, which is understood to be at the receipt of TCO for the last residential unit of Phase 1.

Furthermore, SFFD access requirements are dependent on the width of roadway, type of construction and height of the building. The horizontal Developer and third party vertical Developers shall be aware of and comply with all SFFD requirements.

# 4.5 TRANSPORTATION DEMAND MEASURES

In accordance with Section 4.5, 4.8, and Exhibit J of the DA, Visitacion Development LLC shall cooperate with any and all adjacent public transportation improvements that require temporary use of our property or other concessions with compensation defined and issued as described therein. We have also prepared a Transportation Management Plan (TDM) (Exhibit J of DA) which has been reviewed and approved as adequate and appropriate by the MTA and other agencies.

The TDM highlights specific strategies to address transportation variables throughout the site including 'land use factors' such as a higher density, transit-oriented, and a mixed-use development approach. The Visitacion Valley / Schlage Lock factory project incorporates all three of those factors thru constructing 5-8 story buildings with integrated retail components all near three major transit hubs.

Streets will be designed to promote pedestrian access to all amenities, parks, and transit hubs while also focusing on safe routes for bicyclists. Wayfinding kiosks will have transit schedules posted and integrated real-time tracking of arriving and departing transit. Monthly transit passes will be provided to every tenant through specific allocations of HOA fees.

Parking strategies onsite include unbundled parking for residential tenants, a maximum parking ratio of .8 spaces per residential unit, strategic location of on-street parking with full metering, and continued monitoring an analysis of parking demand variables. Although the current parking ratio for Phase 1 equals .86 spaces per unit, parking throughout the rest of the site will be balanced to create an overall ratio of .8.

In an effort to reduce the amount of required parking onsite, carpool and vanpool applications will be readily available to all tenants and car-share spaces will be dedicated throughout the site with complimentary introductory memberships provided to all new tenants.

Phase 1 includes implementation of a variety of transportation mitigation measures including the extension of walkways along Leland Ave and other streets to promote pedestrian access to retail and public parks, creation of full-time pedestrian access to the Bayshore Caltrain station, and the extension of public streets that are designed to promote bicycling.

Exhibit J further describes the 'Transportation Demand Management Program' (TDMP) which involves the assignment of a coordinator who will organize, facilitate, and administer specific programs to residents and the general public related to transportation options to, from, and around, the project. This coordinator has yet to be identified, but will be hired, trained and operational in accordance with the requirements set forth in the DA.

# 4.6 DEVELOPMENT OF PHASE HYDROLOGY AND HYDRAULICS PLAN

Section 15.2 of Exhibit L of the DA outlines the requirements for any Phase Application included updated analysis for the following:

- Combined Sewer Capacity
- Overland Flow
- Stormwater Management
- Maintenance Assessment

See <u>Attachment 16</u> for all.

## 4.7 DESIGN REVIEW APPROVALS AS PART OF THE PHASE APPLICATION PROCESS

As evidenced by <u>Attachments 11 & 12</u>, Bayside and our design team have actively engaged the community to solicit feedback and input throughout the design process.

We've also engaged City officials, notably Doug Vu, David Winslow, and Esmeralda Jardines, to gain their input and response to our design initiatives. <u>Attachment 8</u> was discussed at length during an October 2015 meeting with David, Doug and Esmeralda. As of February 29<sup>th</sup>, 2016, the City provided a response (see <u>Attachment 19</u>) to the above mentioned 'Design for Development Compliance Request for Clarification' that generally stated the proposed modifications were not consistent with the adopted Design for Development and that each proposed modification would require alteration approval per Planning Code Section 249.45 (Visitacion Valley/Schlage Lock Special Use District).

Approval of the designs will be issued as part of the Site Permit approval process.

## 5. SUMMARY

Bayside has been working closely with industry professionals, community members, and City officials to bring a mixed-use residential development in Visitacion Valley into reality. Our near term goal is to advance the entire civil infrastructure program in an effort to prepare the site for vertical construction; submittal and approval of this Phase Application is a crucial step towards meeting that goal.

Thank You,

Brad Mooney Project Director Bayside Development LLC bmooney@bsdsf.com

to time. Notwithstanding anything to the contrary in this Agreement, the City may exercise its reasonable discretion in approving the aspects of a Design Review Application that relate to the qualitative or subjective requirements of the applicable Design for Development, including the choice of building materials and fenestration. Also notwithstanding anything to the contrary in this Agreement, in considering the Design Review for those aspects of a proposed building or Community Improvement that meet the quantitative or objective requirements of the Schlage Lock Development Project Design for Development and the other Schlage Lock Development Plan Development Project Documents (the "Objective Requirements"), including without limitation, the building's proposed height, bulk, setbacks, location of uses and size of such uses, and amount of open space and parking, the City acknowledges and agrees that (i) it has exercised its discretion in approving the Visitacion Valley/Schlage Lock Special Use District, the Schlage Lock Development Project Design for Development, and the other Schlage Lock Development Plan Documents, and (ii) any proposed Design Review that meets the Objective Requirements shall not be rejected hy the City based on elements that conform to or are consistent with the Objective Requirements, so long as the proposed huilding or Community Improvement meets the Uniform Codes and the Design for Development as required by Section 2.3.4 above. If the Planning Director determines that a building and/or site permit application for Design Review includes a Material Change to the Basic Approvals, the Developer must obtain Planning Commission approval of that change. The Planning Director may, at his or her discretion, consult with any other City agency, and shall determine if any other City Agency's approval is required before a particular Material Change to the Basic Approvals can be brought before the Planning Commission.

3.3.2. Each Basic Approval or Implementing Approval shall remain in effect during the Term of this Agreement. Notwithstanding anything to the contrary above, each street improvement, building, grading, demolition or similar permit shall expire at the time specified in the permit or the applicable public improvement agreement approved under the City's Subdivision Code, with extensions as normally allowed under the Uniform Codes or as set fortb in such public improvement.

#### 3.4. Commencement of Construction; Development Phases: Development Timing.

3.4.1. <u>Development Phases</u>. The Project shall be built in phases ("**Development Phases**") in the manner described in Exhibit F. The Parties currently anticipate that the Project will be constructed in Development Phases over approximately fifteen (15) years. Notwithstanding the schedule for implementation of Phase 1 as included in the Phasing Plan attached hereto as Exhibit F, the Parties acknowledge that for all subsequent phases, the Developer cannot guarantee the exact timing in which Development Phases will be constructed, whether certain development will be constructed at all, or the characteristics of each Development Phase (including without limitation the number of units constructed during each Development Phase and the parcels included within each Development Phase). Such decisions depend on numerous factors that are not within the control of Developer or the City, such as market absorption and demand, interest rates, availability of project financing, competition, and other similar factors. To the extent permitted by this Agreement, including those restrictions on the initiation of the First Phase of the Development Phases as such restrictions are provided in the Phasing Plan, Developer shall have the right to develop the Project in Development Phases in such order and time, and with such characteristics (subject to the Proportionality, Priority and

Proximity Requirements of this Agreement), as Developer requests, as determined by Developer in the exercise of its subjective business judgment, but subject to the City's approval of each Development Phase, which approval shall not be unreasonably withheld, conditioned, or delayed.

3.4.2. Proportionality, Priority and Proximity Requirement. Because (i) the Project will be built over a long time period, and future portions of the Project may not, in fact, be developed after Developer completes a Development Phase, and (ii) Developer has requested and the City has agreed to allow Developer flexibility in the order and timing of the proposed development included in the Project, the City must approve each Development Phase Application to ensure that (A) the BMR dwelling units and Community Improvements for each Development Phase are within the cumulative minimums described in this Agreement to ensure the orderly development of the Project and permit the cumulative amount of market rate private development to occur in that Development Phase; (B) the Community Improvements are implemented in order of public policy priority as set forth in the Phasing Plan; (C) that such Community Improvements are selected with reference to geographic proximity to the proposed Development Phase, if required hy the Phasing Plan; and (D) the timing and phasing of the Community Improvements are consistent with the operational needs and plans of the affected City Agencies, (the "Proportionality, Priority and Proximity Requirement"). With regard to those Public Improvements that must be completed as determined by City review to obtain First Certificates of Occupancy for a building, the Proportionality, Priority and Proximity Requirement shall be deemed to be satisfied by virtue of the requirement that, pursuant to existing Municipal Code, all such improvements must be substantially complete before issuance of a First Certificate of Occupancy for each and every building within the Development Phase. With regard to any proposed Community Improvements not associated with any individual building permit application, the City must review and approve such permit applications to ensure that the Proportionality, Priority and Proximity Requirement is satisfied. The foregoing notwithstanding, nothing in this Section 3.4.2 or other provisions of this Agreement shall affect the Mitigation Measures, which must be completed as and when required based upon the trigger dates established with respect to each applicable Mitigation Measure.

3.4.3. Phasing Plan. The Community Improvements and certain Public Improvements to be constructed by Developer are listed in the Phasing Plan and shall be approved with the Basic Approvals, attached hereto as Exhibit F. The Phasing Plan reflects the Parties' mutual acknowledgement that (i) the approximate minimum number of residential units and the minimum area suitable for retail in Development Phase 1 are generally described in the Phasing Plan but may be subject to change, (ii) the content and boundaries of each subsequent Development Phase, the exact number of residential units and the exact amount of retail area in each subsequent Development Phase will be proposed by the Developer at the time of each Phase Application, and (iii) the need for certain Community Improvements and certain Public Improvements is related to the location of the development as proposed by each Development Phase combined with the cumulative amount of residential units and retail floor area Completed to date. The Affordable Housing Plan, as provided in Exhibit K, defines certain minimum requirements for the production of below market rate dwelling units to aid in determining satisfaction of the Proportionality, Priority and Proximity Requirement described in Section 3.4.2. The Parties agree that the requirements of the Phasing Plan are generally representative of the Proportionality. Priority and Proximity Requirement but are not

26

determinative such that the City must reasonably review and approve each Development Phase Application for consistency with the Proportionality, Priority and Proximity Requirement pursuant to Section 3.4.2. The Parties acknowledge and agree that (i) the minimum requirements for the production of below market rate dwelling units specified for each Development Phase of the Phasing Plan must be satisfied at or before each stage of development, including during and within each Development Phase and (ii) the City cannot disproportionately burden a Development Phase in violation of the Proportionality, Priority and Proximity Requirement. The Parties acknowledge that certain infrastructure or utility improvements may be required at an early stage of development in accordance with operational or system needs and the City may reasonably request Developer to advance certain Community Improvements at such earlier stage in order for efficiency and cost effectiveness. The Parties shall cooperate in good faith to amend the Developer's originally proposed Development Phase Application to advance such improvements and to delay other improvements while maintaining the Proportionality, Priority and Proximity Requirement.

3.4.4. Development Phase Applications Review and Approvals. Prior to the commencement of each Development Phase, Developer shall submit to the Planning Department an application (a "Development Phase Application") in substantial conformance with the checklist attached hereto as Exhibit G. In addition to any necessary permits the Application shall include, at a minimum: (i) an overall summary of the proposed Development Phase; (ii) a site plan that clearly indicates the parcels subject to the proposed Development Phase; (iii) the amount of residential units and retail and commercial square footage in the proposed Development Phase; (iv) the number of BMR Units to be Completed during the proposed Development Phase and the method of delivering those BMR units (e.g., inclusionary, land-dedication, and/or off-site); (v) a description and approximate square footage of any land to be dedicated to the City in the proposed Development Phase; (vi) a brief description of each proposed Community Improvement and Mitigation Measure to be Completed during the proposed Development Phase; (vii) a description of the proposed infrastructure improvements, at a level of detail as required by DPW, that are consistent with the Infrastructure Plan; (viii) a general description of the proposed order of construction of the private development and Community Improvements within the proposed Development Phase; and (ix) a statement describing any requested modification or deviation from any applicable Plan Document, if any such modifications or deviations are requested. If Developer submits a Development Phase Application before the completion of a previous Development Phase, then the Development Phase Application shall include a proposed order of development for the future Development Phases in its response to item (viii) above. The Planning Director and affected City Agencies shall have the right to request additional information from Developer as may be needed to understand the proposed Development Phase Application and to ensure compliance with this Agreement, including but not limited to the applicable Schlage Lock Development Plan Documents and the Proportionality, Priority and Proximity Requirement. If the Planning Director or any affected City Agency objects to the proposed Development Phase Application, it shall do so in writing, stating with specificity the reasons for the objection and any items that it or they believe may or should be included in the Application in order to bring the application into compliance with the Proportionality, Priority and Proximity Requirement and this Agreement. The Planning Director and affected City Agencies agree to act reasonably in making determinations with respect to each Application, including the determination as to whether the Proportionality, Priority and Proximity Requirement has been satisfied. The Parties

agree to meet and confer in good faith to discuss and resolve any differences in the scope or requirements of an Application. If there are no objections, or upon resolution of any differences, the Planning Director shall issue to Developer in writing an approval of the Development Phase Application with such revisions, conditions or requirements as may be permitted in accordance with the terms of this Agreement (eacb a "Development Phase Approval"). The Development Phase Approval notice shall be posted for at least 14 days as follows: (i) the Planning Department shall post notice of the Application on the Planning Department shall post notice of the public via the "Complete List of Plans and Projects" webpage, or an equivalent webpage accessible to the public and dedicated to similar public disclosure purposes; (ii) Developer shall post notice at that area of the Project Site that is the subject of the given Development Phase Approval; and (iii) the Planning Department shall provide direct mail notice to surrounding neighborhood associations.

(a) Pre-Application Meeting. Prior to submitting any Phase Application to the Planning Department for review, the Developer shall conduct a minimum of one pre-application meeting. The meeting shall be conducted at, or within a one-mile radius of, the Project site, but otherwise subject to the Planning Department's pre-application meeting procedures. A Planning Department representative shall attend such meeting.

(b) Phase Application Review. The Planning Director, or his or her designee, and affected City Agencies shall complete review within sixty (60) days of the submittal of a complete Development Phase Application to the Planning Department.

(c) Noticing. After Planning Department staff review of the Phase Application and no less than thirty (30) days prior to Planning Director, or Planning Commission, action on an application, notice of the application and of a post-application meeting will be mailed to occupants within 300 feet of the subject property, anyone who has requested a block book notation, and relevant Visitacion Valley neighborhood groups for a thirty (30) day review period and shall be kept on file.

(d) Post-Application Meeting. The City shall host a post-application meeting on or proximate to the proposed project site fifteen (15) days from the initiation of the thirty (30) day public review period. A representative of the Developer's organization shall attend the meetings. Documentation that the meeting took place shall be submitted to the Planning Department consistent with any documentation requirements established by the Department's procedures and shall be kept with the project file.

The City will review the proposed improvements against the requirements of the Development Agreement and accompanying design controls. All of a phase's horizontal improvements and community benefits must receive Design Review Approval as part of the Phase Application process. Design Review Approval for vertical development may be sought concurrently with or subsequent to the applicable phase's Phase Application process.

3.4.5. <u>Commencement of Development Pbase</u>. Upon receipt of a Development Phase Approval, Developer shall submit a tentative subdivision map application (if not already submitted) covering all of the real property within the Development Phase. Following submittal of the tentative subdivision map application, Developer shall have the right to submit any

individual Design Review Applications and associated permits required to commence the scope of development described in each Development Phase Approval; provided, however, that the City is not required to approve such Design Review Applications until Development Phase Approval and approval of the tentative subdivision map. The Developer also has the option to submit a tentative subdivision map application for the entire site and seek approval of phased final maps for each Development Phase. Should the developer elect to proceed in this manner, the City is not required to approve a Design Review Applications until the Development Phase Approval and the Developer's submission of all required deferred materials associated with the phased final map area. Each Development Phase shall be deemed to have commenced if (i) site or building permits have been issued by the City for all or a portion of the buildings located in that Development Phase and (ii) some identifiable construction, such as grading, of all or a portion of that Development Phase has been initiated. Upon commencement of work in a Development Phase, Developer shall continue the work at a commercially reasonable pace in light of market conditions to Completion of that Development Phase, including all Community Improvements, Stornwater Management Improvements and Public Improvements within the Development Phase in accordance with applicable permits and requirements under this Agreement to ensure that there are no material gaps between the start and Completion of all work within that Development Phase, subject to any Excusable Delay or amendment of the Development Phase Approval as permitted by Section 3.4.6.

3.4.6. <u>Amendment of a Development Phase Approval</u>. At any time after receipt of a Development Phase Approval, Developer may request an amendment to the Development Phase Approval. Such amendment may include but is not limited to changes to the number and location of units proposed during that Development Phase, the substitution of a Community Improvement for another Community Improvement, or the elimination of a Community Improvement from the Development Phase due to a proposed reduction of new private development proposed for that Development Phase. Any such requested amendment sball be subject to the review and approval process and the standards (including the Proportionality, Priority and Proximity Requirements) set forth above in Section 3.4.2. Notwithstanding anything to the conttary above, Developer shall not have the right to eliminate any Community Improvement or Public Improvement for which construction or service has already commenced in that Development Phase.

3.4.7. Without limiting the foregoing, it is the desire of the Parties to avoid the result in <u>Pardee Construction Co. v. City of Camarillo</u>, 37 Cal.3d 465 (1984), in which the California Supreme Court held that because the parties had failed to consider and expressly provide for the timing of development, a later-adopted initiative restricting the timing of development prevailed over the parties' agreement. Accordingly, the Parties hereto expressly acknowledge that except for the construction phasing required by this Section 3, a Development Phase Approval, the Schlage Lock Development Plan Documents, the Phasing Plan, the Mitigation Measures, and any express construction dates set forth in an Implementing Approval, Developer shall have the right to develop the Project in such order and at such rate and at such times as Developer deems appropriate within the exercise of its subjective business judgment.

#### Exhibit G

#### Phase Application Checklist

The Developer will be required to submit a Phase Application for each phase of development, as described in Section 3.4.4. Each such Phase Application must include the following components at a minimum.

#### PHASE SUMMARY TABLE

Parcel	Assessor's Block Number	Blocks in the D4D (1, 2, 3, etc.)	Height/Bulk District	Proposed H <del>e</del> ights	Housing Units	Parking: Residential and Commercial
1						
2						
3			<b>.</b>			
4						1
5						

#### **PROJECT DESCRIPTION**

Project Type: e.g. New Construction

Present or Previous Use(s): e.g. PDR/Industrial

Proposed Use(s): c.g. Residential, Commercial, Retail, Open Space

**Narrative:** The narrative portion of each Phase Application shall, at a minimum, include the following:

"This application pertains to Phase [insert phase number] of the Schlage Lock Project (the "Project"). This application is submitted in accordance with the Project's Development Agreement, which requires the project sponsor to submit a Phase Application for approval by the Planning Department and affected City Agencies prior to the submittal of building permits for such phase of the Project. Initially capitalized terms used herein and not otherwise defined shall have the meaning ascribed to such terms in the Development Agreement.

Phase [insert phase number] is comprised of parcel numbers [insert parcel numbers]. The parcels subject to Phase [insert phase number] are shown on the attached site plan diagram and further described by block number and area on page [insert page number] of this application. Phase [insert phase number] consists primarily of [insert brief description, e.g. residential and retail development]. In addition, as described in more detail below, Phase [insert phase number] will include a number of Community Improvements and CEQA Mitigation Measures, as required by the approved Schlage Lock Development Project Phasing Plan. Following is a description of the elements of Phase [insert phase number]."

Section 3.4.4. of the Development Agreement requires, at a minimum, a discussion of the elements below. The Phase Application should also include any other information the Planning Department deems necessary to review and approve the applications:

- I. Site Plan and Other Maps (Streets, etc.) as Needed.
- 2. Number of Residential Dwelling Units, Retail Square Footage, and Commercial Square Footage.
- **3.** Affordable Housing: Mode(s) of satisfying the phase's affordable housing obligations, number of below market rate (BMR) units to be created by the phase, cumulative BMR units created by the Schlage Lock project.
- 4. Land to be Dedicated to the City and County of San Francisco, if any (Square Feet).
- 5. Community Improvements and Mitigation Measures included in Phase.
- 6. Proposed Infrastructure Improvements (as required by DPW and consistent with Infrastructure Plan).
  - a. Completion of Infrastructure Plan to Date
  - b. Implementation of Infrastructure Plan Work to be Completed During Development Phase
  - c. Right of way dedication
  - d. Proposed water system
  - e. Proposed sewer system
  - f. Proposed storm drain system
  - g. Proposed dry utilities
  - h. Additional infrastructure systems, if any
- 7. Sequencing of Private Development and Community Improvements.
- 8. Modifications to or Deviations from Development Phase Plan Documents.

- 9. Affidavit and Proof of Pre-Application Meeting.
- 10. Neighborhood Notification and Post-Application Meeting Materials.
- 11. Affidavit Confirming that Submission is Accurate and that Additional Submissions may be Required. (Refer to Attachment I.)

# Schlage Lock

# Phase Application Requirements in DA and Design Controls (SUD)

## Per DA Section 3.4.4, Phase Applications should include:

- an overall summary of the proposed Development Phase;
- a site plan that clearly indicates the parcels subject to the proposed Development Phase;
- the amount of residential units and retail and commercial square footage in the proposed Development Phase;
- the number of BMR Units to be Completed during the proposed Development Phase and the method of delivering those BMR units (e.g., inclusionary, land-dedication, and/or off-site);
- a description and approximate square footage of any land to be dedicated to the City in the proposed Development Phase;
- a brief description of each proposed Community Improvement and Mitigation Measure to be Completed during the proposed Development Phase;
- a description of the proposed infrastructure improvements, at a level of detail as required by DPW, that are consistent with the Infrastructure Plan;
- a general description of the proposed order of construction of the private development and Community Improvements within the proposed Development Phase; and
- a statement describing any requested modification or deviation from any applicable Plan Document, if any such modifications or deviations are requested;
- the Phase Application should be in substantial conformance with checklist in Exhibit G of the DA and any other information the Planning Department deems necessary to review and approve the application.

## Additional phase requirements in DA, also should be addressed in Phase Application:

- Plan for historic office building rehabilitation (Section 4.6)
  - Phase 1: "Developer will also be required to secure and stabilize the historic building, as well as undertake minor exterior aesthetic improvements"
- Sustainability Evaluation (Section 6.5)
- First Source Hiring Agreement (Section 6.8)
- Fire Suppression Obligation (selection of AWSS vs. PWSS system) (Section 6.16)
- TDM Measures (Exhibit J)
- Design of pedestrian connection to Caltrain (Exhibit F, Phasing Plan)
- Satisfaction of applicable mitigation measures (Exhibit I, MMRP)
- Development Phase Hydrology and Hydraulics Plan (Exhibit L, Infrastructure Plan, Section 15.2), including:
  - Development Phase Combined Sewer Capacity Analysis
  - o Overland Flow Analysis
  - o Stormwater Management Plan
  - Maintenance Assessment
- Consistency with design controls, as applicable (SUD, Section 10)
- All of a phase's horizontal improvements and community benefits must receive Design Review Approval as part of the Phase Application process (DA Section 3.4.4; SUD sections 10, 11 and 12)

# Related community meetings and noticing (Section 3.4.4):

- Pre-app meeting: Developer hosts a minimum of one pre-application meeting at or within a 1-mile radius of the project site, subject to Planning Department's Pre-Application Procedures:

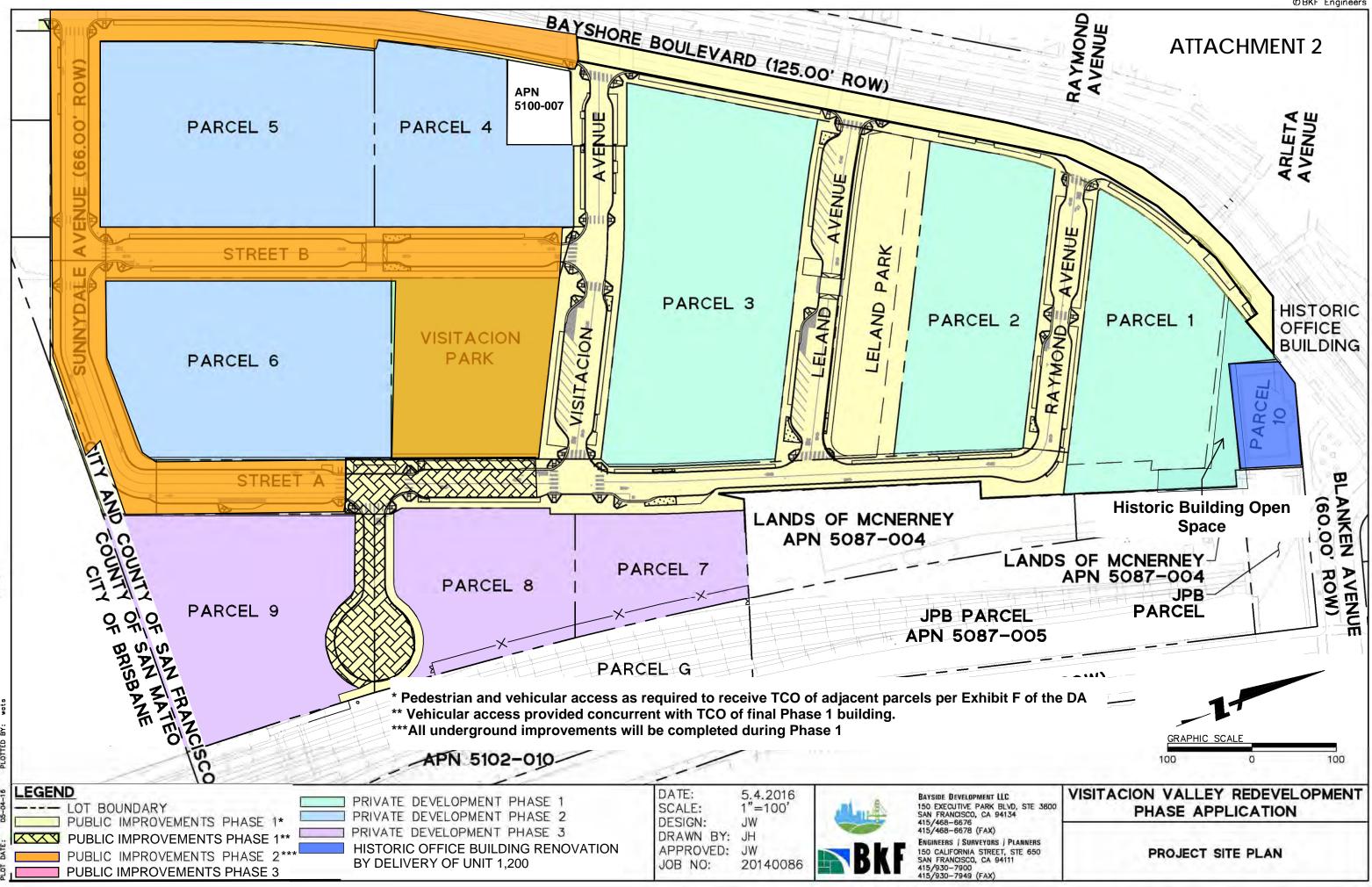
# http://www.sf-planning.org/modules/showdocument.aspx?documentid=533

- Noticing: "After Planning Department staff review of the Phase Application and no less than thirty (30) days prior to Planning Director, or Planning Commission, action on an application, notice of the application and of a post-application meeting will be mailed..."

See section 312: <u>http://www.sf-planning.org/modules/showdocument.aspx?documentid=8675</u>

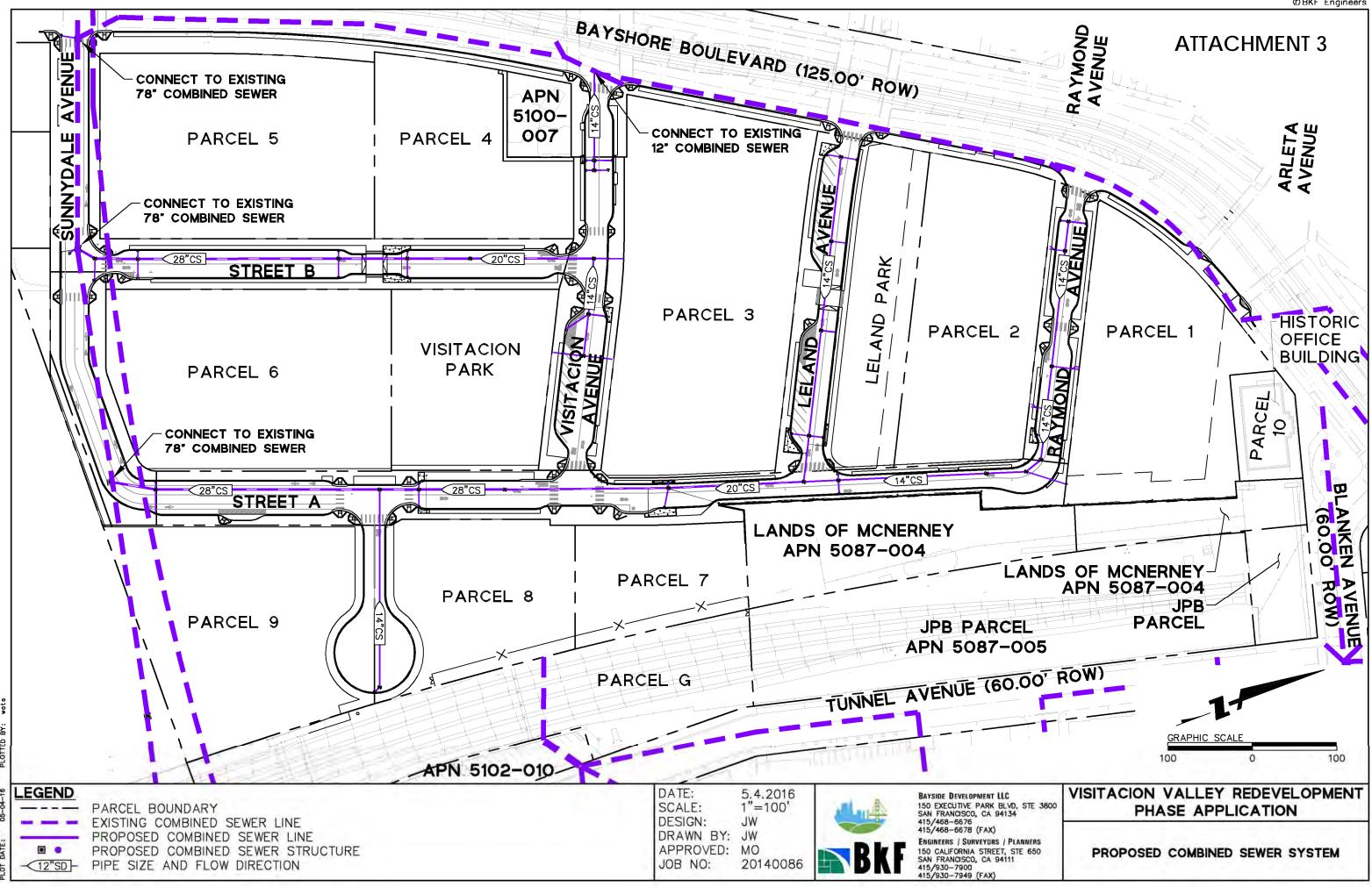
# Affidavit: http://www.sf-planning.org/modules/showdocument.aspx?documentid=8699

- Post-Application Meeting is hosted by Planning Department within 15 days from the initiation of the 30 day public review period but developer must attend.

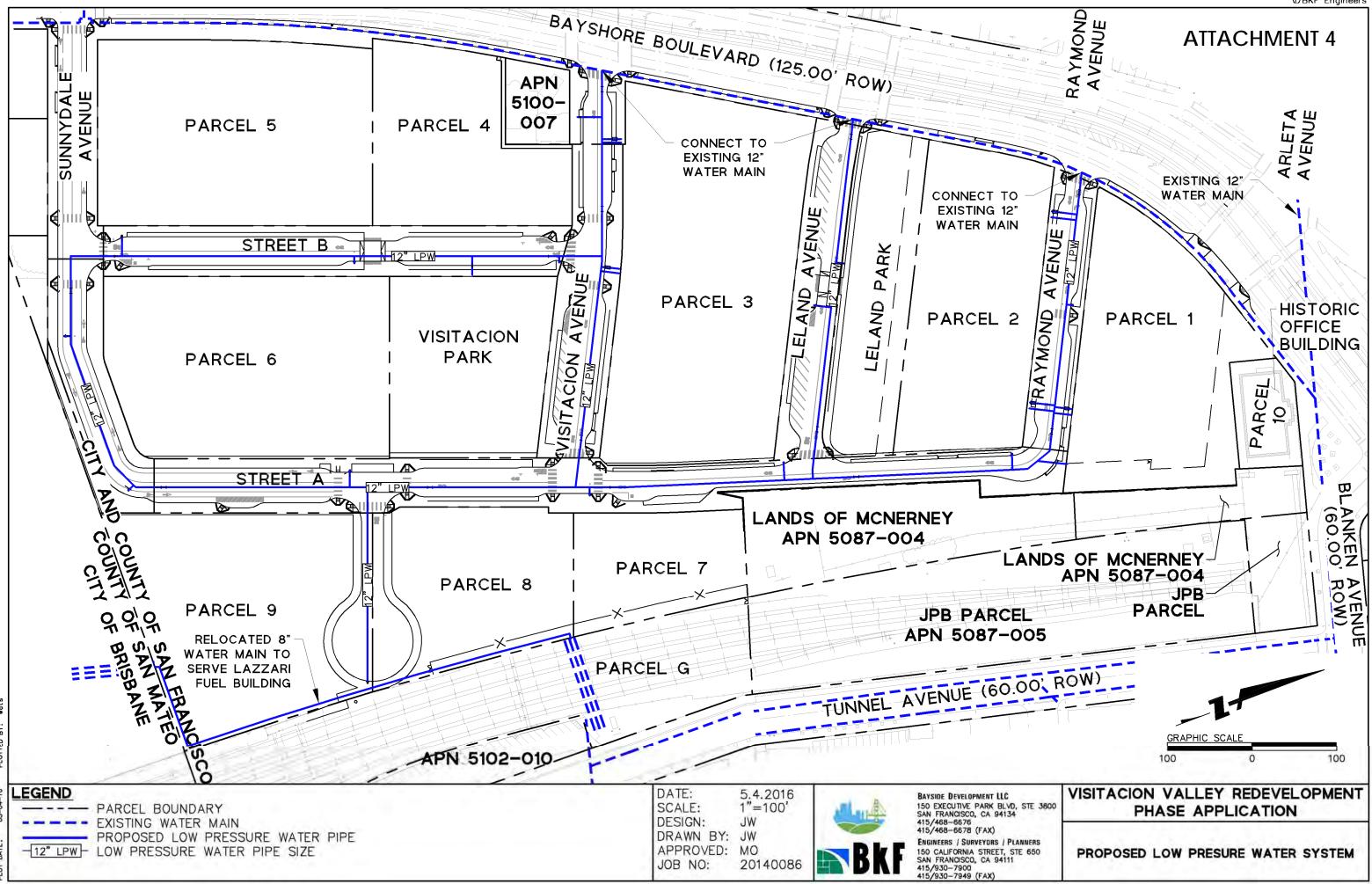


6\ENG\PH

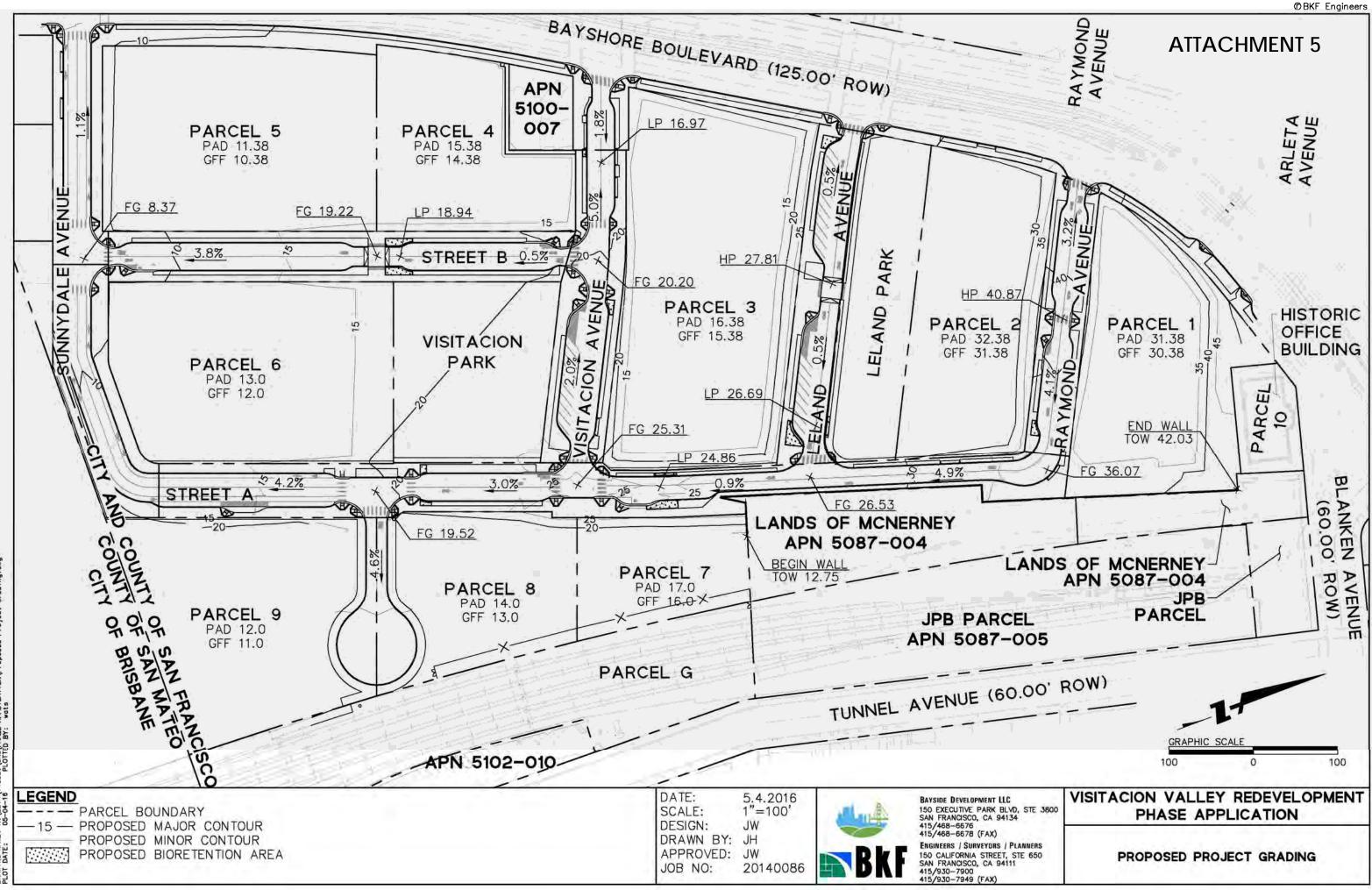




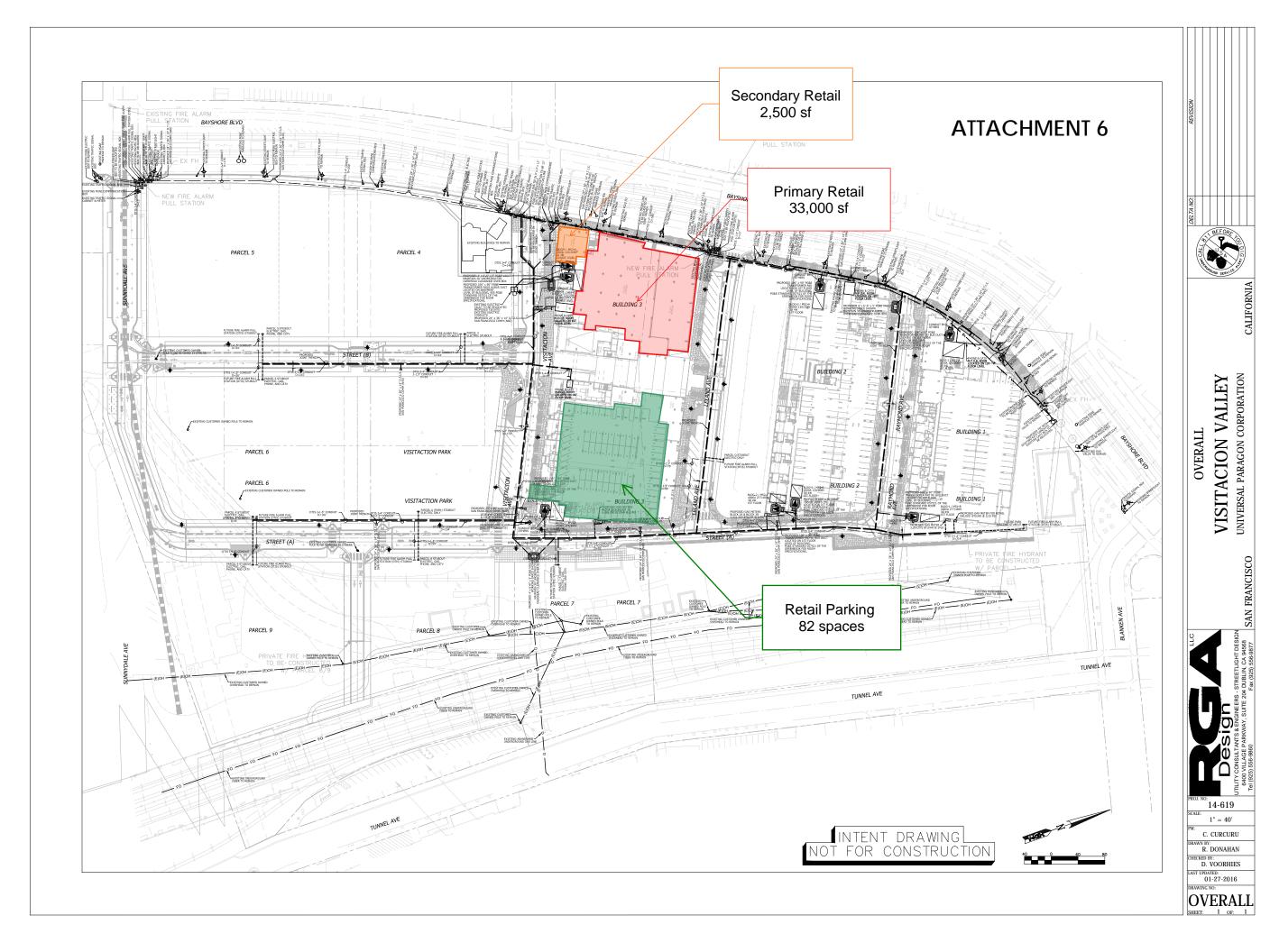


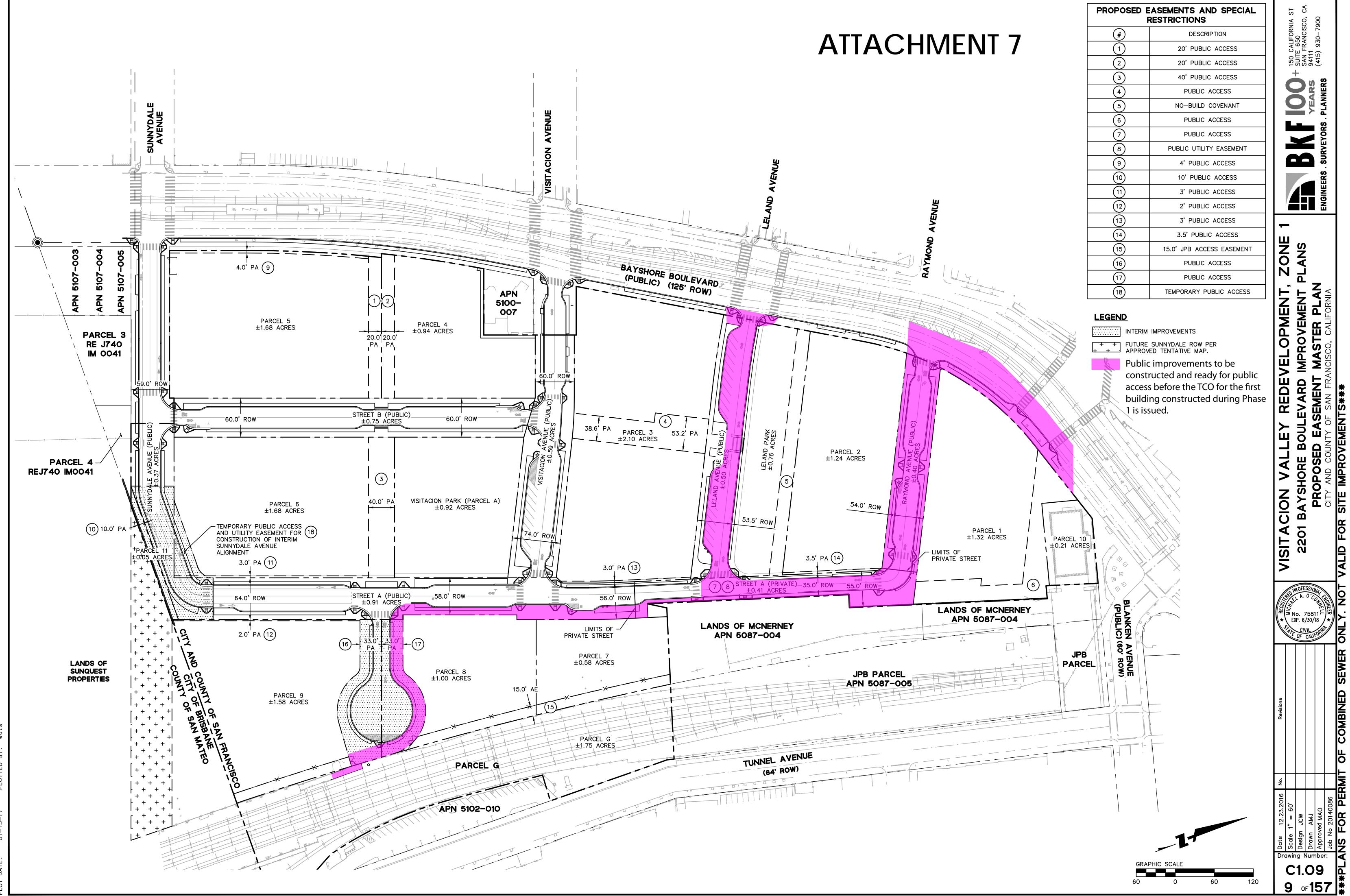


BLOTTED AN PLOT



PLOTTED BY: DA PLOT





DRAWING NAME: K:\2014\140086\ENG\CD\Public Streets\Plotted Sheets\C1.09 PROPOSED EASEMENT MASTER PLAN.c PLOT DATE: 01-13-17 PLOTTED BY: wats © BKF Engineers



Date:August 31, 2015To:Doug Vu, SF Planning DepartmentFrom:Marcial Chao, John ColeRE;Visitacion Valley Schlage Lock Phase-1

As requested following our meeting with you and David Winslow on August 6, 2015, below are specific questions regarding Phase-1 (Parcels 1-3, Blocks 1-6) of the Schlage Lock site totaling approximately 574 units. Parcel 1 is approximately 143 units, Parcel 2 is approximately 160 units, Parcel 3 approximately 265 units. We understand that a full design review by the Planning Department will take place at the time the Site Permit is submitted. In preparation for that submittal, the development team is requesting clarification of specific D4D guidelines as outlined below.

MBH Architects is responsible for the design of Parcel 1 (Blocks 5&6) and Parcel 2 (Blocks 3&4). Pyatok Architects is responsible for the design of Parcel 3 (Blocks 1&2). All the buildings have been designed to closely align with Development Standards and to meet the intent of Design for Development (D4D) Guidelines. Please note that the Development Team has requested that the blocks be re-named to be consistent with the anticipated north to south construction sequence. Blocks 5&6 become Parcel 1, Blocks 3&4 become Parcel 2 and Blocks 1&2 become Parcel 3. We reference both numbering systems for the purpose of this memo.

## 1) Setbacks at Upper Floors

The proposed upper floor setbacks are arranged in a manner that differs from the recommended locations in the D4D (page 45 Figure 2-6). In general we have arranged upper floor step backs to reinforce the stepped massing on Bayshore and to reinforce the stepping of the mass with the prevailing slope. Refer to attached diagram comparing proposed setbacks with those indicated in Figure 2-6 of the D4D.

- 1) Parcel 1 (Blocks 5&6): The proposed design steps back significantly on the south side with 5 stories along Raymond Street and 5 stories along the north side, complying with the establish height limits of 5 stories/57 feet as shown on Figure 2-3 (page 39). This parcel has the most significant cross slope of any of the parcels and is therefore required to step down a full story along Raymond Avenue. The proposed design includes a full height 5' setback from the northern property line. This setback provides additional separation at the Old Office Building and reduces the scale and shadow impacts on the adjacent open space. In lieu of the 8 foot minimum upper floor setback indicated on the northern frontage in Figure 2-6 (page 45), can a full story setback along the southern side (Raymond Street) be credited towards the upper floor setback requirements? This upper floor setback on the southern side reinforces the intent of the setback requirements as outlined on item 3 page 43 "In absence of other guidelines, setbacks shall be arranged to reinforce the stepping of the building mass with the prevailing slope consistent with the pattern of hillside developments in San Francisco".
- 2) Parcel 3 (Blocks 1&2): This building is comprised of two blocks (Block A and Block B) and will be permitted and constructed as one building. Setbacks for both Blocks are oriented towards Leland Greenway as indicated on Figure 2-6. Setbacks are also concentrated towards Visitacion Ave and Visitacion Park rather than along the pedestrian passage to reduce the building scale on the park. Combination of single story and double story upper floor setbacks are proposed on both Blocks,

however, the majority of double story setbacks are located on Block-B in order to create variety between the two blocks , which meets the intent of the D4D (items 2, 3, 4, 12 page 50).

- a) The proposed percentage of upper floor step backs for Block-A complies with the 15% required, however Block-B is below the 15% required. If we combine the overall step back areas for both Block-A and Block-B we comply with the 15% required, including the 10% deviation as allowed by Section 249.459(e)(9)(B) Table 2. <u>Are we allowed to combine upper floor setback areas for both Block-A and Block-B towards the overall 15% requirement?</u>
- 3) Bedroom bays at Setbacks: At Parcel 3 (Blocks 1&2) we are proposing single story bays projecting into the two story upper floor set back areas as a means of creating building façade articulation as required in the D4D (page 42 item 2) and variety of roof form (per the intent of the D4D page 51) overlooking the park. The D4D allows projections into setback areas (item 5 page 46). Also bay projections are permitted into (over) required private and/or common open space (item 5 page 52). Following the established precedents listed above, bay projections allowed into ground floor setback areas and common open space areas, we would like to be able to count the area directly beneath these bay projections towards our required 15% upper floor setback areas. (See Exhibit B-DDSK1.18)
- 4) Page 42, item 3 of the D4D states the following regarding upper floor setbacks: *"The minimum depth of setbacks shall be 8-feet."* Where is the minimum depth dimension taken from? From the face of building or from the property line?
- 5) Additional setback areas: The massing of the buildings at Parcel 3(Blocks 1&2) is orthogonal, whereas in some locations the property lines are non-orthogonal. This results in irregular shaped setback areas between the building wall and the property line. The resulting setbacks contribute to both reduction in shadowing and a reduction in the perceive scale of the buildings as viewed from street level. Where these additional setback areas exceed 8 feet as measured from the property line, can they be considered as contributing towards meeting the standards for upper floor setbacks?

# 2) Ground Floor Uses

Ground floor uses are consistent with D4D requirements (Figure 2.2 page 37) with the exception of the Raymond frontage at Parcel 1 (Blocks 5&6) where the Development Team is recommending commercial space in lieu of residential frontage along the southwest side fronting Raymond Street. This location is highly visible from the Muni stop and the ground floor offers direct on-grade access at the corner of Raymond and Bayshore. Is the proposed Retail frontage at Parcel 1 (Blocks 5&6) acceptable?

# 3) Residential entries at Streets

The D4D requires residential entries be spaced at an average of every 25 feet on center (measured to the centerline of the entrance/stoop).

At Parcel 3 (Blocks 1&2) Block-B, the spacing between ground floor liner unit entries is about 31-feet. At Parcels 1 and 2 the average spacing is about 31-feet. Strict compliance with this standard is difficult due to site constraints and to the limit on the total number of stories. A 25-foot wide unit works if the depth is at least 30-feet, or in cases where it is possible to make a two story multistory unit. At Parcel 3 the depth of the liner units are limited by the internal parking and layout of retail spaces. At all parcels we are prevented from creating an additional story within the available

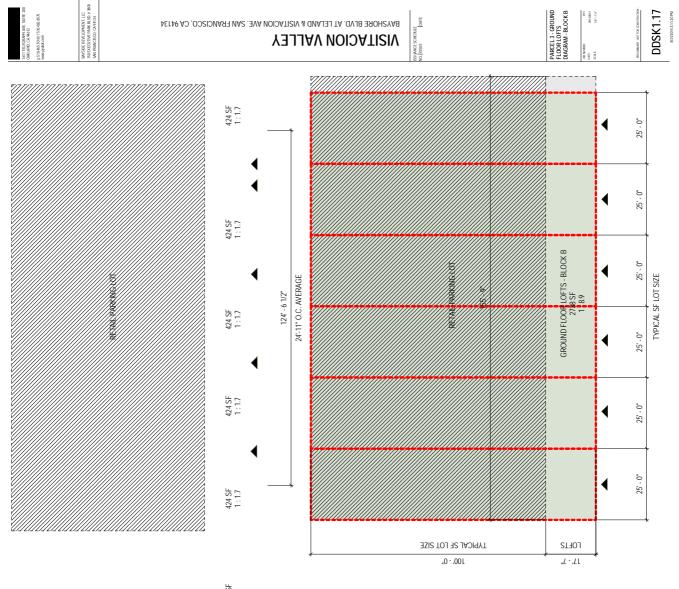
volume due to limit of number of stories by the D4D (Figure 2-3 page 39). Section 249.45(e)(9)(B) Table 2 provides for a 10% dimensional deviation for Ground Floor Entrances, however, the spacing of the residential entries (at 31-ft) is beyond this 10% deviation by 3.5-ft. <u>Will this trigger a "Major Modification" requiring Planning Commission approval? (See Exhibit C- DDSK1.19)</u>

- If we measure the length of the residential frontage and divide by number of residential entrances we can achieve an average o.c. dimesion that is whithin the 10% allowable deviation. <u>Are we</u> <u>allowed to calculate the residential entry spacing using this averaging method?</u> (See Exhibit A-<u>DDSK1.17</u>)
- 3) If we narrow the width of the liner units to locate residential unit entry spacing within 25-ft, we would need to create a multistory unit (Townhome). This would create 7 stories on the South portion of Block-B (Block 2) facing Visitation Park. Even though the overall building height is still compliant (under 68-ft) we would exceed the allowable number of stories (6-stories) by 1 story. Section 249.45(e)(9)(B) Table 2 does not list number of stories as a "Major Modification" and Section 249.45(e)(9)(A) only addresses building height, not number of stories. Will exceeding the number of stories be considered a "Minor Modification"?

Please contact either Marcial Chao at Pyatok or John Cole at MBH if you have any questions regarding these items.

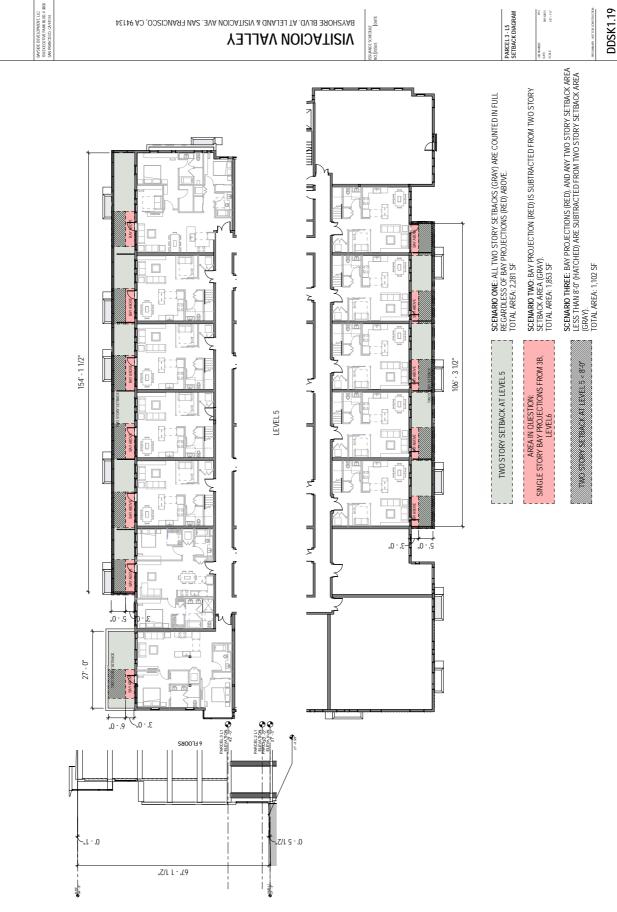
Thanks for assistance

Marcial Chao, Pyatok, 510 465 7010 x120 John Cole, MBH, 510-814-3460



TYPICAL STUDIO (S1.1) : 569 SF

16111ELEGARM ANE SUITE 200 OKKAND, CA9462 P\$1046370011530463555 WWW.Pp466200	Wester ENEL CHARLOWER LLC BOLOGITIME MARK NO. J BOD MARK NO. J BOD MARK NO. J BOD	Y ICION AVE. SAN FRANCISCO, CA 94134	<b>JJJAV N</b>			ISSUMMCE SCHEIDULE NO. ISSUE				PARCEL 3 - SETBACK DIAGRAM	100 NUMBOR: N15 DATE 00140015 SOME 1*40 0*	TO THE PART OF THE	DDSK1.18
		A MD ANY AND ANY AND 3-0' IS BACK AREA.	PROVIDED	5,176SF (16% OF LEVEL 4)	782 SF (15% OF TOTAL SETBACK)				9 SF (10% OF LEVEL 4)	1,102 SF (51% OF TOTAL SETBACK)	7 SF (49%)	6,638 SF (10%) 33% DEVIATION	
SCENARIO THREE		SCENARIO THREE: BAY PROJECTIONS, AND ANY TWO STORY SETBACK AREA LESS THAN 8-0" IS SUBTRACTED FORM TWO STORY SETBACK AREA.	REQUIRED	4,789 SF (15% OF LEVEL 4)	(33% OF TOTAL SETBACK)	3,209 SF 4,39		-	5,203 SF 3,319 SF (15% OF LEVEL 4)	1,717 SF 1,10 (33% OF TOTAL SETBACK)	3,486 SF 2,217 SF	992 SF 6.63 9,992 SF 6.63 33% DE'	
	BILOCK A	SC III	BLOCK A LEVEL 4 - 31,927 SF	TOTAL SETBACK	TWO STORY SETBACK	ONE STORY SETBACK	BLOCK B LEVEL 4 - 34,687 SF	-	TOTAL SETBACK	TWO STORY SETBACK	ONE STORY SETBACK	PARCEL THREE TOTAL (67,435 SF)	
				(16% OF LEVEL 4)	(15% OF TOTAL SETBACK)	(85%)			(13% OF LEVEL 4)	(46% OF TOTAL SETBACK)	(49%)	N (12%)	
		ION IS SUBTRAC	PROVIDED	5,176SF	782 SF	4,394 SF		PROVIDED	4,070 SF	1,853 SF	2,217 SF	8,140 SF 19% DEVIATION	
SCENARIO TWO		FROM TWO STORY SETBACK AREA (GREEN)	REOUIRED	4,789 SF (15% OF LEVEL 4)	1,580 SF (33% OF TOTAL SETBACK)	3,209 SF		REOUIRED	5,203 SF (15% OF LEVEL 4)	1,717 SF (33% OF TOTAL SETBACK)	3,486 SF	9,992 SF	
			BLOCK A LEVEL 4 - 31,927 SF	TOTAL SETBACK	TWO STORY SETBACK	ONE STORY SETBACK	BLOCK B LEVEL 4 - 34,687 SF		TOTAL SETBACK	TWO STORY SETBACK	ONE STORY SETBACK	PARCEL THREE TOTAL (67,435 SF)	
		EN ARE		(16% OF LEVEL 4)	(15% OF TOTAL SETBACK)	(85%)			(13% OF LEVEL 4)	(51% OF TOTAL SETBACK)	(49%)	(14%)	
		SETBACKS (GRI BOVE.	PROVIDED	5,176SF	782 SF (15	4,394 SF		PROVIDED	4,498 SF	2,281 SF (	2,217 SF	9,674 SF WITHIN 10% DEVIATION	
SCENARIO ONE		SCENARIO ONE: ALL TWO STORY SETBACKS (GREEN) ARE COUNTED IN FULL AT LEVELS S&6 RECARDLESS OF BAY PROJECTIONS ABOVE.	REOUIRED	4,789 SF (15% OF LEVEL 4)	1,580 SF (33% OF TOTAL SETBACK)	3,209 SF		REQUIRED	5,203 SF (15% OF LEVEL 4)	1,717 SF (33% OF TOTAL SETBACK)	3,486 SF	9,992 SF WITH	
	BLOCK A	SCENA	BLOCK A LEVEL 4 - 31,927 SF	TOTAL SETBACK	TWO STORY SETBACK	ONE STORY SETBACK	BLOCK B LEVEL 4 - 34,687 SF	-	TOTAL SETBACK	TWO STORY SETBACK	ONE STORY SETBACK	PARCEL THREE TOTAL (67,435 SF)	



N15 00142015 16r = T-0r

BAYSHORE BLVD. AT LELAND & VISITACION AVE. SAN FRANCISCO, CA 94134

10.455.7010 | 15.10.465.85.75 w.pyatok.com

D4D and Plan	Planning Code Comparison Summary					
elopment Contro	Development Controls & Design Guidelines	Proposed Project	Explanation of Change	Complies (Y/N)	Reference	Comments
Development Controls						
Retail Frontage Required:	Ground floor retail is required as shown on Figure 2-2.	Complies		≻	D4D, P.36, Figure 2-2	
Flex Frontage Required:	Flexibility designed frontage that can allow for retail, but also be used for small business, office, artisan, and design workplaces. If not feasible, active residential frontage is required, as shown on Figure 2-2.	Complies		≻	D4D, P.36, Figure 2-2	
Stoop/ Individual Frontage Required:	Walk-up residential units with individual entrances, elaborated with stoops, exterior stairs and landings that project beyond facades to provide access to ground floor units, are required along the public right-of-way as shown on Figure 2-2. Where the change in grade above street level, individual entrances are not required, abut other design strategies should be used to accomplish active frontage.	Block 2 loft frontage about 25' to stoop recess.	Block 2 - narrow lofts with increased exposure	z	D4D, P.36, Figure 2-2	
Multi-unit Residential Frontage Required	Multi-unit residential entries or other entrances to other ground floor uses are required every 100 feet along the public R.O.W.	Flex space shown at Block 2 along Leland Ave. N/A		A/N	D4D, P.36, Figure 2-2	
Green Wall Frontage Required:	Green facades and living walls shall be required per Figure 2-2.	Complies		≻	D4D, P.36, Figure 2-2	Applies to east facade of block 2
Design Guidelines						
1. Locally owned and small businesses:	Project Sponsor to make good faith effort to attract locally owned and small businesses. Retail C and Flex spaces should be 5,000 SF or less in size.	Complies		≻	D4D, P.36	Block 1: Grocery Store Exempt Block 3: 4,896 SF Retail Block 5: 1,577 SF Retail
<ol> <li>Retail and Flex frontage depth:</li> </ol>	Required retail frontage should be designed to typical retail depth of 30-60 feet. Flex frontages should be designed to be a minimum depth of 20 feet	Block 1: Large grocery store Block 2: 22 ft deep flex		≻	D4D, P.38	
BUILDING FORM						
BUILDING HEIGHT	Defined, measured and regulated as provided in Planning Code Sections 102.12 and 260 where applicable; Where in conflict, the Special Use District measurement method takes precedent over Planning Codes.	See below	See below		D4D, P38; Planning Code Sections 102.12 and 260	SF Planning Code Sec. 249.45(e)(6)(B)i
<b>Development Controls</b>						
1. Maximum Building Heights:	Max building height per Height Zone Diagram, Fig. 2-3	T Block 1: Additional projections shown for architectural variation. Cooling tower height exceeds max allowed mechanical height F by 6: Block 2: top of flat roof by 6: Block 2: top of flat roof veceeds max height by 3- 3/4". Additional projections for architectural variation also exceed maximum. Cooling tower n height exceeds max allowed over mechanical height by 6"	This requirement is in conflict with Roof Design peulopment Controls and Design guidelines that encourage a variety of forms. Furthermore, the exception for Mechanical Equipment in Section 260 only allows for 10 feet for cooling towers on Block 5&6, versus 16 feet for other blocks. Our cooling towers on Block 5&6, versus the feet for other blocks. Our are y efficient cooling towers which are 16 feet tall for all blocks.	z	D4D, P.40; Planning Code Sections 102.12 and 26	ATTACH
<ol> <li>Ground Floor and Upper Story Height</li> </ol>	Ground floor spaces shall have a minimum floor-to-floor height of 15 feet for commercial spaces and 12 feet for residential spaces, as measured from grade. Upper stories shall have a minimum floor-to-floor height of 10 feet.	Complies		≻	D4D, P.40	

D4D and Planning Co	D4D and Planning Code Comparison Summary					
8/3/2015						
Development Contr	Development Controls & Design Guidelines	Proposed Project	Explanation of Change	Complies (Y/N)	Reference	Comments
3. Exceptions	In addition to exceptions listed in the Planning Code section 260(b), the following shall also be exempt from the height limits:	Does not comply	These exceptions do not fully accommodate Roof Design Development Controls and Design guidelines that encourage a variety of forms.	z	D4D, P.40	
	The corner portion of occupied space on the northeastern corner of Leland Avenue and Bayshore Boulevard may extend up to ten feet above the maximum height	See above	This additional height is proposed (a) the Northwestern corner of on (b) the Northwestern corner of on (c) the intersection of Bayshore and Leland Avenue). It seems more appropriate to mark this corner since it is the most public building; which contains a grocery store and faces Leland Park.	z	D4D, P.40	
<b>Design Guidelines</b>						
1. Rooflines	Building Heights and roof lines should be varied within the same height district and across blocks through setbacks and other design features.	See drawings	This guideline is potentially in conflict with the Development Controls Listed Above, variation of roof lines is encouraged, but Development Controls and Planning Code Section 260 do not accommodate variation.	≻	D4D, P.40	
DENSITY	Max 1,679 units total for Phase 1+ Phase 2	Parcel 3 = 264 units	Complies	≻	D4D, P.40	
MASSING					D4D, P.40	
<b>Development Controls</b>	0					
<ol> <li>Massing Breaks or Change in Apparent Face</li> </ol>	No building may exceed a maximum continuous length of 100 feet without a massing break or change in apparent face	See drawings	Average distance between massing breaks is less than 100 feet, however in a few cases, due to residential unit plan modules/ increments and how they coincide with ground floor retail, common or residential units, distance between massing breaks exceed 100 feet (Mithin 10%, variation)	z	040 P 40	
	A. Min. 10 ft wide at-grade passageway through the building that extends from the ground plane for a minimum 25 feet above grade or to the ground floor of the third story, in combination with a recess or notch (min. 8 ft deep x 10 ft wide) that extends to the sky	See drawings	Width and/or depth of notches vary slightly due to plan design constraints, I.E. typical bedroom dimensions and/or structural grid consistency.		D4D, P.42	
	B. A minimum 8 ft. deep by 10 ft. wide notch that starts at grade and extends up to the sky, in combination with a major change in fenestration, pattern, color and/ or material; or		Width and/or depth of notches vary slightly due to plan design constraints. Also, not all notches extend fully to grade due to conflicts between non-stacking uses: i.e. some parking spaces in garage are compromised when continuing notches down from unit plans above, therefore it is more feasible to stop notch at the podium level.		D4D, P.42	AIIA
	C. A minimum 10 ft. deep by 12 ft. wide noted that extends up to the sky from a level not higher than 25 feet above grade or the floor plane of the third story, whichever is lower; in combination with a major change in fenestration, pattern, color and/or material.	See drawings	Width and/or depth of notches vary slightly due to plan design straints; I.E. typical bedroom dimensions and/or structural grid consistency.		D4D, P.42	(CHM
						/16

D4D and Planning Co	Planning Code Comparison Summary					
8/3/2015						
Development Controls	ols & Design Guidelines	Proposed Project	Explanation of Change	Complies (Y/N)	Reference	Comments
<ol> <li>Design Features at intervals of 20-30 feet.</li> </ol>	Building Facades shall incorporate design features at intervals of 20-30 feet that reduce the apparent visual scale of a building. Such features may include but are not limited to window bays, porches/decks, setbacks and changes to facade color and building material, etc.	See drawings	Intervals at bays and other features vary between 24-36 feet.	×	D4D, P.42	
3. Upper Floor Setbacks	The floor plate of upper floors of buildings shall have setbacks equal to a minimum of 15% of the area of the floor plate immediately belowAt least one-third (1/3) of the required setback area shall be a full two stories in height.	See drawings			D4D, P.42	Blocks 5&6 do not comply with the two- story setback.
	Minimum 8 feet depth and 12 feet wide.				D4D, P.42	
	Setbacks shall be arranged in a manner that addresses massing and articulation guidelines in set forth in Figure 2-6, Required Setbacks.	Setbacks have been relocated to step with the slope of the site, reflecting the underlying topography, per design guidelines below.	D Buildings meet the total required 1-2 story setbacks. the setbacks have been redistributed to enhance the park adjacency at Block 2 and the boulevard adjacency at Block 1		D4D, p. 45, Figure 2-6	The Required Setback Figure 2-6 (p. 45 of D4D) is a called a "massing and articulation guideline", and as a guideline, it would imply some flexibility.
Design Guidelines						
1. Roof Line	Residential building facades over 50 ft in length should provide roof line modulations of at least 2 feet to provide human scale rhythm to the buildings.	Complies		≻	D4D, p. 44	
2. Building Mass Sculpting	Building mass should be sculpted to define important public spaces, key intersections and corners, such as Leland Avenue and Bayshore Boulevard	Complies		≻	D4D, p. 44	
3. Building Massing Variation	Building massing should reinforce the visual interest and variation of frontages along Leland and Bayshore	Complies		≻	D4D, p. 44	
4. Architectural Expression	Each building within the project should have a unique architectural expression	Complies		≻	D4D, p. 44	
<ol><li>Stepping with slope of site</li></ol>	Building Massing should step with slope of the site to reflect the underlying topography, establishing a regular interval for facade features and roof lines.	Complies		≻	D4D, p. 44	
SETBACKS						
<b>Development Controls</b>						
1. Building Line	Buildings shall line all required streets and pedestrian ways (see Figure 2-2)	Complies		≻	D4D, p. 46; Figure 2-2	
2. Property Line condition @ Bayshore and Leland	Buildings shall be built to the property line (back of sidewalk) along Bayshore Boulevard and along the commercial frontages of Leland Avenue	Storefronts/ facades are setback between 5-10 feet in some areas along Bayshore and Leland as a way to address irregular site conditions and to provide additional sidewalk area.	Setbacks were incorporated to accommodate architectural variation and grade changes. Furthermore, is service, lobby and retail doors must be setback from property line in order to accommodate door swings, which are not permitted to swing over property lines.	z	D4D, p. 46	A
3. Other Setbacks	In all other areas, setbacks may range from zero to eight (0-8) feet. The setback shall be consistent along major building Bays.	Complies		≻	D4D, p. 46	
4. Projections or obstructions	Projections or obstructions into the setback are allowed per Section 136 and 136.2 of the Planning Code	Proposed bays meet allowable depth per code, but in some cases exceed allowable width for a rectangular bay. See drawings (plans)	The bay standard is not flexible, and does not allow for architectural variation if followed strictly. The width deviations are minor and do not exceed the total allowable bay projections along a facade.		D4D, p. 46	Bays and balconies do not meet standards exactly.
6. Landscape @ setbacks	Ground floor front setback areas shall include a minimum of 40% softscape, which can contribute to the 50% requirement of permeable surfaces	TBD			D4D, p. 46	EIN
Design Guidelines						

				Complies		
ls & Desiç	Development Controls & Design Guidelines	Proposed Project	Explanation of Change	(Y/N)	Reference	Comments
All setbach provide ele building wi stoops, ter units	All setback areas along residential buildings should provide elements that enhance the interface of the building with the public realm including front porches, stoops, terraces, and/or landscaping for ground floor units	TBD			D4D, p. 46	
Setback a the street public to	Setback areas should allow for visual access between the street and entrance and establish a transition from public to private space.	Complies		≻	D4D, p. 46	
Setbacks corner er	Setbacks may also be used to enhance retail and comer entries	Complies		≻	D4D, p. 46	
04   040	Inchated Aug and Databare Blue All					
entrance entrance frontage service	sum be located of Leanu Ave. and baryone bive. An retail and flex usesmust have at least one primary frontage on those streets, with the exception of a full- service grocery store @ Block 1.	Complies	Entries average every 60 feet within 10% variation.	≻	D4D. p. 46	
Storefront: 20-30 feet the street.	Storefronts shall be articulated at regular increments of 20-30 feet to express a consistent vertical rhythm along the street.	TBD			D4D. p. 46	
All retail levelat more the by a ram in width.	All retail entries must be as near as feasible to sidewalk levelat sloping conditions, retail entries may be no more than 2 feet above grade, provided they are served by a ramp or other accessible route no less than 45 feet in width.	Complies		≻	D4D. p. 46	
Shoul entrie	Should have a primary entrance at corners. Multiple entries are recommended for large retail	Complies		≻	D4D. p. 48	
Shoul transi	Should be designed to create transparency and create transition between public and private space	Complies		≻	D4D. p. 48	
Shou Plann	Should be used to accentuate retail entries, subject to Planning Code Sec. 136.	TBD			D4D. p. 48	
genei outdo attrac	generating activity of the street, such as seating ledges, outdoor seating, outdoor displays of wares, and attractive signage are encouraged.	TBD			D4D. p. 48	
Shou resid doorv etc.	Should be easily identifiable and distinguishable from residential entrances through the use of recessed doorways, awnings, transparencies, alternate paving, etc.	TBD			D4D. p. 48	
						F
						<b>\</b>
Shoul	Should be accessible from the public R.O.W.	Complies		≻	D4D. p. 48	IA
Shall   public match	Shall have an average of one entrance on the street or public R.O.W. for every 25 feet of building facade to match the traditional SF residential lot pattern.	Entrances into loft units exceed of the 25 foot average intervals. Entry doors are roughly 38 feet on center average. The distance between entry stoop recesses is about 13. 25', the recess itself is about 13'.	Unit plan configurations and grade changes around the perimeter of each building make this requirement challenging. Block 2 flex entries will be developed to accomodate user. Block 2 loft entries are set further apart in response to the shallow unit depth.		D4D. p. 48	CHMEN

8/3/2015 Development Contro						
Development Contro						
	Development Controls & Design Guidelines	Proposed Project	Explanation of Change	Complies (Y/N)	Reference	Comments
<ol> <li>Multi-unit residential podium buildings</li> </ol>	There shall be a min. of one entry per 100 linear feet of street frontage	Complies			D4D. p. 48	An entrance every 100 feet would cause too many interruptions in other ground level uses such as retail, flex, common and service spaces; and grade changes around the perimeter of each building make this requirement challenging.
4. Stoops	Where provided, stoops and stairs shall have a minimum width of 4 feet.	Complies		≻	D4D. p. 48	
5. Floor elevation	Floor elevation of ground level units shall be located 3-5 feet above street level to provide privacy. Specific elevations will vary according to grade.	Entrances into ground level units vary between 1.5 to 5.5 feet above grade.	3 feet min. to 5 feet max. does not provide enough flexibility to negotiate adjacent grades/ slopes.		D4D. p. 48	
6. Subgrade entries	Are prohibited	Complies		≻	D4D. p. 48	
<b>Design Guidelines</b>						
<ol> <li>Ground Floor Residential Design Guidelines</li> </ol>	All residential buildings should follow the Planning Department's Ground Floor Residential Design Guidelines	TBD			D4D. p. 48	
2. Lobby connection	Residential units in podium buildings should connect to a lobby entry that opens directly onto a public R.O.W. at grade or via ramp, etc.	Complies		≻	D4D. p. 48	
<ol><li>Courtyard entries</li></ol>	Multiple entries into courtyards are encouraged.	Complies		≻	D4D. p. 48	
FACADE DESIGN						
<b>Development Controls</b>						
1. Blank and blind walls		Complies		~	D4D. p. 49	
<ol> <li>Physically intimidating security measures</li> </ol>	Such as window grills or spiked gates are not permitted; security concerns shall be addressed by creating well- lit, well used and active frontages that encourage "eyes on the street."	Complies		~	D4D. p. 49	
<ol> <li>Utilities, storage and refuse collection</li> </ol>	Shall not be located on Leland Avenue and shall be integrated into the overall articulation and fenestration of the building facade.	Complies		≻	D4D. p. 49	
<b>Design Guidelines</b>						
3. Architectural Concepts and designers	Should vary between buildings. Buildings may share common architectural materials and elements across portions of their facades, but the overall combination of components, form and material should vary. Due to thier unique configuration.	Complies			D4D. p. 50	ATT
<b>ROOF DESIGN</b>						4(
<b>Development Controls</b>						C
1. Variety	A variety of expressive and interesting roof forms shall be used to contribute to the overall character of the development	Complies	This is potentially in conflict with Height Development Controls (above)	~	D4D. p. 51	ΗM
Design Guidelines						E
1. Green technologies	Roof design should attractively incorporate and integrate green roofing technologies.	Complies	See above	≻	D4D. p. 51	NT

Visitacion Valley Phase 1 - Parcel 3	se 1 - Parcel 3					
D4D and Plan	and Planning Code Comparison Summary					
8/3/2015						
Development Contro	Development Controls & Design Guidelines	Proposed Project	Explanation of Change	Complies (Y/N)	Reference	Comments
<ol> <li>Sloping and pitched roof forms</li> </ol>	Such as sawtooth, gable, hip, mansard, pyramidal and other roofs are encouraged to be used as accent to create interest atop prominent or special buildings	Complies	See above	≻	D4D. p. 51	
<ol> <li>Shaped parapets, cornice and roof overhangs</li> </ol>		Complies	See above	≻	D4D. p. 51	
4. Roofscape	Strategies to achieve interesting roofscape include vertical accents at corners, varied parapets, roof gardens and trellises	Complies	See above	≻	D4D. p. 51	
that provide v but not limite 5. Architectural features encouraged.	visual interest to building facades, including d to, comer towers, gables and turrets are	Complies	See above	~	D4D. p. 51	
PRIVATE OPEN SPACE						
Development Controls						
1. Open space per unit	Min. 60 SF of usable open space per unit shall be required if provided as private usable open space; or a min. of 50 SF of usable open space per unit if provided as common usable open space.	Complies		≻	D4D. p. 51	
2. Private Open Space		Complies		≻	D4D. p. 51	
3. Common Open Space		Complies		~	D4D. p. 52	
<ol> <li>Community multi- purpose and recreation rooms</li> </ol>	With direct access to other common open space may be provided to fulfill a portion (to a max. of 33%) of the common open space requirement.	Complies		≻	D4D. p. 52	Staff approval needed?
5. Projections		Complies		≻	D4D. p. 52	
<ol><li>Public open spaces and pathways</li></ol>	Required public open spaces illustrated in Figure 2-7 and required public pathways in Figure 2-8 shall not count towards private open spaces.	Complies			D4D. p. 52	
7. Sidewalks and other R.O.W.		Complies		≻	D4D. p. 52	A
8. Plants	No invasive plants	TBD			D4D. p. 52	T
Design Guidelines						<b>A</b> (
1. Visibility	Common open space at ground level should be designed to be visible from the street, using views into the site, tree-lined walkways, or a sequence of design elements to allow visual access into the space.	Complies		≻	D4D. p. 52	CHN
2. Usable soft and hardscape		TBD			D4D. p. 54	ЛE
3. Access	Where common open space is provided, each unit should have access to the open space directly from the building.	Complies		≻	D4D. p. 54	NT
5. Bay Friendly Landscaping		TBD			D4D. p. 54	8

															ATTACHMEN
	Comments														
	Reference	D4D. p. 54	D4D. p. 54										Planning Code Section 134	Planning Code Section 140	
	Complies (Y/N)								≻		≻			~	
	Explanation of Change												This requirement is in conflict with the Visitacion Valley Design For Development Standards. A rear yard on the ground level of a podium building would be infeasible because: 1) dwelling units located at the first level (facing the public R.O.W.) line the podium structure, and the open space cannot be located at grade in a podium building; 2) There is no rearyard in a building; 2) There is no rearyard in building; 2) There is no rearyard in courtages on every side. An exception is requested to count the poblicity accessible/ privately owned passagewarys in the rear yard area, regardless of location and/or floor level.		
	Proposed Project	TBD	TBD	TBD	TBD	TBD			Complies		Complies		No rear yards proposed, open 23,870/91,258= 26%	Complies	
D4D and Planning Code Comparison Summary	Development Controls & Design Guidelines	Maintenance should reduce water usage	Where appropriate, private and common open space areas should collect and utilize rainwater for irrigation.			DEVELOPMENT	TRANSPORTATION, PARKING & LOADING					SF PLANNING CODE (Add'l items not addressed in D4D)	Rear Yards apply to every dwelling in an MUG district. Minimum rear yard shall be equal to 25% of the total depth of the lot rear yards shall be provided at the lowest story containing a dwelling unit. All dwelling units in all use districts shall face onto an open area - one 125 SF room for each unit must face	onto a space 25 feet deep for the first and second levels, and increases 5 feet for every floor above in every direction.	
U4U and Plann	Development Controls	6. Water Usage	7. Rainwater a	LIGHTING	SIGNAGE	SUSTAINABLE SITE DEVELOPMENT	<b>TRANSPORTATION</b> , F	<b>Development Controls</b>		Design Guidelines		SF PLANNING CODE	SEC. 134	PLANNING CODE	

1 2 2 2 2 2 million 1 2 2 2 2 2 million 1 2 2 2 2 million 1 2 2 2 2 2 million 1 2 2 2 2 2 2 million 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
1     12.02.02       1
Present of the second of the s
Description         Description           0.00000000000000000000000000000000000
менуна менуна основания основ
A the constant of the constant
And the second s
Rest         Exercision           Image: Section 100 and 100
Indexes view, Prant 1 TASKLIST TASKLIST IASKLIST Removed oncome o

# Affidavit of Conducting a Pre-Application Meeting. Sign-in Sheet and Issues/Responses submittal

Br	ad Mooney	, do hereby declare as	follows:
1.	I have conducted a Pre-Application M activity prior to submitting any entitle accordance with Planning Commissio	ement (Building Permit, Var	construction, alteration or other iance, Conditional Use, etc.) in
2	The meeting was conducted at 201 L	eland Ave SF CA (Vis Va	alley Library) (location/address)
	on May 30th 2015 (date) from 10am 13	Ken (time).	
3.	I have included the mailing list, meeti response summary, and reduced plan am responsible for the accuracy of thi suspension or revocation of the permi	s with the entitlement Appl is information and that erro	lication, I understand that I
4.	I have prepared these materials in goo	od faith and to the best of m	y ability.
I decl corres	are under penalty of perjury under the la ct.	ws of the State of California	that the foregoing is true and
EXEC	UTED ON THIS DAY, June 2nd	, 2015	IN SAN FRANCISCO.
_	-1-		
Signatur		-	
Bra	d Mooney		
	ype or print)	-	

## Owner

Relationship to Project (#.g. Owner, Agent) (F Agent, give business name & profession)

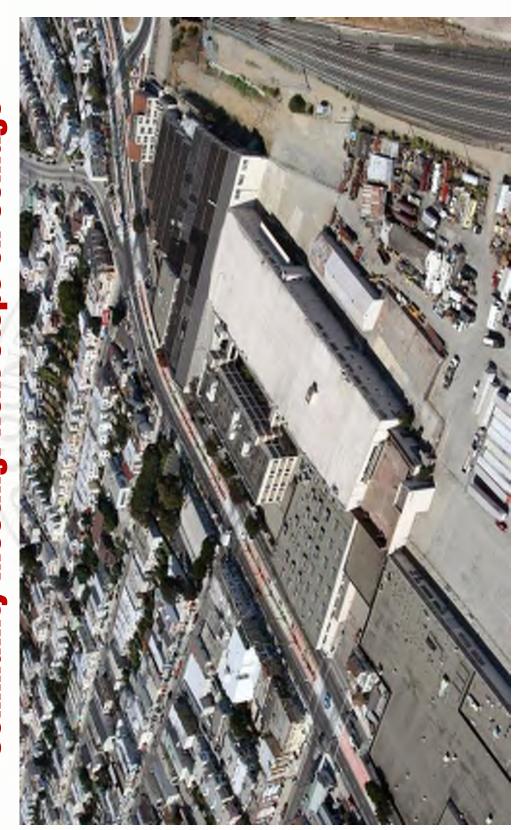
2201 Bayshore Blvd SF CA 94134

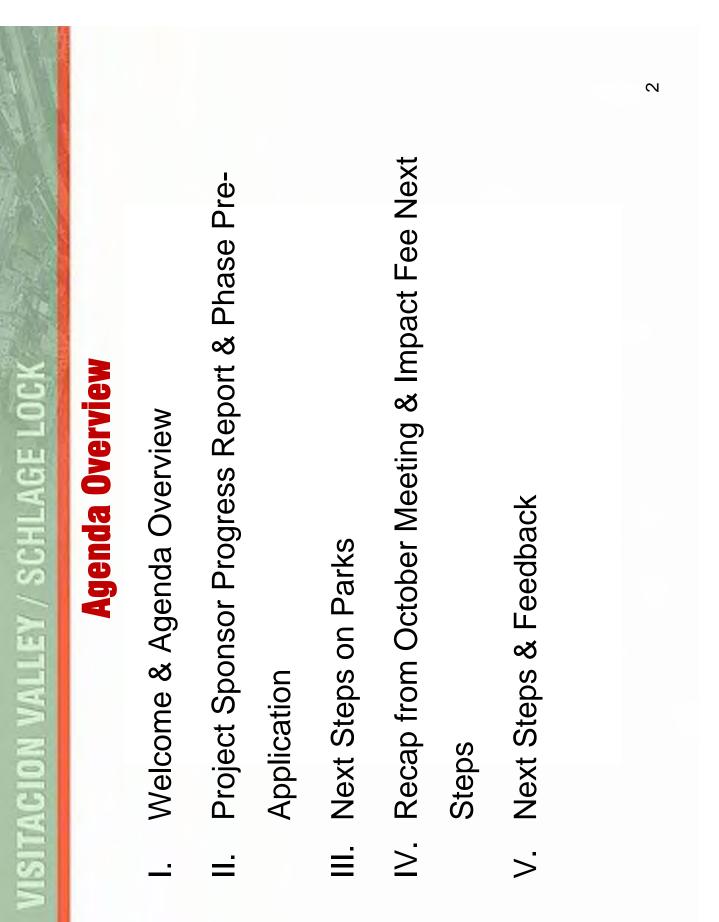
Project Accress

# **VISITACION VALLEY / SCHLAGE LOC**

# May 30, 2015

# **Community Meeting: Next Steps on Schlage** 訪谷區Schlage Lock工廠的重建計劃 Visitacion Valley / Schlage Lock



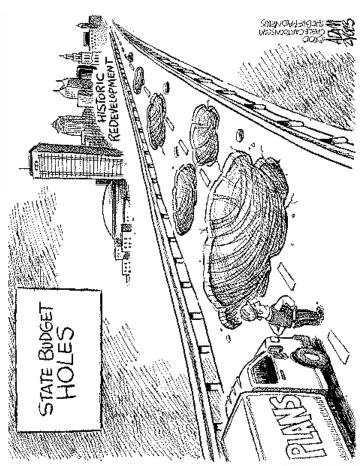




# Background

- 1999 Factory closes; Home Depot opposed
- 2009 Redevelopment Plan adopted
- 2011 Redevelopment Agency & funding loss
- 2012-14 Schlage Lock plans revised
- 2014 Schlage re-approved







# **Project Approved and Moving Forward to Next Phase**





# **Community Engagement After Approval**

- Community role after approvals:
- Neighborhood Notification for Applications
- Pre-application & post-application meetings for phases and design review applications
- Annual meetings for impact fee allocation and progress reports (2 a year for first 2 years)
  - Parks design process

# II. Project Sponsor Progress Report & Phase Application Meeting VISITACION VALLEY / SCHLAGE LOCK

**ATTACHMENT 10** 

ဖ









# Schlage Lock Project Update:

- Background
  - Overview
- Project Schedule
- Community Improvements
- Grocery Store Tenant Status
  - Historic Office Building
    - Parks
- Below Market Housing
- Caltrain Pedestrian Access
  - Next Steps



# **Background:**

 Bayside Development LLC is the design and construction affiliate to Universal Paragon Corp (UPC).
 Bayside will be managing the majority of project functions moving forward.



# **Overview:**

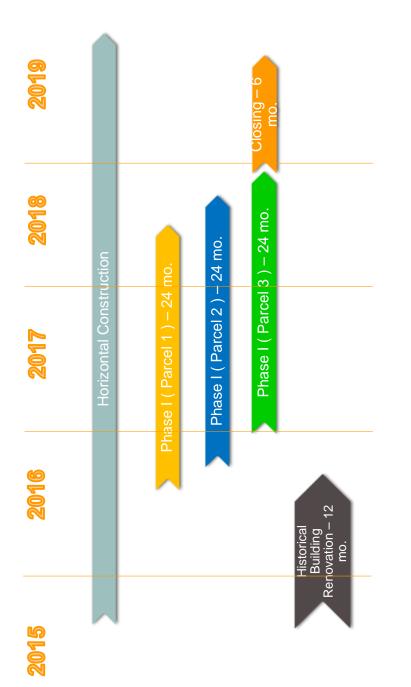
- Phase 1 includes approximately 560 total housing opens space, new streets, sidewalks, and utilities. units, major and minor retail components, public
- Three separate buildings are proposed:
- Parcel 1 has approximately 140 housing units
- Parcel 2 has approximately 160 housing units
  - Parcel 3 has approximately 260 housing units
- the 'Design for Development' and 'Open Space Each building is being designed to comply with and Streetscape Master Plan' guidelines. L



# **Project Schedule:**

- Onsite Environmental Remediation complete
- Phase Application submitted by the end of June.
- Horizontal Development (grading, utilities, retaining wall) should commence by the end of 2015.
  - Historical Building renovation hopefully complete by end of 2016 I
    - Vertical Development:
- Design Review by the end of June: need to set up another Community Meeting.
- Hoping to start major construction in the fall of 2016.
  - First delivery in the fall of 2018

# **Project Schedule**



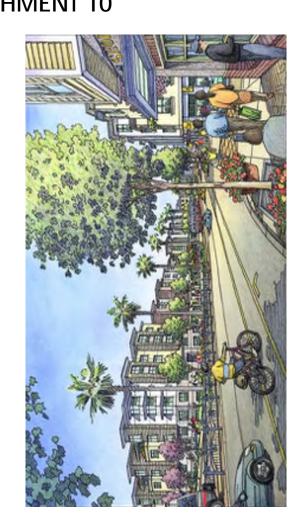
All values and claims are for reference only and subject to change.



# **Community Improvements:**

- Improved sidewalks at Bayshore Blvd (partial delivery in Phase 1)
- Additional street trees on Bayshore and throughout the project (partial delivery in Phase 1)
  - Public Parks (Leland Park delivered in Phase 1)
- Increased connectivity by extending public streets and right-of-ways.
  - New Retail including full service grocery (delivered in Phase 1)
    - 25% of the Historic Building for Community Use
- New roads and utilities within the Development

ATTACHMEN (Extensions of Leland Ave, Raymond Ave, Visitacion Ave and partial completion of Str to be delivered with Phase 1)



# ສ

**Grocery Store Tenant Status:**- Bayside and UPC are working

- secure a major grocery tenant Newmark Cornish & Carey to Design is moving forward to with retail consultants
  - Design is moving forward to accommodate up to 33,000 sf for a full-service grocer.



## **Historical Building:**

Bayside is working with Garavaglia Architects to renovate the old Schlage Lock Of Building over the next 10-16 months (pending availability of funds).

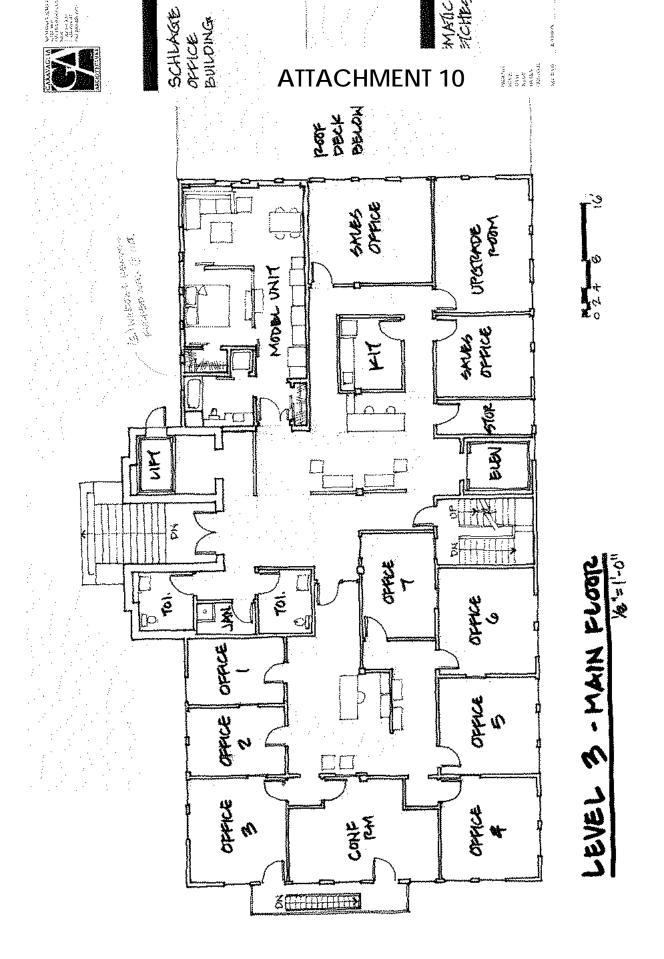
delivery of our 1,200<sup>th</sup> unit, but we've decided to try and move up the renovation in The Development Agreement requires delivery of the building concurrent with order to

- reduce crime on the premises
  - reduce graffiti and vandalism
    - occupy the building with:
- Bayside corporate offices
- Condominium Sales Center
  - Contractor offices



Once Phase 1 is complete, we'll move the sales center on-site and possibly begin rent office space.

Phase 2 is complete. This space is currently planned to be a large community roo 25% of the square footage of the building will be open for Community uses once (3,000 sf) with access to a small kitchen and restrooms.



### **Parks:**

Rec & Park Dept, and the Community, to continue the park Bayside is working with GLS Landscape Architects, the SF design process.

Meetings' over the next six months. We hope to have the firs We will be scheduling several 'Park Design Community meeting in July.

through the Schematic Design Phase and seek City approval Design for both Leland and Visitacion Park will progress

Once approved, only the design for Leland Park will be completed through construction drawings at this stage. Leland Park and the Blanken Open Space will be delivered concurrent with Phase 1.

Visitacion Park will be delivered with Phase 2.



# Affordable Housing:

84 Below Market Rate Units 476 Market Rate Units

Unit types available (1 bedroom, 2-bedroom, etc.) will reflect overall unit r MHDATTE MHDATTE Affordable Housing Units will be ready to occupy at the fort ie City has meries

# **Pedestrian Access to Caltrain:**

Per the Design for Development and Development Agreement, a temporary pedestrian walkway will be built to access the Caltrain Station on Tunnel Ave.

Temporary Access will be delivered concurrent with the first units of Phase 1 Permanent Access will be delivered with Phase 3.

ALL access will be ADA compliant.





### Next Steps:

- Schedule 'Building Design Pre-Application Review Meeting'
- Schedule first 'Park Design Review Meeting'
  - City to Schedule 'Post-Application Meeting'
     Bayside to submit Phase Application
- Bayside to submit Historical Building Renovation permit I



### Schlage Lock Parks Next Steps

### Visitacion Valley / Schlage Loc Community Meeting

May 30, 2015





# Schlage Lock Parks

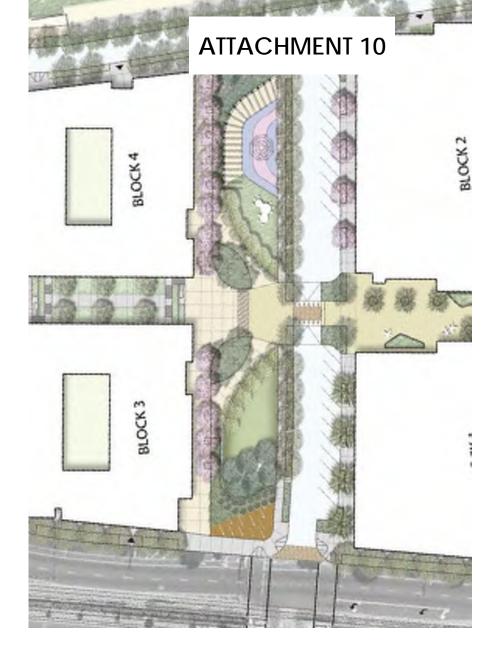
- Two parks minimum
- Relocated with revised plan
- Built by Developer
- Purchased and maintained\* by RPD
- \* Developer-funded for 22 years

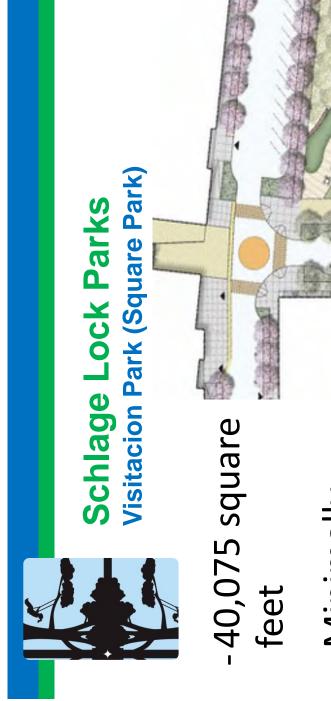




Schlage Lock Parks Leland Park (Linear Park)

- 33,106 square feet
- Significantly revised design





- Minimally revised design





**Design Review Advisory Panel** Schlage Lock Parks

Goals of Design Review:

- Consistency of design and character with nearby TACHMENT 10 parks
  - 2. Unique identity and sense of place
- 3. Ecological value
- Suitable amenities for existing and new residents



Schlage Lock Parks Design Review Advisory Panel

- Four to eight meetings, open to public
- Monthly or every-other month (start in July)
- 3. Seven members
- Community representatives
- Design expertise
- 4. Recreation and Parks Commission design approval



Schlage Lock Parks Contact Information

### Questions?

Interested in Advisory Panel?

Contact:

Jordan Harrison

Jordan.Harrison@sfgov.org

415-575-5602

Saturday, May 29, 2015 Visitacion Valley Pre-Application Meeting Presentation Notes and Q&A Moderator: Claudia Elores - SE Planning Den:

Moderator: Claudia Flores - SF Planning Department Notes by PYATOK

### **Overview of Agenda**

- Approved Development Agreement, moving to next steps.
- Community role: pre-app phase meeting, post-app meetings
- Progress reports and impact fee allocation meetings

### **Progress Report by Development Team**

Brad Mooney, Project Director for Bayside Development - construction affiliate for UPC. Jeff Brooks is the CEO of Bayside. Jonathan Sharfman and Howard Pierce of UPC, also present.

Bayside appreciates and recognizes the ongoing community involvement since Schlage closing in 1999. Especially since redevelopment funding went away. The goal is to catch the wind of this economic cycle before there's another slow down. End of June 2015 to submit phase application for Phase I

The parcel names have changed recently as shown on the screen.

Total Phase 1 = 560 units +/-

- parcel 1 140
- parcel 2 160
- parcel 3 260 units

Pyatok was the lead architect involved with the master plan – now moving forward with design documents for Phase I

Renovation of the Historic Building will be undertaken in Phase I if funding allows. Garavaglia Architects will be the lead designer.

The first Design Review meeting will be held soon.

Construction on horizontal infrastructure to start in the 4<sup>th</sup> quarter of 2015.

### **Overview of Community Improvements:**

- Sidewalks & street trees at Bayshore frontage
- Parks
- Historic building uses
- Retail including grocer up to 33K SF. Working with Newmark Cornish & Carey to identify
  potential grocery operators. Normally grocers are reluctant to commit until construction is in
  progress.
- Improved access to Caltrain

Question/Concern by Mike Giametti, resident:

• What are the specific sidewalk improvements on the project? Will both sides of Bayshore be improved?

Project Sponsor Response, Brad Mooney, Bayside:

• Currently, the plan improves the eastern extent of Bayshore Blvd only, from the historic building

to Sunnydale. The development team is also talking to the city about including the crosswalks in the plan - which would include the bulb outs and ADA improvements.

• Claudia, SF Planning: We will also talk about impact fees later on in the meeting - and other improvements can be included.

### **Historic Building**

The building will be renovated in Phase 1 (provided funding can be secured )- 10 years ahead of schedule and will be Bayside's main office and sale center through Phase 1. The basement level, which opens to the lower grade level, will be the general contractor offices, approximately 4800 SF. After Phase 1 - it will be rented out as office space.

25% of the historic building is required to be allocated to the community for its use, approximately 3000 SF. This space will be available for use as a community room with small kitchen and restrooms. The goal is to get community input on what the use should be in the future.

### Parks

Leland Park will be delivered in Phase 1, and Visitacion Park will be delivered as part of Phase 2, but both parks are going through schematic design process now.

GLS landscape architects, SF Park & Rec, and the community will hold 3 or 4 community design meetings beginning in July to discuss the design of Leland Park and Visitacion Park.

These parks are going to be turned over to the city parks system, with an agreement that UPC will be responsible for 22 yrs. of maintenance.

Blanken Open Space on the north side of the site has a major grade change and GLS is looking at a terraced design to provide pedestrian access around Parcel 1.

### Affordable Housing

15% of units are dedicated to affordable housing. Previous discussions included an option to provide all of Phase 1 affordable housing units on the northern parcel. In the current plan the affordable housing will be distributed throughout the site, with approximately 84 units (in Phase 1) of below market rate housing. This arrangement will allow Bayside to control the design of the northern parcel, and to deliver affordable housing concurrently with market rate units.

Question/Concern by Russell, resident in the front row:

• Any thought about providing more affordable housing early on, so that less can be provided later?

Project Sponsor Response by Brad Mooney:

• Yes, we've considered it. We are only allowed to do up to 20% in first phase. We're looking into the possibility of increasing to that level.

### Pedestrian Access to Caltrain

There will be a temporary path built during Phase 1 construction, most likely made of asphalt, which will be improved and rerouted to its final configuration as construction progresses

Questions/Concern by resident:

• Does anyone know if Caltrain has plans to bring the bullet train to that station? Clarification, the "baby bullet" train.

Project Sponsor Response by Jonathan:

- The bullet train (high-speed rail) will not stop there, but not certain about the baby bullet schedule plans, that is an issue for Caltrain.
- Claudia: Not sure, but we're taking notes and we will have answers in the future.

### Next steps:

Watch your emails for the design review meeting which will be held in next few weeks hopefully. It will be led by Peter Waller from Pyatok.

Separately, the park design review meetings will begin in July with Parks & Rec hopefully.

Questions/Concern by Fran, resident:

• I'm troubled by lack of information about the use of the historic building. Our original request was that 100% of it to be allocated for community use. We might come back to using less, but we should be given the chance to plan for something bigger. Who will eventually own the building?

Project Sponsor Response by Brad and others:

- This is the first step in the conversation and we want to start that now instead of 7 years from now. 25% was where we landed in the Development Agreement (DA) after the redevelopment funding fell through. Bayside considers 25% a baseline. We want to find a long term community-serving use that can pay for itself in operations. Once we find that we can talk about what is the right percentage for community use.
- Jonathan focus on the fact that the building will be developed earlier so we have time to talk about operations . We're asking for patience with the process as we follow through with the first phase and have some time to plan together.
- Claudia we will have a brainstorm today about how to use the space.

Question 2 by Fran, resident:

• Regarding the parks design, I'm concerned about materials and how it's going to look in the end. The community should be involved through the whole design process and not only through schematics. Let's make sure there's a design process all the way through with that.

Project Sponsor Response by Brad:

• Design meetings moving forward with GLS & with Parks and Rec will definitely get to the level of detail regarding materials and specific design. It will be a detailed schematic design.

Questions/Concern by resident and service provider:

 I'm wondering about meeting schedules. Are you being creative and intentional about whom you are including in the design process? Especially regarding the young people and young families in the community. Has there been an intention to include them in the process? Many young people in the community want to be involved, but they work full time. How else can we engage them?

Project Sponsor Response by Brad:

- We have sent 280 letters announcing meetings and information updates to involve the community. Bayside hasn't focused specifically on families, and welcomes suggestions about any ways to communicate with them and to include them in the process. We are always open to suggestions on how we can engage more of the community.
- Claudia: If you have suggestions, speak to us and let us know. If there are schedule conflicts with proposed meeting times, let us know about them.

Questions/Concern by Francisco de Costa:

 I've been involved from day one and Jonathan is the only person I recognize who is still involved in this process. Politicians are missing from this meeting. Pacific Islanders and other groups aren't represented here and we haven't been informed. I'm an advocate and I pay attention to contamination and hot spots. To build in the area, you have to address the traffic peak times. We need empirical data on the particulars, on how thorough was the clean-up. How to accommodate young children in the project. We need input from youth and young adults.

Project Sponsor Response by Jonathan:

• The DTSC (Department of Toxic Substances Control) has everything on their website, all the documents and standards related to the contamination cleanup. Howard focuses on this every day. The information is available. Also, if you have any further questions/concerns you're welcome to speak to us directly - we are meeting all standards.

Questions/Concerns by Russell, resident:

• We've heard that another person has bought a parcel on the site. Are they going through the same process? Do they have the same affordable housing requirements? How does this change the maximum unit count? How does that all fit together?

Project Sponsor Response by Claudia:

Patrick, the owner of the parcel in question, is here today. The City has been working with them about how to reach an agreement about what they want and what's best for the community. The development agreement (DA) only applies to what is owned by UPC. Another process will be held to see what the project proposes, and to see what those commitments could be. But the short answer is no - the agreement does not apply. The D4D does apply to the entire special use district, therefore the parcel is required to meet development standards.

Questions/Concerns by Doug, resident:

- First, I'd like to say that after all these years, it's really fantastic that the project has finally hit the road.
- What are the specifics of the development agreement with regard to residential affordability? What about commercial affordability? Who establishes that level? For the 25% for community use in the historic building, is there any information about leasing affordability rates for that?

Project Sponsor Response by Emily, SF Economic Development:

• The project is subject to the city's standard affordability definition, which is set by the Mayor's Office of Housing. For rental housing, units have to be affordable to residents at 55% of the area median income (AMI) and below. For condominiums, units have to be at 90% AMI or below. The

commercial space lease is not set to any affordability standard.

• Jonathan: The DA does not define affordability for commercial uses, but it's the baseline of the obligation, and we all see it as a gateway to Vis Valley. It's an asset to the community and we do want to see a community use that is self-funded and sustainable.

Questions/Concerns by Russell, resident:

• Is the project still being designed as a condo?

Project Sponsor Response by Brad:

• Yes, the project is condo-mapped, but we are still looking at the option of a rental parcel on the site. The idea is that it can be rental for first 5 years. At the moment, we are building to a condo spec with the option to rent.

Questions/Concerns by resident:

• Who owns the historic building?

Project Sponsor Response by Brad:

- For the next 3-5 years it's owned by UPC.
- Emily: It's written into the ownership agreement that 25% must be used by the community. We can also allow that percentage to be increased.

Questions/Concerns by resident:

• How do we get a copy of the PowerPoint?

Project Sponsor Response by Claudia, SF Planning:

• I will email the presentation to those of you who sign in today.

Questions/Concerns by Marlene, resident:

- I've been involved since the 1999 meetings and there have been many modifications to the project that the public hasn't been made aware of. There are 40,000 people in Visitacion Valley and 280 fliers aren't sufficient. Many residents are of Asian/pacific island descent and do not have access to email. We've made the request before, we'd like to have information posted in trilingual format on the site, directly on the construction fence, with a trilingual phone number.
- Also, we want to give the community a chance to get first priority to affordable units. When are these applications open? Have any applications been issued?

Project Sponsor Response by Emily, SF Economic Development:

• We'll make sure to post information on site about the project and affordable housing as well. No applications have been issued.

Questions/Concerns by Curtis, new resident:

- How are we notifying the community? Reaching 280 residents is not enough. There are a lot of people missing from the list.
- Also, Recology is expanding. How does Bayside and UPC feel about its impact? Can bayside

join the community in speaking against their expansion?

Project Sponsor Response by Brad:

• We are aware of Recology's expansion plans. We own a lot of land around it and we've have been working closely with them through the whole process. Also, to the earlier point about project information, we can definitely make sure we start posting on site and nearby transit stops and the like.

Community member response:

• Historically, it's very difficult to get people to come to meetings. It's great to have a good turnout today. People have to claim their citizenship on these issues. People should know they can have their voice heard in this setting.

Another community member comment:

• Not everyone can come even if they want to - there are conflicts. Putting notices out for information on the website has to happen, and if they still can't come or choose not to come, fine.

Questions/Concern by resident:

• Regarding affordable housing, is the developer prohibited from starting a list of people that are interested in what's being built? That would help the community know who's interested and how many people are interested. Can these people who are getting priced out of rents in the next 3-5 years get the information?

Project Sponsor Response by Brad:

- We are not yet at the marketing/sales stage, but we will do that when we get there.
- Claudia/Emily: There are workshops planned for the future. The city takes the lead on doing that outreach as well. We're considering 20-25% of units be designated as priority for existing VisValley residents.

Questions/Concern by resident:

• Is there a fire department or police station planned?

Project Sponsor Response by Brad:

• No, but we sit with them regularly to talk about how we can design a safe community and how they can be a part of that. Public safety/security issues are real and we talk about it a lot. We are definitely planning an expansion of their services though no new stations are planned.

Questions/Concern by resident:

• Our area desperately needs a police substation on site. They are over-stretched, from Ingleside to Silver Avenue.

Project Sponsor Response by Brad:

 We are open to that discussion. Safety is important to our long-term goals for the site and later phases.

Questions/Concern by Veronica, community member:

• What about congestion and traffic concerns?

Project Sponsor Response by Jonathan:

 The developer has prepared an environmental impact report that includes studies of morning and afternoon traffic patterns –peak hours. As a mitigation measure the developer will be required to implement a Transportation Demand Management (TDM) plan. This will likely include clipper cards and transit passes to reduce the impact on the existing community and to help reduce the total number of drivers.

Question continued:

• That's great, but people are drivers. We need an over ramp over Sunnydale, where it turns into car wash. And we need a connection to Beatty at the freeway.

Response continued by Claudia:

• MTA folks are here to continue that discussion in the afternoon.

### **Parks Presentation**

Questions/Concern by Marlene, resident:

• For the past 26 years, community safety has been our number 1 concern.

Also, how many people can be accommodated in the covered space in the parks? We have big tai chi groups.

Questions/Concern by Fran, resident:

• We want community oversight on maintenance plan and designs for the parks.

### LUNCH BREAK

### Impact Fees

Neighborhood-specific fees. 2005 - Facilities and infrastructure impact fee.

Developments pay a fee based on the size of the project. This fee can only be spent on capital improvements - not maintenance and operations.

Current breakdown of how impact fees are distributed

- 45% street and transportation
- 20% child care
- 30% parks and rec
- 5% admin

### Survey questions:

1. and 2. Streets and transportation Greenway - green connections streetscape improvement proposals Three different locations - 1 - greenway, 2. Leland ave extension, 3. General greening (includes maintenance for 3 years)

3. Recreation and open space Playground improvements

Questions/Concern by Fran, resident:

• Transportation should be paid by the city - not from our neighborhood impact fee funds. There are other sources for funding for these things. It's not much money to begin with.

Project Sponsor Response by Claudia:

• We can reevaluate the impact fee allotment breakdown with community in the future. This is part of our current conversation.

Questions/Concern by Marlene, resident:

• The 56 line has erratic service. My seniors are complaining. The community is not well informed.

Project Sponsor Response by Frank, MTA:

• There is a public meeting coming to address the 56 bus line.

Questions/Concern by Marlene, resident:

• What about 66 Raymond?

Project Sponsor Response by Claudia:

• The City will provide an update.

Questions/Concern by Curtis, new resident:

• Are there other project improvements planned within the area?

Project Sponsor Response by Matt:

• Yes, for example, the Blanken tunnel repair project could be part of the Impact Fee allotment plan in the future.

End

### **MEETING SIGN-IN** AND PRE-APPLICATION SHEETS PRESENTATION SLIDES

yong ibigey, magiging parte ito ng kasulatang pampub-iiko para sa proyektong ito at maaring ilista sa aming galan o karagdagang impormasyon. Kung ito ma'y in-EVENT DATE: 5 - 30 - 15 ABISO: Hindi kinakailangang ipaalam ang inyong panfis -657-4003 415 279-かっとのヨン・カルヒ webaite o hilingin ng mamamayanan para suriin. PHONE/TELÉFOND/ 電話 1200 R. MUNING HAMMEN 415 2852 444 PUMIRMA DITO 415 349 achen Ohiltmunivesal.com fulie C martin bruibling can SCA BER EVENTYPE COMMENTAL MULT SANVYSTA6128 balida perology ion materizseyahn.corr JOGNENBERN EGMAIL F Mart 15 Slev Sull Sull and marcher & queil. com registro público para este proyecto 7 pueden ser disponibles en nuestra página web o so-licitados por el público. AVISO: No titrie que dar su nombre y sus sus datos, estos serán parte del **REGISTRACIÓN** E-MML 開業 datos. Sl da 17th lokation the St 9434 BAYSHORE, 憋不<del>置要提供您的姓名或额繁</del>粒料。 加果您提供了,它就将作為該存案公 共記錄的一部的,並且可能含必作在 我們的網站上或融公眾要求查閱。 Vallen / ORGANIZATION, ADDRESS] DIRECCIÓN | 拍 北 Samahan at Tirahan o direksyon ng Samahan LAN NWING 2966 13474 CC 120Kunydale Ma 79 Turben Dre MULTIEN ZUBY | WINTH BULY CO DUP RELAND N N N Revolusing RAYSIDE PROJECT NAME Visity CITY 3598 be part of the public record for this project and may be posted on our websile or request-ed by the public for review. NOTE: You are not required to provide your name or contact information. If you do, it will Mille GlANNIN SIGN-IN any Mates Anthony Chan Joseph War Aprickin Matrikan DRUA ( hew SUMA (AMAS NAME / NOMBRE / PANGALAN / 姓名 PANIA 9640

PROJECT NAME		EVENT TYPE:	EVENT DATE:
SIGN-IN	I 義名表 REGISTRACIÓN	ACIÓN PUMIRMA DITO	1A DITO
NAME / NOMBRE / PANGALAN / 姓名	ORGANIZATION, ADDRESS  DIRECCIÓN   143:11E Samahan at Tirahan o Direksyon ng Samahan	E-MAIL  電郵	PHONE / TELÉFONO / 電話
Heil, Goventia	1815 General August	heidigountio eathined 415-584-	115-JPY- 3636
T. Donet	1360 Gouttinger 94134	cbarnetts f egazil.	415.468-
Seate lay	) to caying me ) fam	Frighertroulde Juna w	)
KEIL FOU	18 WART TENESA Si	KETH FOT OGMAIL.604	
Wandylee	2169 Expanse BAN, 55, 199	Wheelors Ogni, com	
ZACK PRILIES	138 MARI TERISA	ON 1-IST	
Hordeline Mate	<u>بہ</u>	morningstarlesse yaken	9951662512
Nersan	(82 Schuenin 2t	L	
Cwternet Cuternet			
RATELL K	ILL FAILTY PLANED STU FLR	PRICHERATINE BUILDING COLD	
NOTE: You are not required to provide your name or contact information. If you do, it will be part of the public record for this project and may be posted on our website or request- ed by the public for review.	您不需要提供您的姓名或 <b>哪餐符,</b> 如果您提供了,它就將作為該專案公 共記錄的一部份,並且可能會公佈在 我們的網站上或被公眾要求查閱。	AVISO: No tiene que dar su nombre y sus ABISO: Hindi kinal datos. Si da sus datos, estos serán parte del galan o karagdagan registro público para este proyecto y pueden yong ibigay, magigi ser disponibles en nuestra página web o so-liko para sa proyeb licitados por el público.	ABISO: Hindi kinakailangang ipaalam ang inyong pan- galan o karagdagang impormasyon. Kung ito ma'y in- yong ibigay, magiging parte ito ng kasulatang pampub- liko para sa proyektong ito at maaring ilista sa aming website o hilingin ng mamamayanan para suriin.

.

### **ATTACHMENT 10**

.

.

.

PROJECT NAME		EVENT TYPE:	EVENT DATE:
NI-NDIS	I 簽   <br< th=""><th>ACIÓN PUMIRMA DITO</th><th>A DITO</th></br<>	ACIÓN PUMIRMA DITO	A DITO
NAME / NOMBRE / PANGALAN / 姓名	ORGANIZATION, ADDRESS  DIRECCIÓN   #45.41E Samahan at Tirahan o direksyon ng samahan	」 E-Weitr  韋戴	迎加/UNCHTELEFOND/ 電記
CARI Law	GI MLDER ST.	CENTRET FMRI @ GMAIL.	Pr 484 3353
Jergether	UPC 150 Exec. PK		)
Steve Reese	45 Leurphell Ave	reese supe Oshs global.	
Martene Tran	Martene Tran 34 Leland Ave	tan merlene Sydnesser	
Ranie, Done	merey Howing its	rdaree werey housing and	3.57-71.8
Tomy Verter	269 Junel	•	115-296-296
Fuldwarn	4909 220 ST ST CA 74/24	FUCKYF CON	415 415
When and de	340 APM ST	WLIEZE VAMOR CON	415 468 1262
LINDA CEAR	241 Yocalma A3	LM EKAR, COMO DOX, CM	
Glun Chr	zist Buyshore Blun	JUMUSIN #550 Email	
NOTE: You are not required to provide your wome or contact information. If you do it will	您不需要提供您的姓名或 <b>聯繫</b> 資料。 如用做担供了一它計製作為該重发公	AVISO: No titene que dar su nombre y sus ABISO: Hindi kinaka datea. Si da sus datea. estas serán narte del ezlan o karaedaezne	ABISO: Hindi kinakailangang ipaalam ang inyong pan- salan n karaadasang imbormasyon. Kung ito ma'y in-

name or contact miormation. If you do, it will be part of the public record for this project and may be posted on our website or request-ed by the public for review.

.

如来您说供了,它就将作得被导来公 共記錄的一部份,並且可能會公佈在 我們的網站上或被公眾要求查阅。

registro público para este proyecto y pueden ser disponibles en nuestra página web o so-licitados por el público.

galau o an eguegang muru muru yan anno an anno an anno yong ibigay magiging parte ito ng kasulatang pampub-liko para sa proyektong ito at maaring ilista sa aming website o hilingin ng mamamayanan para suriin.

PROJECT NAME		EVENTTYPE:	EV.	EVENT DATE:
SIGN-IN	簽名表	REGISTRACIÓN P	PUMIRMA DITO	DITO
NAME / NOMBRE / PANGALAN / 姓名	ORGANIZATION, ADDRESS  DIRECCIÓN   놴노뵤는 Samahan at Tirahan o direksyon ng samahan	E-MAIL  電郵		HHONE/TELÉFONO/電話
Lou Represe	By Shere convary	UPIEMELLI & DOL. COM		650-222 CELE
Steven Huang		Write 2 steven Bugahan		415- 8-8- 8157
Simon Betrally	Simon Bertraly Payl of PUVIR Works	S. M.O.H BE-Mangle Std pur of 415-558	@ Stelpur of y	115-55%
NOTE: You are not required to provide your name or contact information. If you do, it will be part of the public record for this project and may be posted on our website or request- of hy the mublic for review	rovide pour 您不需要提供您的姓名或聯繫資料。 u do, it will 加果您提供了,它就將作為該專案公 this project 共記錄的一部份,並且可能會公佈在 or request- 我們的網站上或被公眾要求查閱。	AVISO: No tiene que dar su nombre y sus datos. Si da sus datos, estos <del>será</del> n parte del registro público para este proyecto y pueden ser disponibles en nuestra página web o so- licitados nor el cúblico.	ABISO: Hindi kinakailangang ipaalam ang inyon galan o karagdagang impormasyon. Kung ito m yong ibigay, magiging parte ito ng kasulatang pa liko para sa proyektong ito at maaring ilista sa webaite o hilimen we mamawawnan para suri sa	ABISO: Hindi kinakailangang ipaalam ang inyong pan- galan o karagdagang impormasyon. Kung ito ma'y in- yong ibigay, magiging parte ito ng kasulatang pampub- liko para sa proyektong ito at maaring ilista sa aming webste o hilincin ny mamamayanan para sarring

. Ja 2bl5 415-335-7020 ABISO: Hindi kinakailangang ipaalam ang inyong pan-EVENT DATE: 5730 PHONE/TELÉFONO/電話 **PUMIRMA DITO** nala 51661. Qyahoo com carles London Meler com Cristinalize Equal 1. com MUSSIA and Monthail. Car marlow Gartnonad. Com CAPARINE & AOL. CON AVISO: No tiene que dar su nombre y sus REGISTRACIÓN E-MAIL | 職要 1.5 VALLEY MNACT FEE EVENTIPPE 您不需要提供您的姓名或聯繫資料。 SAMAHAN AT TIRAHAN O DIREKSYON NG SAMAHAN VKValling Coundin ř える 1 T ORGANIZATION, ADDRESS| DIRECCIÓN | 地址 SC WLEN'S (82 Tchuevin London Meier Leland 之 ま が Pujotok pyatok 450 187 NOTE: You are not required to provide your name or contact information. If you do, it will SIGN-IN Sherry Campe Rund Munine N 1/1 Hugh **PROJECT NAME** Cristine Carle' Meler NCRENNEY Homman · WALLE しょいのようの NAME / NOMBRE / PANGALAN / 姓名 くしょくさ していて いって

yong ibigay, magiging parte ito ng kasulatang pampub-liko para sa proyektong ito at maaring ilista sa aming website o hilingin ng mamamayanan para suriin. galan o karagdagang impormasyon. Kung ito ma'y in-

如果您提供了,它就將作為該專案公 共記錄的 ---部份,並且可能會公佈在 我們的網站上或被公眾要求查閱。 be part of the public record for this project and may be posted on our website or request-

ed by the public for review.

registro público para este proyecto y pueden ser disponibles en nuestra página web o sodatos. Si da sus datos, estos serán parte del licitados por el público.

### Saturday, July 25, 2015 Visitacion Valley Pre-application Community Meeting Location: Visitacion Valley Library, 201 Leland Ave, San Francisco, CA Presentation Q&A Notes by PYATOK

Brad Mooney of Bayside Development introduced the design team: Peter Waller from Pyatok Architects; Anthony Chen; David Delasantos and John Proctor from MBH; and Will Smith from Groundworks Office.

Presentation by Peter Waller and John Proctor.

### Q&A:

- 1. Question/Concern by resident:
  - Does the residential parking number include the spaces for retail? And if 47,000 SF is the max for both phases, how are you going to fit the grocery into the project?
  - Project Sponsor Response by Brad:
    - The parking spaces are separated between residents and retail, with 497 dedicated to the residents and 82 to retail visitors. The grocery store is part of the first phase and is included in the 44,970 SF.
- 2. Question/Concern by Marlene, resident:
  - People in the community are asking for information about the affordable housing in this project. How many units are there and where are can the community apply? Project Sponsor Response by Brad:
    - 15% of the units are required to be affordable, which adds up to 86 units in the first phase. The entire process is handled by the mayor's office of housing.
    - Emily: The city will send links out to the community through Brad and Bayside Development. The first thing applicants will need to do is attend orientation workshops to learn about the application process. They will occur multiple times and in multiple languages.
- 3. Question/Concern by Marlene, resident:
  - Could you talk about the plaza? We need more information for the community. I've requested a location for public signage and communication multiple times. We need to find a centralized location for project information to be posted not just on the web and not just email. I've also requested a signature mark to identify the project for marketing. Project Sponsor Response by Brad:
    - We are working with marketing firms now to work on the identity. It is very important to think about the identity of the project and we're hoping that they will help us develop it once they are on board.
- 4. Question/Concern by resident:

• Who is the grocery store coming in? What's the process for bringing them on board? Project Sponsor Response by Brad:

• We're working with retail brokers to reach out to national chains and local chains. Realistically we are about a year and a half away from getting to a signed agreement in

mid-2017. It's really difficult for a store to sign a lease until we have a building in progress or near completion. They are definitely interested in having the pool of new residents moved in, but will absolutely be serving the needs of the existing community as well.

- 5. Question/Concern by resident:
  - I have two concerns. One, is related to street trees. San Francisco doesn't have money to maintain street trees. The second is related to the building and the parks. Who is responsible for maintenance and cleaning of these separate areas? Is it the building HOA?
  - Project Sponsor Response by Brad:
    - The developer is responsible for 22 years of maintenance for the parks as part of the agreement with the city. The building management is responsible for cleanup of its property, so if it's a rental building, then it'd be the management company, or if it's sold as condos, then yes it would be the Homeowner's Association.
- 6. Question/Concern by Russell, resident:
  - In the walk in Parcel 2, what's the quality of that space for the residents? It seems like it's very active and public and I'm wondering how those units will work.
  - Project Sponsor Response by Peter:
    - Yes, the walk will be open to the public during the day, so on the ground floor we have a lobby/concierge space where we're hoping there will be a presence fulltime, which is a plus for security. As you move around there's a lounge on one side and a bike room on the other, along with the double height courtyard entrances for residents, so there are a lot of active uses.
- 7. Question/Concern by Russell, resident:
  - One more thing, related to branding. I do understand that you need a brand to sell the units, but we want to make sure that it's seen as part of Visitacion Valley. It'd be great to respect the history, and definitely bring it into the future, but make sure it's seen as something anchored in the neighborhood.

Project Sponsor Response by Brad:

- That's a great point.
- 8. Question/Concern by resident:
  - What about the street parking? Will it be a permit system, and if so, who gets a permit? Project Sponsor Response by Brad:
    - Good question. The goal of the plan is to allow for visitors, so it's all metered or timed.
    - Jonathan: To add to that, in making that decision, the city side, including Parks and Recreation, wants the street parking to be timed to avoid having people parking there to go to Cal train. They want people to be able to access the parks and there's an additional 80 spaces for retail to accommodate visitors, so we want to prevent long-term parking and minimize congestion.
- 9. Question/Concern by resident:
  - What are the hours of construction for the project? And where will construction workers park?

Project Sponsor Response by Brad:

- The hours are 7am to 6pm, Monday Friday. Construction workers will be parking all on site, and all logistics will be contained within the site.
- 10. Question/Concern by Fran, resident:
  - I'm concerned about the UPRR site that was sold. That was all supposed to be park and now we are losing a lot of open space. I know this isn't you guys, but we need to figure out the open space problem. This also affects parking if we are getting an extra 200 units of housing. This is a major concern.

Project Sponsor Response by Brad:

- Thank you for the comment. We tried to buy it, and were not able to come to an agreement. So we agree we need a bigger conversation around the issue.
- Emily: We, the city, have told them to expect a robust community outreach component. I'm not sure why we haven't had that begin, but we are definitely working on it.
- 11. Question/Concern by resident:
  - When will construction actually begin?
  - Project Sponsor Response by Brad:
    - Construction to begin the overall site work including a retaining wall and sewer work will start in 4 to 5 months, and actual construction for buildings will begin 6 months after that.
- 12. Question/Concern by resident:
  - What's in place to ensure that locals get hired to work here?
  - Project Sponsor Response by Brad:
    - There's a first course hiring agreement with the city, with a goal of 50% local hires, which will be managed by City Build and other agencies. That's all tied up in a PLA (Project Labor Agreement). City Build is not presenting anything here today, but we will engage them in the next meeting.
- 13. Question/Concern by resident:
  - What's the average square footage of the units?

Project Sponsor Response by Peter:

- 500sf studios to 1400sf three bedrooms. We definitely have a wider range of units and have larger sizes than most of what's being built in the city lately.
- Emily: And the city requirement is to have 40% of two bedrooms or higher.
- 14. Question/Concern by resident:

• On the overview slide, what is the access available on the walks?

- Project Sponsor Response by Peter:
  - The walk is opened 24/7 in Parcel 3. Parcel 2 is open during the day and Parcel 1 is private with a visual connection across the block.
- 15. Question/Concern by Fran, resident:
  - We need to make sure everyone hired for long term employment comes from our zip code.

Project Sponsor Response by Brad:

• Yes, thank you.

Peter: Do we have other reactions about the architecture in particular?

- 16. Question/Concern by Russell, resident:
  - My general comment is a bit sarcastic, but I've never seen a building look as good as the renderings.

Project Sponsor Response by Brad:

- Yes, and you'll notice MBH has sketches instead of models to get those ideas out right away. I'm very committed to building something great, it's part of my background to do so.
- Peter: Do you have any suggestions to make sure that happens?
- Fran: You need continuous community review to get there.
- Inskip: It's because of what gets value engineered through the process. If you design something that can be built, then it will look like the rendering.
- Doug Vu, City Planning: The department shares the same opinions and concerns about making sure high quality buildings get built. We review a lot of projects, and that's what we are looking for - we want to make sure there is the highest quality. Typically we ask for materials samples, and hopefully that's something that will be presented at the next community meeting. More detail about exterior materials, ideas about how the building will be topped, all of those things to assure a high quality of design.
- Brad: Yes, and we've just finished schematic design, so I'm looking forward to getting into those details as we continue to develop the design.
- 17. Question/Concern by resident:
  - Translated: if we need to take the train, we have to walk to Visitacion Avenue. Will there be the opportunity to access the train after this project gets built?

Project Sponsor Response by Brad:

- Absolutely, at the end of Phase One, residents and community members will be able to walk down Leland Ave and down the block to an access point to reach the train.
- 18. Question/Concern by resident:
  - You haven't mentioned anything about available community space.
  - Project Sponsor Response by Brad:
    - Yes, thank you for asking. The historic building is approximately 65000 sf and our agreement stipulates that 25% of it be designated for community use. There will be a separate parallel community process to talk about how that space will be defined.
- 19. Question/Concern by resident:
  - These have to be up to LEED standards right? And I'm assuming it factors into the cost. Project Sponsor Response by Brad:
    - Bright Green Strategies is on board to try to get to LEED Gold but the city requirement is LEED Silver, and we'll reach that or surpass it.
    - Peter: The D4D does require a sustainability plan as well.
    - Brad: Geothermal was also explored, as one example, and it was decided to not go forward with it because of contamination issues. But that doesn't affect the cost –

people say building green costs more and it doesn't have to if you plan for it ahead of time and correctly.

- 20. Question/Concern by Russell, resident:
  - I'd like to encourage the design team to continue to show renderings at a realistic eye level and through perspectives. Elevations are not helpful for the public to understand the design.
- 21. Question/Concern by Marlene, resident:
  - Given the diversity of the community, we have requested that banners are posted in three languages with phone numbers so people can call in. People need more information.
  - Project Sponsor Response by Brad:
    - As soon as we get construction fences on the site, we'll be able to post information. You may have seen some of the flyers I posted to telephone poles around the neighborhood for today. Part of the program is to have a community bulletin board to share that information.
- 22. Question/Concern by resident:
  - Does MBH have any local projects so we can see their design sensibility? Project Sponsor Response by Brad:
    - The Ashton project around the corner was designed by MBH. It's the taller apartment building there.
- 23. Question/Concern by resident:
  - Has anyone done a study on traffic in the area? There's a lot of it on Bayshore at the moment. It's a huge bottleneck to get to the highway.

Project Sponsor Response by Brad:

- There's a traffic demand management plan in place and one example of the attempts to mitigating traffic is to limit the left turns into the site, so that northbound traffic won't be interrupted.
- 24. Jonathan announcement:
  - Brisbane community hearings will be happening soon, and if you have questions, you can stop by 132 Visitacion Avenue. That office is open for community to learn more about the Brisbane projects and proposal. To ask more questions you can meet with Shimara Cisneros on Tuesdays Thursdays and Saturdays or visit www.brisbanebaylands.com .

END.

### LELAND & VISITACION PARK COMMUNITY MEETING 3 October 24, 2015

SAN FRANCISCO RECREATION AND PARK SIS GLS LANDSCAPE ARCHITECTURE SAYSIDE DEVELOPMENT LLC

### **LELAND PARK OVERVIEW**

### ATTACHMENT 12



PARK SCOPE

VISITACION PARK -

PHASE ONE SCOPE.

LELAND PARK



### **PREVIOUS PLAN**

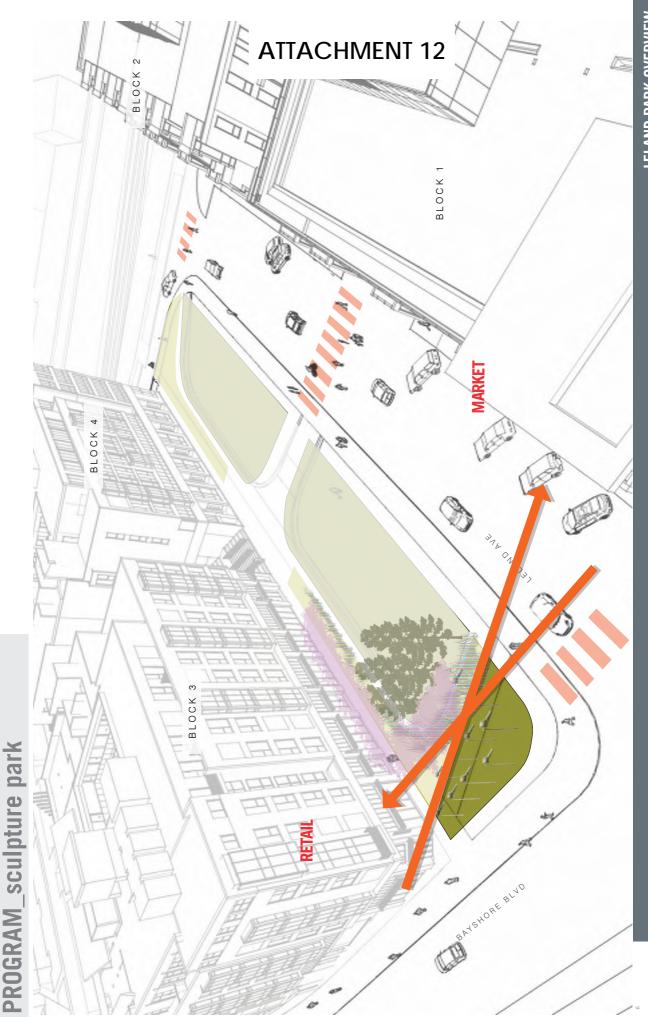


**LELAND PARK OVERVIEW** 



preferred scheme

CIRCULATION



**LELAND PARK OVERVIEW** 





LELAND PARK OVERVIEW





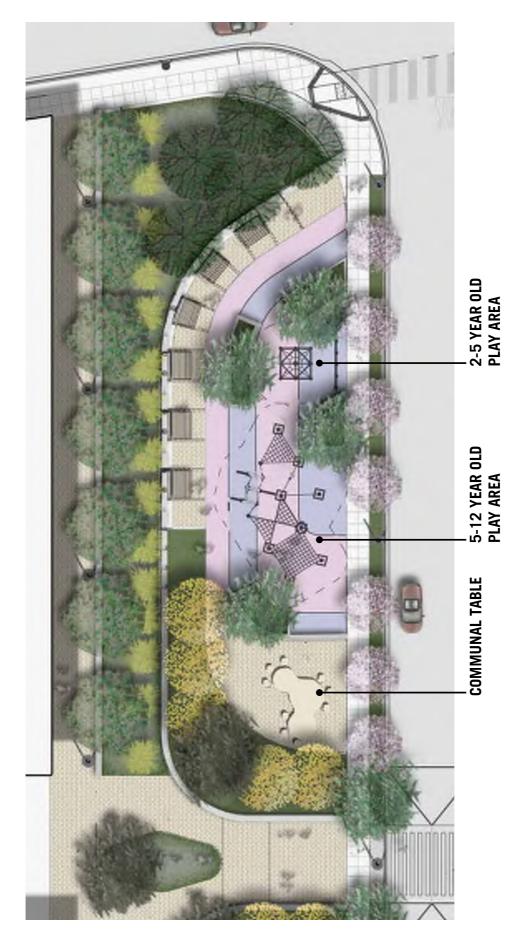
## **CURRENT PLAN**



### ATTACHMENT 12

**LELAND PARK OVERVIEW** 





PLAYGROUND\_OPTION 1: COMBINED AGED GROUP

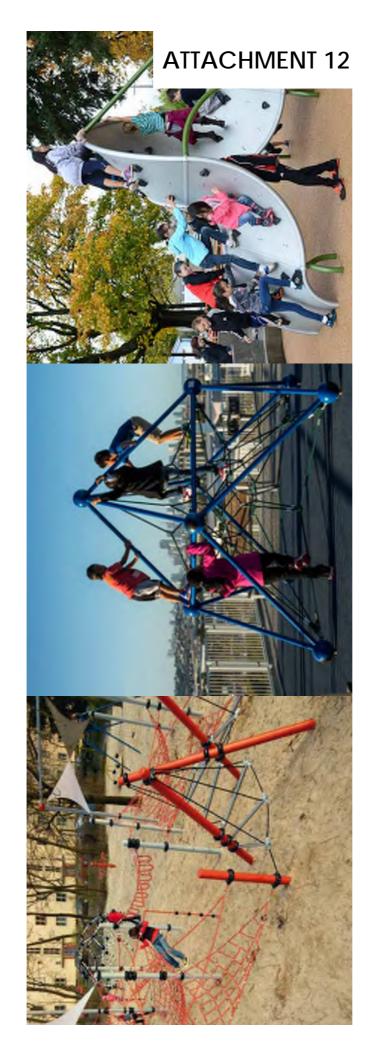


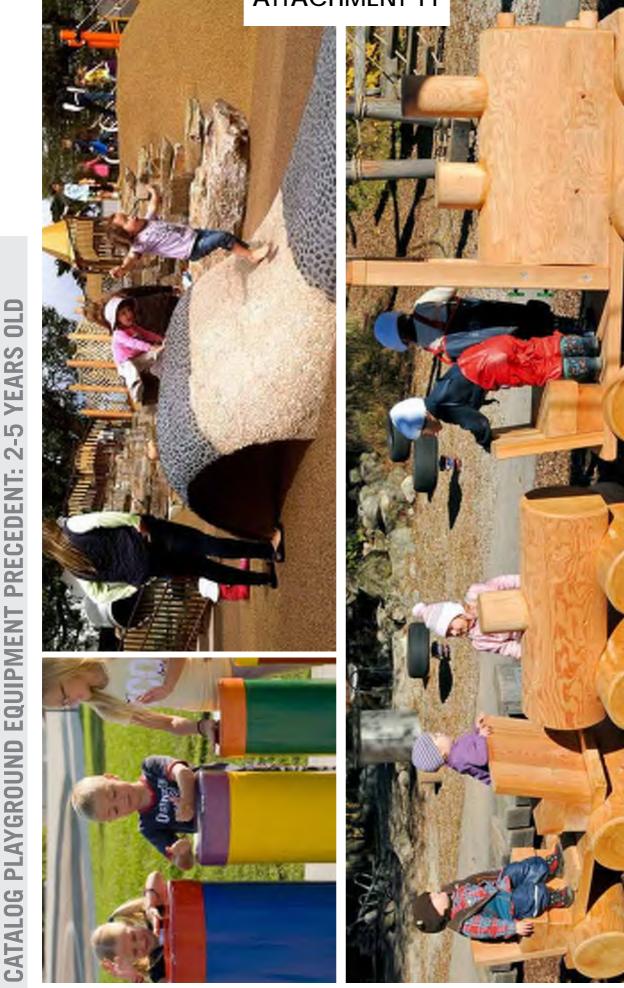
PLAYGROUND\_ OPTION 2: 2-5 YEARS OLD ONLY

## PLAYGROUND SURFACING

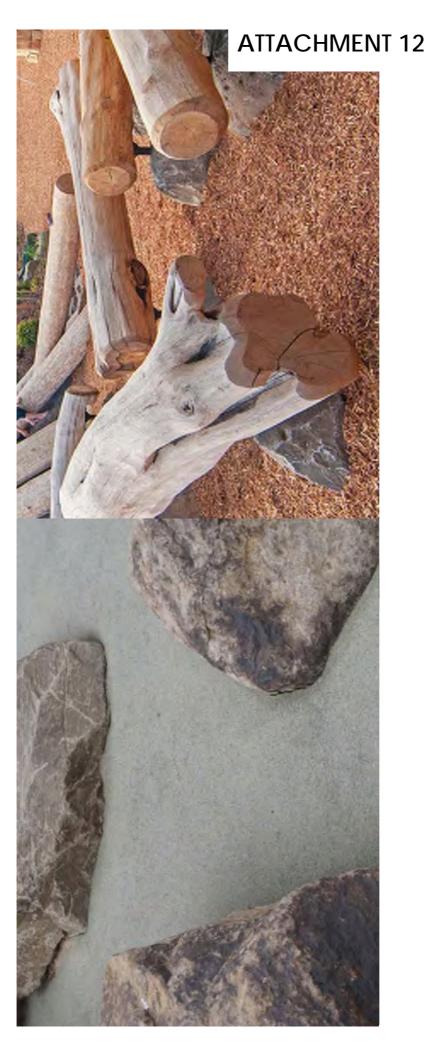


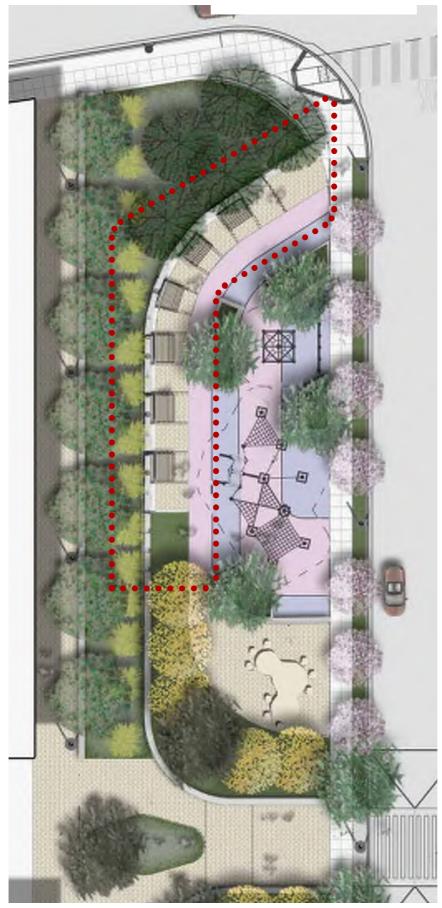
**RUBBERIZED SURFACING** 











PLAYGROUND TRELLIS STRUCTURE



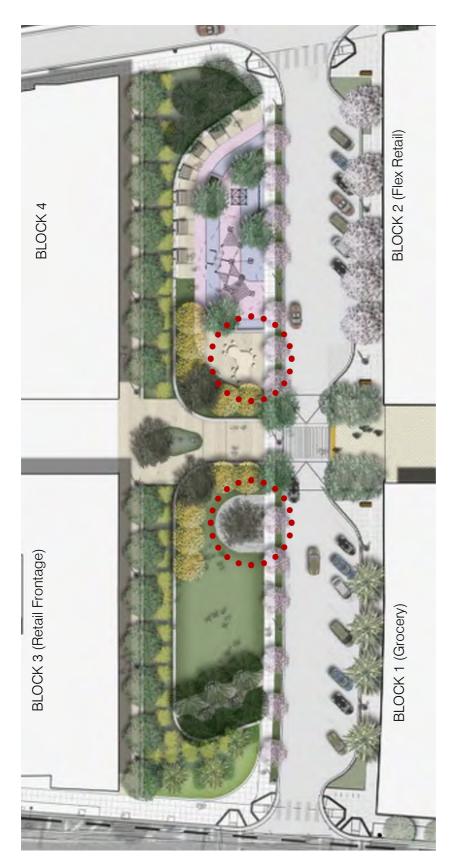
**PERFORATED METAL PANELS** 

1/2" RODS WITH VINE





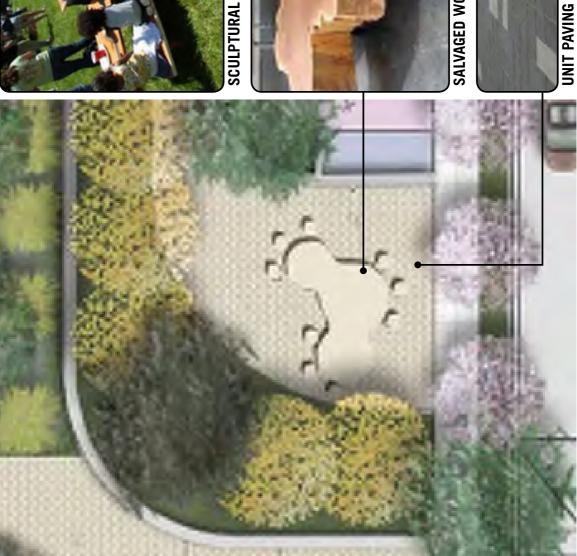




INTERACTIVE GARDEN

## **LELAND PARK OVERVIEW**

# NTERACTIVE GARDEN\_COMMUNAL TABLE

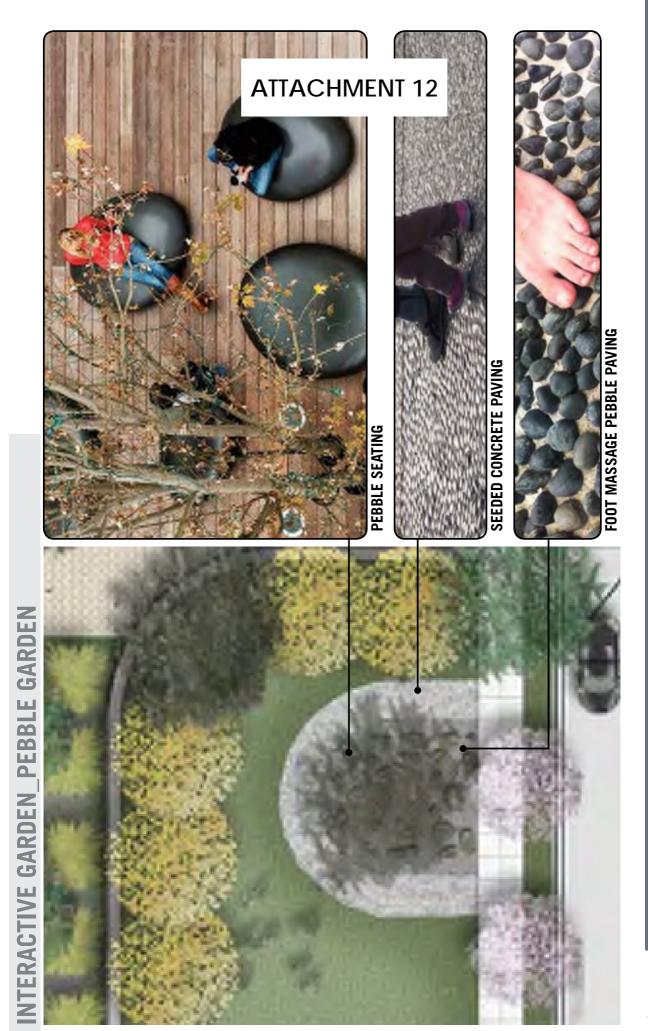


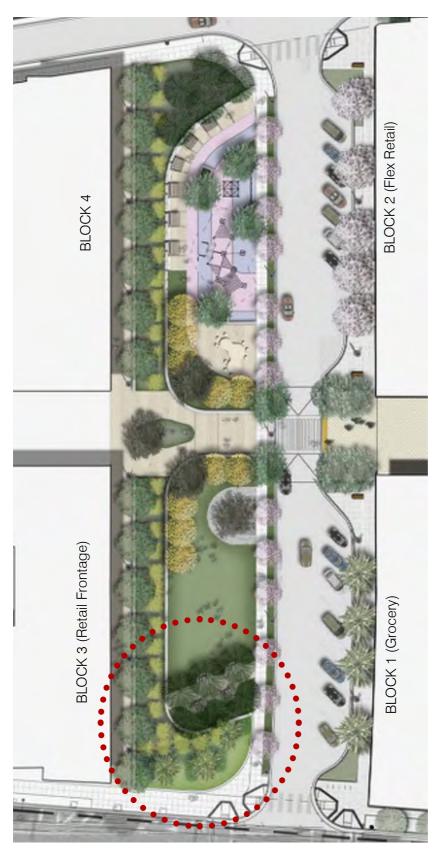


SCULPTURAL ART PICNIC TABLE



SALVAGED WOOD SLAB





**LELAND & BAYSHORE CORNER** 

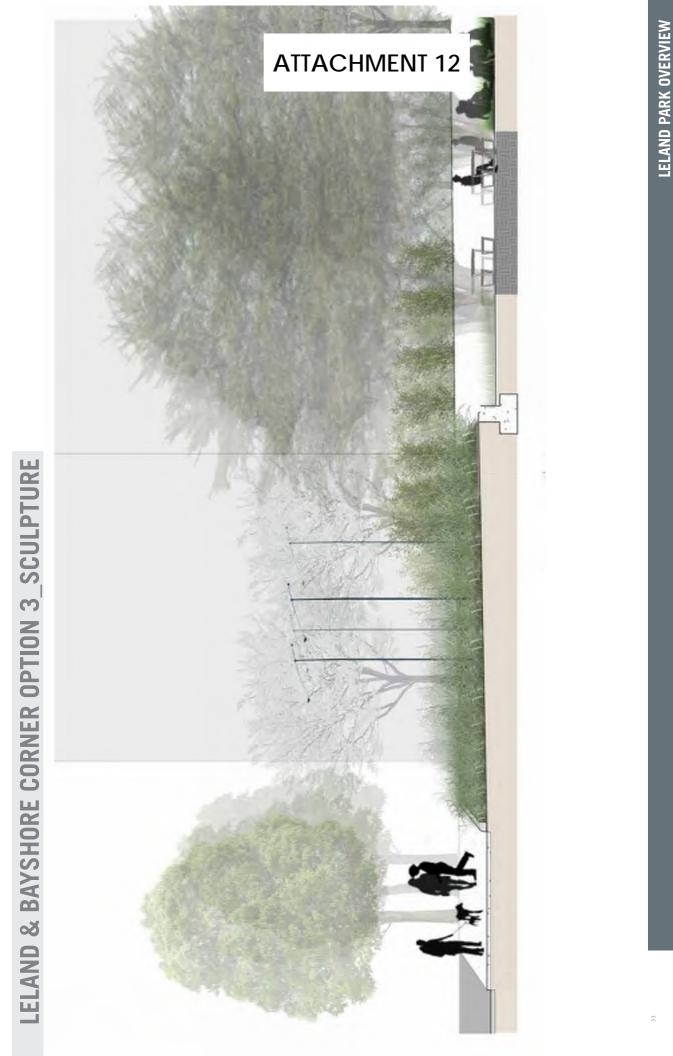






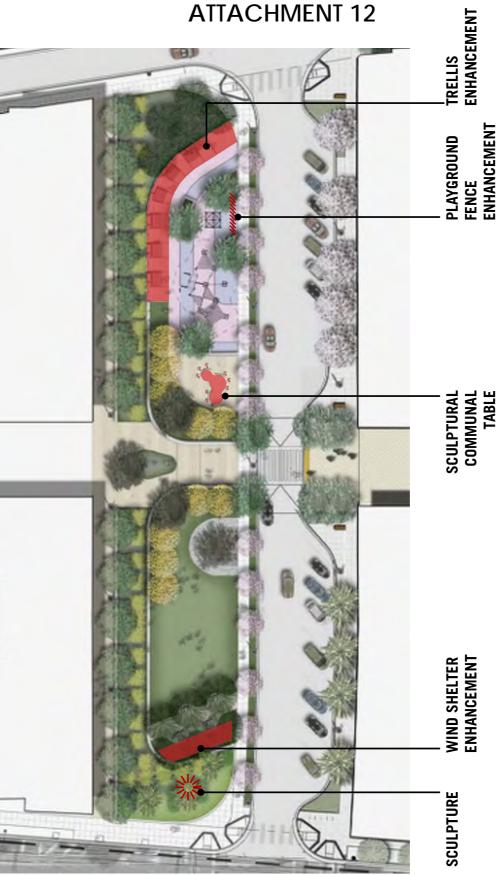


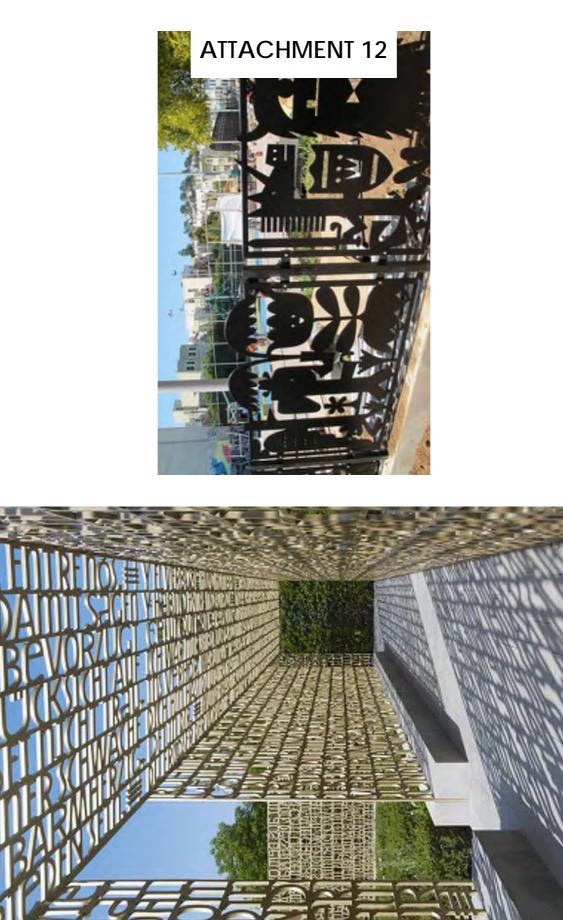






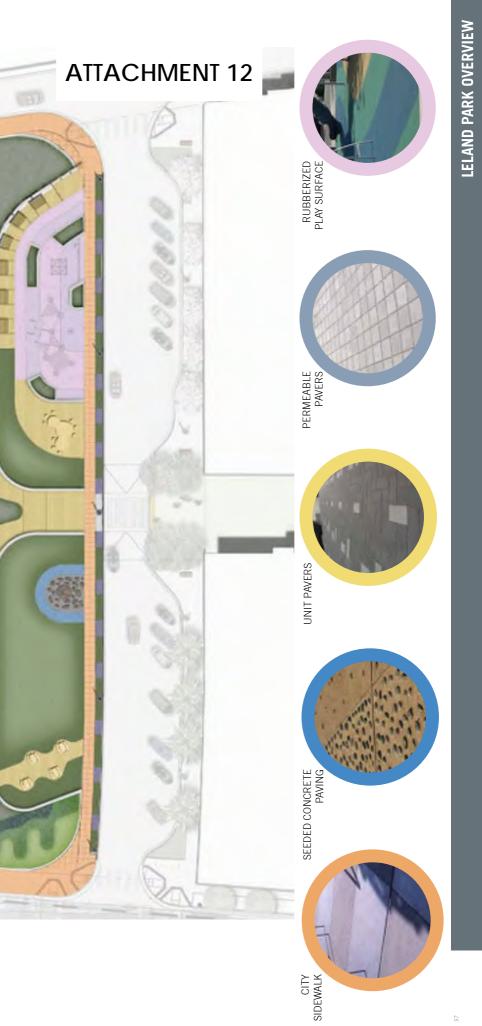






## **ART ENRICHMENT PRECEDENTS**

### **PAVING PLAN**



水

茶

米

米

















**TREE PLANTING PLAN** 



### **LELAND PARK OVERVIEW**



# **VISITACION PARK OVERVIEW**



PARK + PHASE 1 SCOPE



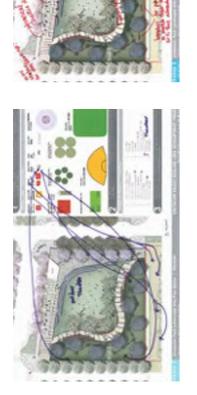
"OVAL" SCHEME

ATTACHMENT 12

素

"MEADERING" SCHEME

# EXERCISE Programming



ĥ

h

ĥ

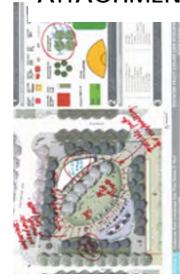
de la

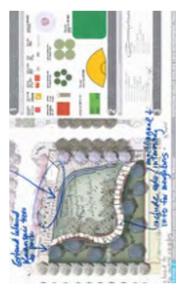
h

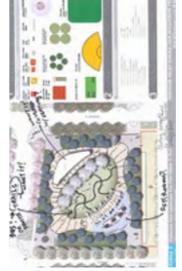
1

1711

### ATTACHMENT 12

















**VISITACION PARK OVERVIEW** 

	, 2015 Schlage Lock Parks meeting comments summary	TIC PLANTINGS AND SURFACES, MEANDERING PATH CONFIGURATION TH CLIMBING PLANTS
EXERCISE SUMMARY	September 26, 2015 Schlage Lo	Clear winners: <ul> <li>Naturalistic plantings and s</li> <li>Trellis with climbing plants</li> </ul>

OUTDOOR THEATER/MULTIUSE LAWN, ABLE TO USE FOR OTHER ASSEMBLY (YOGA); I.E. LARGE OPEN SPACE IN MIDDLE OF PARK

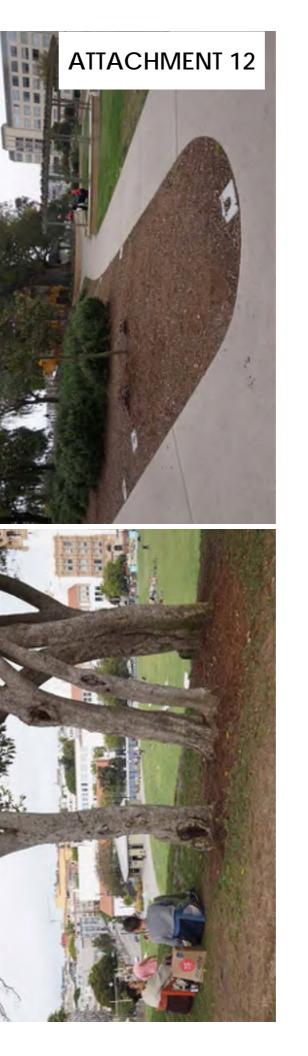
### Strong support:

- CHALLENGING PLAY EQUIPMENT WITH NATURAL LOOK/BASED ON NATURAL MATERIALS
- SHADE OVER THEATER SEATING
- COVERED AREA FOR TAI CHI
- MOVE OUTDOOR THEATER SEATING TO NOT BE FACING SETTING SUN
- BBQ with picnic area with shade
- FITNESS STATION
- ART INTEGRATED INTO THE PARK





**REC & PARKS PLANTING OBSERVATION** 





## ACCESSIBLE PAVING MATERIAL



## ACCESSIBLE PAVING MATERIAL





INTERACTIVE GARDEN PLANTING PROTECTION STRATEGY PRECEDENTS



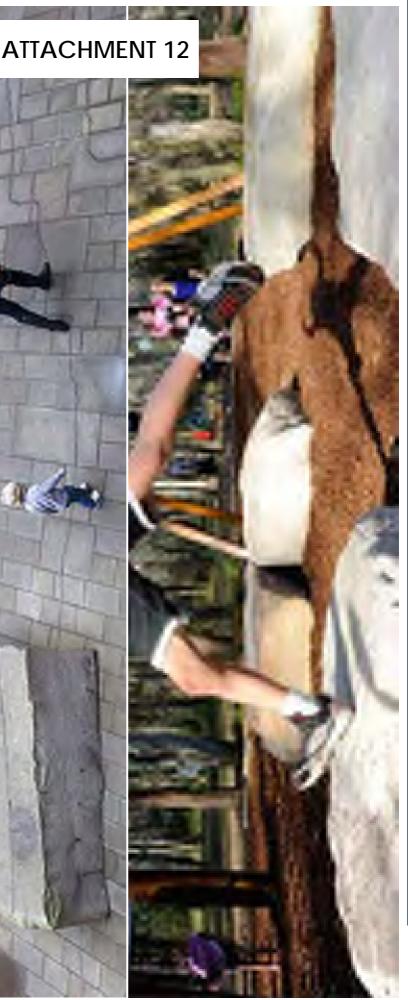
INTERACTIVE GARDEN PRECEDENT



INTERACTIVE GARDEN PRECEDENT



# INTERACTIVE GARDEN PRECEDENT



# THANK YOU

SURVEY

### Attachment I of Development Agreement

### APPLICANT'S AFFIDAVIT

### STATE OF CALIFORNIA CITY AND COUNTY OF SAN FRANCISCO

Under penalty of perjury the following declarations are made:

- (a) The undersigned is the owner or authorized agent of the owner of this property.
- (b) The information presented is true and correct to the best of my knowledge.
- (c) I understand that other information or applications may be required.

Signed:		
	(Appli	cant)
Date: 2	.10.14	2
Name (print):	Bons	looney_
	Owner Autho	orized Agent (sircle one)

For Homes       Builder Name:         Project Team Leader:       Project Team Leader:         Project Description       # of stories: 6         # of Units: 567       Avg. Home Size Adjustment: -5.5         # of Units: 567       Avg. Home Size Adjustment: -5.5         # of Units: 567       Avg. Home Size Adjustment: -5.5         Project Point Total       # of stories: 6         Project Point Total       Avg. Home Size Adjustment: -5.5         Project Point Total       Avg. Home Size Adjustment: -5.5         Project Point Total       Avg. Home Size Adjustment: -5.5         Prelim: 68.5 + 13 maybe pt       Final: 12.5         Opate Most Recently Updated:       6/177/2015         Date Most Recently Updated:       6/177/2015         Date Most Recently Updated:       6/177/2015         A Indicates that an Accountability Form is required.       Ava         A Indicates that an Accountability Form is required.       Ava         A Indicates that an Accountability Form is required.       Image         A Indicates that an Accountability Form is required.       Ava         A Indicates that an Accountability Form is required.       Image         A Indicates that an Accountability Form is required.       Image         A Indicates that an Accountability Form is required.       Image	Bayside Development         cite Development         Bay Shore Brvd. @ Leland and Visitacion Ave., San Francisco, California         ewtCity/State):       Bay Shore Brvd. @ Leland and Visitacion Ave., San Francisco, California         Adjusted Certification Thresholds       Adjusted Certification Thresholds       84.5         Adjusted Certification Thresholds       84.5       Platinum:       84.5         Final Credit       54.5       Platinum:       84.5       Platinum:       84.5         Final Credit       54.5       Platinum:       84.5       Platinu:
ti-family       Avg. Home Siz         Avg. Home Siz       Avg. Home Siz         De pt       Final: 12.5         Perimal: 12.5       Dept         Perimal: 12.5       Dept         Perimal: Not Certis       Dept         Ped:       6/17/2015         Bility Form is required.       Dept         AllD       (ID) (Minimum 0 ID Pc         AllD-RISE       AllD-RISE         aled with Respect to LEED i       Silver         AllD-RISE       Silver         AllD-RISE       Silver         All Classe of due east-west       In All S 50% greater than on the south walls 50% greater than on the south wall the sou	al Cree ID: LL: LL: vin Kurt vin Kurt vin Kurt ereq.
'ii-family       Avg. Home Si         De pt.       Final: 12.5         De pt.       Final: 12.5         ed:       6/17/2015         ed:       5/17/2015         ed:       5/17/2015         ed:       6/17/2015         ed:       6/17/2015         ed:       5/17/2015         ed:       Silver         aled with Respect to LEED to feed of the cast-west         fouth walls 50% greater than on of south walls 50% greater than on of south walls 50% greater than on on the 15 degrees of due cast-west         D.PISE       D.PISE	al Cree ID: LL: LL: vin Kurt vin Kurt vin Kurt ereq.
'ti-family       Avg. Home Siz         De pt       Final: 12.5         De pt       Final: 12.5         Ped:       6/17/2015         Billity Form is required.       DPC         (ID)       (Minimum 0 ID PC         Allo-RISE       Silver         Allo-RISE       Silver         aled with Respect to LEED 1       fouth walls 50% greater than on of 15 fouth walls 50% greater than on of 15 fouth walls 50% greater than on on built Respect to LEED 1	Adjusted Certification Thresholds         Certificad: 39.5 Gold: 69.5         Certificad: 39.5 Silver: 35.5 Platinum: 84.5         Silver: 34.5 Silver: 84.5         Silver: 54.5 Platinum: 84.5         Silver: 54.5 Platinum: 84.5         Dis 0 SS: 7 EA: 0 EQ: EA: 0         ID: 0 SS: 7 EA: 0         UL: 0 WE: 3 MR: 2.5         Minimum Point Thresholds Not Met for Final Rating Rating VI Presholds Not Met for Final Rating VI Presholds Not VI Presholds Not Met for Final Rating VI Presholds Not VI Presho
ti-family       # of stories:         Avg. Home Size Adjustment:         De pt       Final: 12.5         De pt       Final: 12.5         Ped:       6/17/2015         ed:       6/17/2015         bility Form is required.       Image: Comparison of the following for t	Certified:         39.5         Gold:         69.5           Silver:         54.5         Plathum:         84.5           Silver:         54.5         Plathum:         84.5           Final Credit Category Point Totals         84.5         84.5           ID:         0         SS:         7         Ed:         0           ID:         0         SS:         7         Ed:         0         Ed:           ID:         0         SS:         7         Ed:         0         Ed:         0           ID:         0         WE:         3         MR:         2.5         AE:         AE:           ID:         MWE:         3         MR:         2.5         AE:           Max Pt:         Preliminary Rating         MR:         2.5         AE:           Max Pt:         Preliminary Rating         No         No         No           Max:         11         Y:7.5         M:0         Notes         No
Avg. Home Size Adjustment: De pt Final: 12.5 Final: 12.5 Ed: 6/17/2015 ed: 6/17/2015 ed: 0/17/2015 ed: 0/17/2015 ed: 0/17/2015 ed: Solution 0 ID Points Required) (ID) (Minimum 0 ID Points Required) ID Rither Context and Cont	Silver:       54.5       Platinum:       84.5         Final Credit Category Point Totals       8.2       7       8.4         ID:       0       SS:       7       8.4         Minimum Point Thresholds Not Met for Final Rating       AE:       AE:         Minimum Point Thresholds Not Met for Final Rating       AE:       AE:         Max Pts       Preliminary Rating       Notes       AE:         Max Pts       Preliminary Rating       Notes       Notes       AE:         Max Pts       Nayle       No       Notes       AE:         Prered.       Prevent       Prevent       Prevent       Prevent
De pt       Final: 12.5         Prinal: 12.5         Final: Not Certified         ed:       6/17/2015         ed:       6/17/2015         bility Form is required.         (ID)       (Minimum 0 ID Points Required)         er:       Silver         and       Inder the following)         outh walls 50% greater than on east/west walls       Inder the following)         fourth walls 50% greater than on east/west walls       Inder the following)         Inder the following       Inder the following)         Inder the following       Inder the following)         Inder the following       Inder the following	Final Credit Category Point Totals         ID: 0       SS: 7       EA: 0       EQ:         LL: 0       WE: 3       MR: 2.5       AE:         LL: 0       WE: 3       MR: 2.5       AE:         Minimum Point Thresholds Not Met for Final Rating       AE:       AE:         Devin Kurtz       Image: American Amer
De pt       Final: 12.5         Ped:       6/17/2015         ed:       6/17/2015         bility Form is required.          (ID)       (Minimum 0 ID Points Required)         er:       Silver         er:       Silver         er:       Silver         and with Respect to LEED for Homes          south walls 50% greater than on east/west walls          fourth walls 50% greater than on east/west walls          fourth SEF	ID:       0       SS:       7       EA:       0       EQ:         LL:       0       WE:       3       MR:       2.5       AE:         LL:       0       WE:       3       MR:       2.5       AE:         Minimum Point Thresholds Not Met for Final Rating       MR:       2.5       AE:         Devin Kurtz       Max Pts.       Preliminary Rating       N         Max Pts.       Preliminary Rating       No       N         Max Pts.       Preliminary Rating       No       N         Max Pts.       Naybe       No       Notes       N         Max:       11       Y:7.5       N:0       Notes       N         Prevent       Prevent       Prevent       N       N       N
Final: Not Certified         ed:       6/17/2015         ed:       6/17/2015         bility Form is required.       (ID)         (ID)       (Minimum 0 ID Points Required)         ef:       Silver         fill       (ID)         MID-RISE       Silver         aled with Respect to LEED for Homes       South walls 50% greater than on east/west walls         fourth walls 50% greater than on east/west walls       In 2 Respect         fourth walls 50% greater than on east/west walls       In 2 Respect	LL: 0       WE: 2.5       AE:         Alinimum Point Thresholds Not Met for Final Rating       AE:         Minimum Point Thresholds Not Met for Final Rating       AE:         Devin Kurtz       Devin Kurtz         Max Pts.       Preliminary Rating         Max Pts.       Preliminary Rating         Max Pts.       Preliminary Rating         Max Pts.       Naybe       No         Max Pts.       Ni-0       Notes         Prevent       Prevent       Prevent
ed: 6/17/2015 bility Form is required. (ID) (Minimum 0 ID Points Required) er: Silver er: Silver aled with Respect to LEED for Homes aled with Respect to LEED for Homes for Homes for Homes ale	Devin Kurtz Max Pts. Preliminary Rating Available Y / Pts Maybe No Max: 11 Y:7.5 M:0 Notes Prereq.
bility Form (ID) er: AlD-RISE aled with F south walk fouth walk in 15 degree:	Preliminary Rating Y/Pts Maybe No Y:7.5 M:0 Notes
IIIIY Form (ID) (ID) ar: Er: IIID-RISE aled with F south walls in 15 degreed	Y/Pts Maybe No Y:7.5 M:0 Notes
(ID)	Y:7.5 M:0 Notes
<ol> <li>Integrated Project Planning</li> <li>Preliminary Rating</li> <li>Preliminary Rating</li> <li>Target performance tier: Silver</li> <li>Energy Expertise for MID-RISE</li> <li>Energy Expertise for MID-RISE</li> <li>Professional Credentialed with Respect to LEED for Homes</li> <li>Professional Credentialed with Respect to LEED for Homes</li> <li>Professional Credentialed with Respect to LEED for Homes</li> <li>Building Orientation for Solar Design (<i>meet all of the following</i>)</li> <li>Bailding Orientation for Solar Design (<i>meet all of the following</i>)</li> <li>Bast-west axis is within 15 degrees of due east-west</li> <li>Trades Training for MID-RISE</li> </ol>	Prereq. Y Prereq.
	Prereq. Y Prereq.
	Prereq.
	Prereq.
	<b>1 1</b> <i>0</i> please see ID 01-06 for details <b>0</b>
	1 1 0 0
	1 0 0
_	$\Box$ c) At least 450 sq. ft. of south-facing roof area, oriented for solar applications
	$\Box$ d) 90% of south-facing glazing is shaded in summer, unshaded in winter
	1 1 0 0
2. Quality Management for Durability	
2.1 Durability Planning (meet all of the following)	Prereq. shut off valves must be accessible
$\checkmark$ a) Durability evaluation completed	arsigma c-v) Install drain and drain pans for dothes washers in/over living spaces; OR
$\checkmark$ b) Strategies developed to address durability issues	no clothes washers in/over living spaces
✓ c-i) Nonpaper-faced backer board in tub, shower, spa areas	✓ c-vi) Exhaust conventional clothes dryers directly to outdoors
✓ c-ii) No carpet in kitchen, bathroom, laundry, and spa areas	$\checkmark$ c-vii) Install drain and drain pan for condensing clothes dryers
✓ c-ii) No carpet within 3 ft of each entryway	$\checkmark$ d) Durability strategies incorporated into project documentation
$\Box$ c-iv) Install drain and drain pans in tank water heaters in/over living spaces; OR	ec d e) Durability measures listed in durability inspection checklist
✓ no tank water heaters in/over living spaces	

**US Green Building Council** 

Page 1 of 21

October, 2014

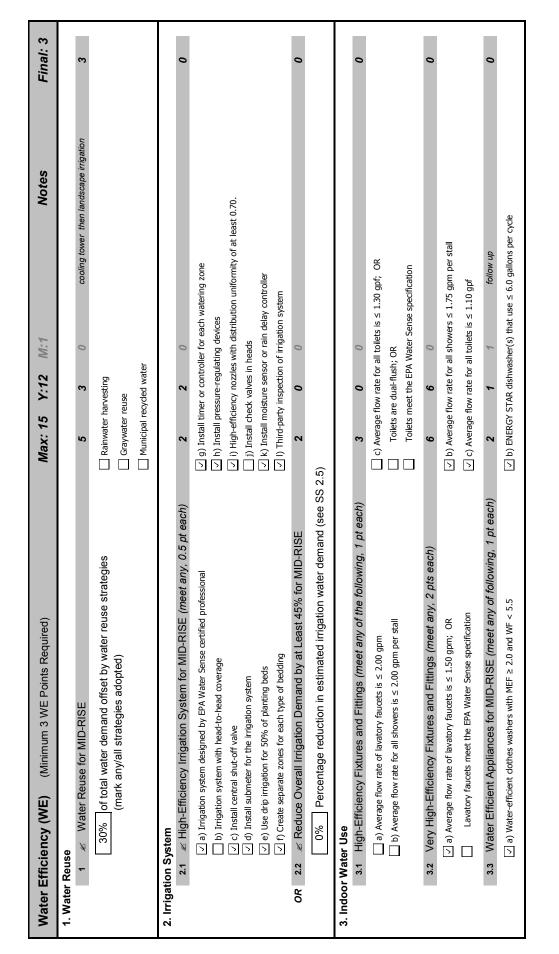
	Prereq.	porte	anion aci	titation and the second se	
builder has a quality management process in place	Dullaer conduc	ated inspec	cion using aura	builder conducted inspection using durability inspection checklist	
2.3 Third-Party Durability Management Verification	3	3	0		0
3. Innovative or Regional Design					
	1	1	0		0
lnnovation 2 (ruling #): WE 2.1 EP	1	0.5	0		0
≤ Innovation 3 (ruling #): Conxtec structural frame system	1	0	0		0
	1	0	0		0
Location & Linkages (LL) (Minimum 0 LL Points Required)	Max: 10	Y:8	M:0	Notes	Final: 0
1. LEED for Neighborhood Development  1. LEED for Neighborhood Development	10	0	0	follow up	0
un ≪ Site Selection (meet all of the following)	~	~	0	follow up	C
→ a) Built above 100-year floodplain defined by FEMA	✓ d) Not built or	n land that	was public par	$\overline{\checkmark}$ d) Not built on land that was public parkland prior to acquisition	
$\checkmark$ b) Not built on habitat for threatened or endangered species $\checkmark$ c) Not built within 100 ft of water, including wetlands	<ul> <li>✓ e) Not built or</li> </ul>	land with	prime soils, ur	ec  e) Not built on land with prime soils, unique soils, or soils of state significance	
Edge Development	1	0	0		0
	2	0	0		0
Brownfield Redevelopment for MID-RISE	1	1	0	follow up	0
$\square$ a) Site meets criteria as "contaminated" by ASTM E1903-97 Phase $\scriptstyle m II$	ノ b) Site defined	d as "browr	ifield" by local,	ec s b) Site defined as "brownfield" by local, state, or federal government agency	
re Existina Infrastructure	ł	٢	0		0
5. Community Resources / Transit					
Basic Community Resources for MID-RISE (meet one of the following)	1	0	0		0
a) Within 1/4 mile of 4 basic community resources	b) Within 1/2 mile of 7 basic community resources	mile of 7 b	asic communit	y resources	
Extensive Community Resources for MID-RISE (meet one of the following)	2	0	0		0
a) Within 1/4 mile of 7 basic community resources	b) Within 1/2 mile of 11 basic community resources	mile of 11	basic communi	ity resources	
Outstanding Community Resources for MID-RISE (meet one of the following)	ę	ę	0		0
a) Within 1/4 mile of 11 basic community resources	✓ b) Within 1/2 mile of 14 basic community resource	mile of 14	basic communi	ity resource	
Access to Open Space	~	1	0		0

Page 2 of 21

Sustainable Sites (SS) (Minimum 5 SS Points Required)	Max: 22 Y:16 M:4 Notes Final: 7	
1. Site Stewardship 1.1 Erosion Controls During Construction (meet all of the following)	Prereq. Y	
<ul> <li>J a) Stockpile and protect disturbed topsoil from erosion.</li> <li>J) Control the path and velocity of runoff with silt fencing or equivalent.</li> <li>C) Protect sewer inlets, streams, and lakes with straw bales, silt fencing, etc.</li> </ul>	<ul> <li>d) Provide swales to divert surface water from hillsides</li> <li>J) be tiers, erosion blankets, compost blankets, etc. on sloped areas.</li> </ul>	
<ul> <li>1.2 Minimize Disturbed Area for MID-RISE (meet appropriate requirements) Where the site is not previously developed, meet all the following: <ul> <li>□ a) Develop tree / plant preservation plan with "no-disturbance" zones</li> <li>□ b) Leave 40% of buildable lot area, not including area under roof, undisturbed</li> <li>OR Where the site is previously developed, meet all the following:</li> <li>□ c) Develop tree / plant preservation plan with "no-disturbance" zones AND</li> <li>□ Rebabilitate lot; undo soil compaction and remove invasive plants AND</li> <li>□ Meet the requirements of SS 2.2</li> <li>OR ✓ U Build on a lot to achieve a density of 40 units per acre.</li> </ul> </li> </ul>		
Ĕ		I
	Prereq.	
2.2  ∠ Basic Landscaping Design (meet all of the following)	1 1 0 0	
<ul> <li>Jany turf must be drought-tolerant.</li> <li>b) Do not use turf in densely shaded areas.</li> <li>こ) Do not use turf in areas with slope of 25%</li> </ul>	<ul> <li>d) Add mulch or soil amendments as appropriate.</li> <li>e) All compacted soil must be tilled to at least 6 inches.</li> </ul>	
AND/OR 2.3  Z. Limit Conventional Turf for MID-RISE	2 2 0 2	_
AND/OR 2.4  # Drought-Tolerant Plants for MID-RISE	1 1 0 1	
	□ Both points in SS 2.3 are met ( $\leq$ 20% turf)	
OR 2.5  Keduce Overall Irrigation Demand by at Least 20% for MID-RISE	<b>3 0 3</b> follow up <b>0</b>	
Percentage reduction in estimated irrigation water demand	(calculate)	
<ol> <li>Reduce Local Heat Island Effects</li> <li>3.1          Reduce Site Heat Island Effects for MID-RISE (meet one)     </li> </ol>	1 1 0 0	
	$\checkmark$ b) Install light-colored, high-albedo materials for 50% of sidewalks, patios, and driveways	_
3.2	1 1 0 0	_
$\swarrow$ a) Install roof with high albedo materials on 75% of roof area D Install a vegetated roof for at least 50% of roof area	$\Box$ c) Install combination of high albedo and vegetated roof	

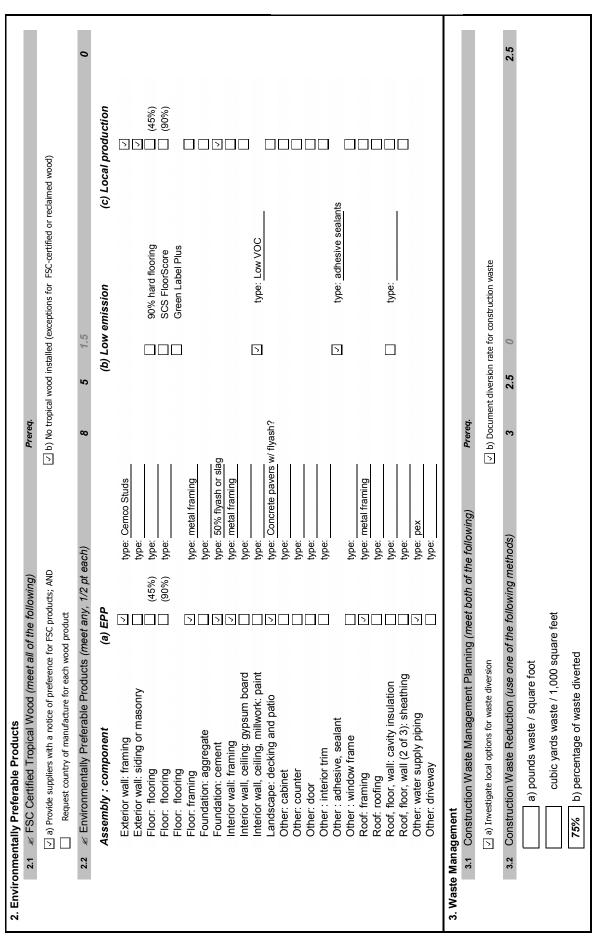
### 0 0 0 C iv) Install non-toxic termite bait system v) Use noncellulosic wall structure v) Use solid concrete foundation walls or pest-proof masonry wall design e) In 'moderate' to 'very heavy' termite risk areas: i) Treat all cellulosic material with borate product to 3' above foundation ii) Install sand or diatomaceous earth barrier iii) Install steel mesh barrier termite control system 125 rides per day EP point $\checkmark$ b) Within 1/2 mile of transit services providing 60 rides per weekday $\Box$ b) In-field performance monitoring data to demonstate compliance space per unit confirm lot size Provide infrastructure to facilitate shared vehicle usage $\checkmark$ d) Size parking to not exceed min zoning req'ts, AND na па na $\Box$ b) Plant trees, shrubs, or groundcover density (units/acre) 0 Provide infrastructure t e Provide no new parking 0 0 113.4 2 ≤ Stormwater Quality Control for MID-RISE (meet one of the following) impermeable surfaces directed to on-site infiltration features $\checkmark$ c) Include no wood-to-concrete connections, or separate connections with dividers $\square$ a) Provide low-emitting, fuel-efficient vehicles for 3% of the total parking capacity 7.3 Parking Capacity/Low-Emitting Vehicles for MID-RISE (meet one) $\checkmark$ b) Seal external cracks, joints, etc. with caulking and install pest-proof screens lot size (acres) 5 Pest Control Alternatives (meet any of the following, 1/2 pt each) $\Box$ a) Stormwater mgmt plan designed in accordance with state or local program $\Box$ b) 5% of total capacity is preferred parking spots for low-emitting vehicles $\Box$ a) For portions of lot on steep slope, use terracing and retaining walls 567 secure, covered storage capacity (# of bicycles) $\square$ a) Within 1/2 mile of transit services providing 30 rides per weekday $\Box$ c) Alternative-fuel refueling stations for 3% of total vehicle capacity 4.2 Permanent Erosion Controls (meet one of the following) 7.1 Public Transit for MID-RISE (meet one of the following) $\Box$ d) Install landscaping so mature plants are 24" from home 5.0 $\checkmark$ a) Keep all exterior wood at least 12" above soil other impermeable surfaces # of total units on the lot OR 6.3 Very High Density for MID-RISE 4.1 A Permeable Lot for MID-RISE 6.1 Moderate Density for MID-RISE vegetative landscape 7.2 Bicycle Storage for MID-RISE permeable paving OR 6.2 High Density for MID-RISE 4. Surface Water Management 7. Alternative Transportation 6. Compact Development 5. Nontoxic Pest Control 567 4.3

### **ATTACHMENT 14**



14

Energy & Atmosphere (EA) (Minimum 0 EA Points Required)	Max: 38 Y:9 M:1 Notes Fina	Final: 0
Important note: projects registered after October 1: (exception: projects permitted under Title-24 2008 should	rt note: projects registered after October 1st, 2014 must exceed Title-24 2013 by at least 10% (exception: projects permitted under Title-24 2008 should use the earlier version of the LEED for Homes checklist)	
1. Optimize Energy Performance in Mid-rise Buildings		
1.1 Minimum Energy Performance for MID-RISE in CA (meet all of the following)	Prereq.	
<ul> <li>L<sup>-</sup> Energy performance exceeds Title-24 2008 by 15% or more</li> <li>L<sup>-</sup> Energy improvements verified by HERS Rater</li> </ul>	스 Energy modeling conducted by current CEPE or CEA	
1.2 Testing and Verification for MID-RISE	Prereq.	
1.3 Optimize Energy Performance for MID-RISE in CA	<b>24 6</b> 0 0	0
<b>10.0%</b> % savings compared with Title-24 2013	(calculate)	
8. Lighting		
8.1 Basic Lighting	Prereq.	
8.2 Advanced In-Unit Lighting (meeting one of the following)	<b>3 3</b> 0 LED <b>0</b>	0
$\checkmark$ a) Meet Title-24 w/ high-efficacy lighting throughout	$\Box$ c) Meet Title-24 w/ controls AND use 90% ENERGY STAR lamps	
□ b) Meet Title-24 w/ controls AND use 60% ENERGY STAR fixtures		
10. Renewable Energy 10   ∞ Renewable Energy System	<b>10 0 0</b> follow up 0.0	0.0
Percentage of annual reference energy load supplied by renewable system	stem	
(calculate)		
11. Residential Refrigerant Management		
11.1 Refrigerant Charge Test	Prereq. Y	۲
11.2 Appropriate HVAC Refrigerants (meet one of the following)	<b>1 0</b> 1 follow up 0	0
□ a) Use no refrigerants	$\Box$ c) Use refrigerants that complies with global warming potential equation	
b) Use non-HCFC refrigerants		
Materials & Resources (MR) (Minimum 2 MR Points Required)	Max: 16 Y:8.5 M:3 Notes Final:	Final: 2.5
1. Material-Efficient Framing 1.1 Framing Order Waste Factor	Prereq.	
1.2 Detailed Framing Documents	1 0 0	0
AND/OR 1.3 Detailed Cut List and Lumber Order	1 0 0	0
Requirements of MR 1.2 have been met	Detailed cut list and lumber order corresponding to framing plans or scopes	
AND/OR 1.4 Framing Efficiencies (meet any of the following, see Rating System for pts)	3 1 1.5 follow up 0	0
✓ Precut framing packages	$\checkmark$ Stud spacing greater than 16" on center	
Open-web floor trusses	✓ Ceiling joist spacing greater than 16" on center	
Structural insulated panel walls	Floor joist spacing greater than 16" on center	
Structural insulated panel roof     Chruchural insulated hand floore	L Roof rafter spacing greater than 16" on center T Two of the followinor: Size headers for loads: Edder hiorkinor: drowall cline: 2-stud conners	
OR 1.5 Off-site Fabrication (meet one of the following)		0
a) Panelized construction	b) Modular, prefabricated construction	
US Green Building Council Page	6 of 21 October	<del>October, 2014</del>



**US Green Building Council** 

Page 7 of 21

October, 2014

Indoor Environmental Quality (EQ) (Minimum 3 EQ Points Required)	Max: 21 Y:5.5 M:4 Notes Final: 0
ы Б	
2 Basic Combustion Venting Measures for MID-RISE (meet all the following)	Prereq.
a) no unvented combustion appliances	$\Box$ d) space, water heating equipment designed with dosed combustion; OR
□ b) carbon monoxide monitors on each floor of each unit	space and water heating equipment has power-vented exhaust; OR
C ) no fireplace installed, OR	space and water heating equipment located in detached or open-air facility; OR
all fireplaces and woodstoves have doors	no space- or water-heating equipment with combustion
3. Moisture Control	
3 Moisture Load Control (meet one of the following)	1 0 0
a) Additional dehumidification system	b) HVAC system equipped with additional dehumidification mode
4. Outdoor Air Ventilation	
4.1  & Basic Outdoor Air Ventilation for MID-RISE (meet all of the following)	Prereq. follow up
☑ a) ASHRAE 62.2-2007 met for all in-unit spaces	$\checkmark$ b) ASHRAE 62.1-2007, Sections 4 through 7 met for residential-associated spaces
4.2 Enhanced Outdoor Air Ventilation for MID-RISE	2 0 0 0
4.3 Third-Party Performance Testing for MID-RISE	1 0 0 0
5. Local Exhaust	
5.1 $\measuredangle$ Basic Local Exhaust for MID-RISE (meet all of the following)	Prereq.
$[\mathcal{I}]$ a) In-unit bathrooms and kitchens meet ASHRAE 62.2-2007 air flow requirements	✓ d) ENERGY STAR labeled bathroom exhaust fans OR
$[\mathcal{A}]$ b) Fans and ducts designed and installed to ASHRAE Std. 62.2	Multi-port bathroom exhaust systems installed
$[\mathcal{A}]$ c) Air exhausted to outdoors through roof or outside wall	$\checkmark$ e) Common bathrooms and kitchens meet ASHRAE 62.1-2007 air flow requirements
5.2 Enhanced Local Exhaust (meet one of the following)	<b>1 0 </b> <i>1</i> follow up <b>0</b>
a) Occupancy sensor	$\Box$ c) Automatic timer tied to switch to operate fan for 20+ minutes post-occupancy
b) Automatic humidistat controller	d) Continuously operating exhaust fan
5.3 Third-Party Performance Testing for MID-RISE	1 0 0 0

6. Distribution of Space Heating and Cooling	
6.1  K Room-by-Room Load Calculations	Prereq. Y
6.2 Return Air Flow / Room-by-Room Controls (meet one of the following)	1 0 0 0
	B. Nonducted HVAC Systems
$\Box$ a) Return air opening of 1 sq. inch per cfm of supply	Flow control valves on every radiator
b) Limited pressure differential between dosed room and adjacent spaces	Radiant floor system with thermostatic controls in every room
6.3 Third-Party Performance Test / Multiple Zones (meet one of the following)	2 0 0 0
A. Forced-Air Systems	B. Nonducted HVAC Systems
Have supply air flow rates in each room tested and confirmed	Install at least two distinct zones with independent thermostat control
7. Air Filtering	
7.1 Good Filters	Prereq. Y
7.2 Better Filters	1 1 0 MERV 10 0
OR 7.3 Best Filters	2 0 2 MERV 13 0
8. Contaminant Control	
8.1  × Indoor Contaminant Control during Construction	1 1 0 Calgreen 0
8.2 Indoor Contaminant Control for MID-RISE (meet any of following, 1 pt each)	<b>2 0</b> 0 0 0
$\Box$ a) Install permanent walk-off mats for each unit	$\Box$ b) In each unit, design shoe removal and storage space near primary entryway
Install central entryway system	c) In each unit, install central vacuum system with exhaust to outdoors
8.3  K Preoccupancy Flush	<b>1 1</b> 0 48 hr flush out <b>0</b>
9. Radon Protection	
9.1 💉 Radon-Resistant Construction in High-Risk Areas	Prereq.
9.2 💉 Radon-Resistant Construction in Moderate-Risk Areas	<b>1 0 </b> 7 <i>follow up</i> <b>0</b>
10. Garage Pollutant Protection	
10.1 No HVAC in Garage	Prereq.
10.2 Minimize Pollutants from Garage for MID-RISE (meet all of the following)	<b>2 2</b> 0 <b>0</b>
a) In conditioned spaces above garage:	<ul> <li>c) Vestibule to provide airlock between garage and adjacent spaces; OR</li> <li>Provide self-closing doors and deck-to-deck partitions</li> </ul>
b) In conditioned spaces next to garage	<ul> <li>✓ d) Continuous exhaust in garage</li> </ul>
Veather-strip all doors	
✓ carbon montative detections in rooms that share a tool with galage ✓ Seal all penetrations and cracks at the base of walls	
OR 10.3 Detached Garage or No Garage	3 0 0

14

11. Environmental Tobacco Smoke Control	
11 Env. Tobacco Smoke Reduction for MID-RISE (meet part (a) or (b) below)	1 0.5 0 0
a) Reduce smoke exposure and transfer (1/2 point)	b) Prohibit smoking throughout the building (1 points)
✓ Prohibit smoking in all common areas	Prohibit smoking within living units
$\checkmark$ Any exterior smoking areas are > 25 ft from entries, air intakes, windows	Prohibit smoking in all common areas of the building
$\checkmark$ Prohibit on-property smoking within 25 feet of entries, intakes, windows	$\Box$ Any exterior smoking areas are > 25 ft from entries, air intakes, windows
✓ Prohibitions communicated through lease agreements, CC&Rs, signage	Prohibitions communicated through lease agreements, CC&Rs, signage
12. Compartmentalization of Units	
12.1 Compartmentalization of Units (meet both of the following)	Prereq.
$ec { m J}$ a) Air-seal and/or weather-strip all walls, chases, doors, windows, etc.	ec d b) Demonstrate minimal leakage of 0.30 CFM50 per square foot of enclosure
12.2 Enhanced Compartmentalization of Units	1 0 0 0
Awareness & Education (AE) (Minimum 0 AE Points Required)	Max: 3 Y:2 M:0 Notes Final: 0
1. Education of the Homeowner or Tenant	
1.1  Æ Basic Operations Training (meet both of the following)	Prereq.
$\checkmark$ a) Operations and training manual	<ul><li>J) One-hour walkthrough with occupant(s)</li></ul>
1.2 💉 Enhanced Training	1 0 0 0
1.3 Public Awareness (meet three of the following)	1 1 0 0
a) Open house on at least four weekends	$[\mathcal{A}]$ c) Newspaper article on the project
$\checkmark$ b) Website about features and benefits of LEED homes	ec d d) Display LEED signage on the exterior of the home
2. Education of the Building Manager	
2  Æ Education of the Building Manager (meet both of the following)	1 1 0 0
✓] a) Operations and training manual	<ul><li>J) One-hour walkthrough with building manager</li></ul>

### **ATTACHMENT 14**

**USGBC LEGAL DISCLAIMER** 

express or implied, written or oral, statutory or otherwise, with respect to the certifications provided by USGBC. By way of example only, and without limiting the broad scope of the foregoing, it is understood that LEED certification, whether at the Certified level or any other level, does not mean that the project is structurally sound or safe, constructed in accordance USGBC makes no warranty with respect to any LEED certified project, including any warranty of habitability, merchantability, or fitness for a particular purpose. There are no warranties, with applicable laws, regulations or codes, free of mold or mildew, free of volatile organic compounds or allegens, or free of soil gases including radon.

## SIGNATURES BY RESPONSIBLE PARTIES

By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been met for the indicated credits and will, if audited, provide the necessary supporting documents.	ereby declare and affirm to the USGBC that the LEED II, if audited, provide the necessary supporting docume	) for Homes require ents.	ements, as specified in the LEED for Homes Rating
Project Team Leader	Brad Mooney	Company	Bayside Development
Signature		Date	
By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the required inspections and performance testing for the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been completed. I have evaluated this project's documentation package and conducted the necessary QA/QC procedures with the Green Rater, and I hereby declare and affirm to USGBC that the homes included in this submittal are ready to earn LEED for Homes certification, as per the attact checklist.	ereby declare and affirm to the USGBC that the requiring System, have been completed. I have evaluated this and affirm to USGBC that the homes included in this s	red inspections and is project's docume submittal are ready	are and affirm to the USGBC that the required inspections and performance testing for the LEED for Homes , have been completed. I have evaluated this project's documentation package and conducted the necessary QA/QC to USGBC that the homes included in this submittal are ready to earn LEED for Homes certification, as per the attached
Provider QAD	Earth Advantage	Company	
Signature		Date	
By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the required inspections and performance testing for the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been completed.	ereby declare and affirm to the USGBC that the requir ng System, have been completed.	red inspections and	d performance testing for the LEED for Homes
I also hereby confirm that all verification services were performed	performed in accordance with the LEED for Homes <u>Verification &amp; Submittal Guidelines and Addendum.</u>	erification & Submit	tal Guidelines and Addendum.
Green Rater	Bright Green Strategies	Company	Bright Green Strategies
Signature		Date	
By affixing my signature below, the undersigned does hereby declare and affirm to the USGBC that the required inspections and performance testing for the LEED for Homes requirements, as specified in the LEED for Homes Rating System, have been completed.	ereby declare and affirm to the USGBC that the requir ng System, have been completed.	red inspections and	d performance testing for the LEED for Homes
I also hereby confirm that all verification services were performed	performed in accordance with the LEED for Homes <u>Verification &amp; Submittal Guidelines and Addendum.</u>	erification & Submit	tal Guidelines and Addendum.
Green Rater		Company	
Signature		Date	

### ATTACHMENT 14

### City and County of San Francisco

### First Source Hiring Program Office of Economic & Workforce Development

Workforce Division

A COUNTY OF THE COUNTY OF THE

Edwin M. Lee, Mayor

### MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MOU") is entered into as of May 16<sup>th</sup>, 2016, by and between the City and County of San Francisco (the "City") through its First Source Hiring Administration ("FSHA") and Visitacion Investment LLC ("Project Sponsor").

WHEREAS, Project Sponsor, as developer, proposes to construct up to 590 new dwelling units, with up to 44,970 square feet of commercial space and 579 accessory, off-street parking spaces ("Project") at Visitacion Valley, Lots 1 & 2 in Assessor's Block APN 5087-003/ 5087-003A & APN 5099-014, San Francisco California ("Site"); and

WHEREAS, the Administrative Code of the City provides at Chapter 83 for a "First Source Hiring Program" which has as its purpose the creation of employment opportunities for qualified Economically Disadvantaged Individuals (as defined in Exhibit A); and

WHEREAS, the Project requires a building permit for a commercial activity of greater than 25,000 square feet and/or is a residential project greater than ten (10) units and therefore falls within the scope of the Chapter 83 of the Administrative Code; and

WHEREAS, Project Sponsor wishes to make a good faith effort to comply with the City's First Source Hiring Program.

Therefore, the parties to this Memorandum of Understanding agree as follows:

- A. Project Sponsor, upon entering into a contract for the construction of the Project with Prime Contractor after the date of this MOU, will include in that contract a provision in the form attached hereto as Exhibit A and Exhibit A-1. It is the Project Sponsor's responsibility to provide a signed copy of Exhibit A to First Source Hiring program and CityBuild within 10 business days of execution.
- B. Project Sponsor, as the developer of the Project, will comply with the requirements of Chapter 83 and upon entering into leases for the commercial space at the Project that are subject to Chapter 83, will include in that contract a provision in the form attached hereto as Exhibit B and Exhibit B-1. Project Sponsor will inform the FSHA when leases or occupancy contracts have been negotiated and provide a signed copy of Exhibit B and Exhibit B-1.
- C. Any lessee(s) or operator(s) of commercial space within the Project shall have the same obligations under this MOU as the Project Sponsor.
- D. CityBuild shall represent the First Source Hiring Administration and will provide referrals of Qualified economically disadvantaged individuals for employment on the construction phase of the Project as required under Chapter 83. The First Source

V(5/12/2016)

Hiring Program will provide referrals of Qualified economically disadvantaged individuals for the permanent jobs located within the commercial space of the Project.

- E. The owners or residents of the residential units within the Project shall have no obligations under this MOU, or the attached First Source Hiring Agreement.
- F. FSHA shall advise Project Sponsor, in writing, of any alleged breach on the part of the Project's contractor and/or tenant(s) with regard to participation in the First Source Hiring Program at the Project prior to seeking an assessment of liquidated damages pursuant to Section 83.12 of the Administrative Code.
- G. As stated in Section 83.10(d) of the Administrative Code, if Project Sponsor fulfills its obligations as set forth in Chapter 83, it shall not be held responsible for the failure of a contractor or commercial tenant to comply with the requirements of Chapter 83.
- H. This MOU is an approved "First Source Hiring Agreement" as referenced in Section 83.11 of the Administrative Code. The parties agree that this MOU shall be recorded and that it may be executed in counterparts, each of which shall be considered an original and all of which taken together shall constitute one and the same instrument.
- J. Except as set forth in Section E, above: (1) this MOU shall be binding on and inure to the benefit of all successors and assigns of Project Sponsor having an interest in the Project and (2) Project Sponsor shall require that its obligations under this MOU shall be assumed in writing by its successors and assigns. Upon Project Sponsor's sale, assignment or transfer of title to the Project, it shall be relieved of all further obligations or liabilities under this MOU.

Date: 5.12.16 Signature: Name of Authorized Signer: Jefferey A Brooks Email: jbrooks@bsdsf.com Phone: 415 468 6676 x268 Company: Visitacion Investment LLC Address: 150 Executive Park Blvd Ste 4000 San Francisco, CA 94134 Phone: 415 468 6676 x271 Project Sponsor: Bayside Development LLC Email: bmooney@bsdsf.com Contact: Brad Mooney Address: 150 Executive Park Blvd Ste 4000 San Francisco, CA 94134 Date: 5/12/16 First Source Hiring Administration OEWD, 1 South Var Ness 5th Fl. San Francisco, CA 94103 Attn: Ken Nim, Compliance Manager, ken.nim@sfgov.org

Patrick Mulligan, CityBuild Director, OEWD

Date: 5/12/16

V(5/12/2016)

### Exhibit A: First Source Hiring Agreement

This First Source Hiring Agreement (this "Agreement"), is made as of , by and between , the First Source Hiring Administration, (the "FSHA"), and the undersigned contractor ("Contractor"):

### RECITALS

WHEREAS, Contractor has executed or will execute an agreement (the "Contract") to construct or oversee a portion of the project to construct new dwelling units, with up to square feet of commercial space and accessory, off-street parking spaces ("Project") at , Lots in Assessor's Block , San Francisco California ("Site"), and a copy of this Agreement is attached as an exhibit to, and incorporated in, the Contract; and

WHEREAS, as a material part of the consideration given by Contractor under the Contract, Contractor has agreed to execute this Agreement and participate in the San Francisco Workforce Development System established by the City and County of San Francisco, pursuant to Chapter 83 of the San Francisco Administrative Code;

WHEREAS, as a material part of the consideration given by Contractor under the Contract, Contractor agree to an overall goal of 30% of total construction work hours performed by San Francisco residents with priorities given to economically disadvantaged workers from San Francisco District 10;

WHEREAS, as a material part of the consideration given by Contractor under the Contract, Contractor has agreed to execute this Agreement and participate in the San Francisco Workforce Development System established by the City and County of San Francisco, pursuant to Chapter 83 of the San Francisco Administrative Code;

NOW, THEREFORE, in consideration of the mutual covenants set forth herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties covenant and agree as follows:

1. DEFINITIONS

For purposes of this Agreement, initially capitalized terms shall be defined as follows:

- a. "Core" or "Existing" workforce. Contractor's "core" or "existing" workforce shall consist of any worker who appears on the Contractor's active payroll for at least 60 days of the 100 working days prior to the award of this Contract.
- b. "Economically Disadvantaged Individual". An individual who is either (a) eligible for services under the Workforce Investment Act of 1998 (29 U.S.C.A. 2801, et seq.), as may be amended from time to time, or (b) designated as "economically disadvantaged" by the OEWD/First Source Hiring Administration as an individual who is at risk of relying upon, or returning to, public assistance.
- c. "Hiring opportunity". When a Contractor adds workers to its existing workforce

V(5/12/2016)

for the purpose of performing the Work under this Contract, a "hiring opportunity" is created. For example, if the carpentry subcontractor has an existing crew of five carpenters and needs seven carpenters to perform the work, then there are two hiring opportunities for carpentry on the Project.

- d. "Job Notification". Written notice of job request from Contractor to CITYBUILD for any hiring opportunities. Contract shall provide Job Notifications to CITYBUILD with a minimum of 3 business days' notice.
- e. "New hire". A "new hire" is any worker who is not a member of Contractor's core or existing workforce.
- f. "Referral". A referral is an individual member of the CITYBUILD Referral Program who has received training appropriate to entering the construction industry workforce.
- g. "Workforce participation goal". The workforce participation goal is expressed as a percentage of the Contractor's and its Subcontractors' new hires for the Project.
- h. Entry Level Position: A non-managerial position that requires no education above a high school diploma or certified equivalency, and less than two (2) years training or specific preparation, and shall include temporary and permanent jobs, and construction jobs related to the development of a commercial activity.
- i. First Opportunity: Consideration by Contractor of System Referrals for filling Entry Level Positions prior to recruitment and hiring of non-System Referral job applicants.
- j. Job Classification: Categorization of employment opportunity or position by craft, occupational title, skills, and experience required, if any.
- k. Job Notification: Written notice, in accordance with Section 2(b) below, from Contractor to FSHA for any available Entry Level Position during the term of the Contract.
- 1. Publicize: Advertise or post available employment information, including participation in job fairs or other forums.
- m. Qualified: An Economically Disadvantaged Individual who meets the minimum bona fide occupational qualifications provided by Contractor to the System in the job availability notices required this Agreement.
- n. System: The San Francisco Workforce Development System established by the City and County of San Francisco, and managed by the Office of Economic and Workforce Development (OEWD), for maintaining (1) a pool of Qualified individuals, and (2) the mechanism by which such individuals are certified and referred to prospective employers covered by the First Source Hiring requirements under Chapter 83 of the San Francisco Administrative Code. Under this agreement, CityBuild will act as the representative of the San Francisco Workforce Development System.

V(5/12/2016)

- o. System Referrals: Referrals by CityBuild of Qualified applicants for Entry Level Positions with Contractor.
- p. Subcontractor: A person or entity who has a direct contract with Contractor to perform a portion of the work under the Contract.

### 2. PARTICIPATION OF CONTRACTOR IN THE SYSTEM

a. The Contractor agrees to work in Good Faith with the Office of Economic and Workforce Development (OEWD)'s CityBuild Program to achieve the goal of 50% of new hires for employment opportunities in the construction trades and Entry-level Position related to providing support to the construction industry.

The Contractor shall provide CityBuild the following information about the Contractor's employment needs under the Contract:

- i. On Exhibit A-1, the CityBuild Workforce Projection Form 1, Contractor will provide a detailed numerical estimate of journey and apprentice level positions to be employed on the project for each trade.
- Contractor is required to ensure that a CityBuild Workforce Projection Form 1 is also completed by each its subcontractors.
- iii. Contractor will collaborate with CityBuild staff in completing the CityBuild Workforce Hiring Plan Form 2, to identify, by trade, the number of Core workers at project start and the number of workers at project peak; and the number of positions that will be required to fulfill the First Source local hiring expectation.
- iv. Contractor and Subcontractors will provide documented verification that its "core" employees for this contract meet the definition listed in Section 1.a.
- v. A negotiated and signed CityBuild Workforce Hiring Plan Form 2 will constitute the First Source Hiring Plan as required under Chapter 83.
- b.

i.

- Contractor must (A) give good faith consideration to all CityBuild Referrals. (B) review the resumes of all such referrals, (C) conduct interviews for posted Entry Level Positions in accordance with the nondiscrimination provisions of this contract, and (D) affirmative obligation to notify CityBuild of any new entry-level positions throughout the life of the project.
- ii. Contractor must provide constructive feedback to CityBuild on all System Referrals in accordance with the following:
  - (A) If Contractor meets the criteria in Section 5(a) below that



establishes "good faith efforts" of Contractor, Contractor must only respond orally to follow-up questions asked by the CityBuild account executive regarding each System Referral; and

- (B) After Contractor has filled at least 5 Entry Level Positions under this Agreement, if Contractor is unable to meet the criteria in Section 5(b) below that establishes "good faith efforts" of Contractor, Contractor will be required to provide written comments on all CityBuild Referrals.
- c. Contractor must provide timely notification to CityBuild as soon as the job is filled, and identify by whom.

### 3. CONTRACTOR RETAINS DISCRETION REGARDING HIRING DECISIONS

Contractor agrees to offer the System the First Opportunity to provide qualified applicants for employment consideration in Entry Level Positions, subject to any enforceable collective bargaining agreements. Contractor shall consider all applications of Qualified System Referrals for employment. Provided Contractor utilizes nondiscriminatory screening criteria, Contractor shall have the sole discretion to interview and hire any System Referrals.

### 4. COMPLIANCE WITH COLLECTIVE BARGAINING AGREEMENTS

Notwithstanding any other provision hereunder, if Contractor is subject to any collective bargaining agreement(s) requiring compliance with a pre-established applicant referral process, Contractor's only obligations with regards to any available Entry Level Positions subject to such collective bargaining agreement(s) during the term of the Contract shall be the following:

- a. Contractor shall notify the appropriate union(s) of the Contractor's obligations under this Agreement and request assistance from the union(s) in referring Qualified applicants for the available Entry Level Position(s), to the extent such referral can conform to the requirements of the collective bargaining agreement(s).
- b. Contractor shall use "name call" privileges, in accordance with the terms of the applicable collective bargaining agreement(s), to seek Qualified applicants from the System for the available Entry Level Position(s).
- c. Contractor shall sponsor Qualified apprenticeship applicants, referred through the System, for applicable union membership.
- 5. CONTRACTOR'S GOOD FAITH EFFORT TO COMPLY WITH ITS OBLIGATIONS HEREUNDER



Contractor will make good faith efforts to comply with its obligations to participate in the System under this Agreement. Determinations of Contractor's good faith efforts shall be in accordance with the following:

- a. Contractor shall be deemed to have used good faith efforts if Contractor accurately completes and submits prior to the start of demolition and/or construction Exhibit A-1: CityBuild Workforce Projection Form 1; and
- b. Contractor's failure to meet the criteria set forth from Section 5(c) to 5(m) does not impute "bad faith." Failure to meet the criteria set forth in Section 5(c) to 5(m) shall trigger a review of the referral process and the Contractor's efforts to comply with this Agreement. Such review shall be conducted by FSHA in accordance with Section 11 (c) below.
- c. Meet with the Project's owner, developer, general contractor, or CityBuild representative to review and discuss your plan to meet your local hiring obligations under San Francisco's First Source Hiring Ordinance (Municipal Code- Chapter 83) or the City and County of San Francisco Administrative Code Chapter 6.
- d. Contact a CityBuild representative to review your hiring projections and goals for this project. Developer/prime must take active steps to advise all of its subcontractors of the local hiring obligations on the project, including, but not limited to providing CityBuild access and presentation time at each pre-bid, each pre-construction, and if necessary, any progress meeting held throughout the life of the project
- e. Submit to CityBuild a "Projection of Entry Level Positions" form or other formal written notification specifying your expected hiring needs during the project's duration.
- f. Notify your respective union(s) regarding your local hiring obligations and request their assistance in referring qualified San Francisco residents for any available position(s). This step applies to the extent that such referral would not violate your union's collective bargaining agreement(s).
- g. Be sure to reserve your "name call" privileges for qualified applicants referred through the CityBuild system. This should be done within the terms of applicable collective bargaining agreement(s).
- h. Provide CityBuild with up-to-date list of all trade unions affiliated with any work on this project in a timely matter in order to facilitate CityBuild's notification to these unions of the project's workforce requirements.
- i. Submit a "Job Request" form to CityBuild for each apprentice level position that becomes available. Please allow a minimum of 3 Business Days for CityBuild to provide appropriate candidate(s). You should simultaneously contact your union about the position as well, and let them know that you have contacted CityBuild as part of your local hiring obligations.



- j. Developer has an ongoing, affirmative obligation and must advise each of its subs of their ongoing obligation to notify CityBuild of any/all apprentice level openings that arise throughout the duration of the project, including openings that arise from layoffs of original crew. Developer/contractor shall not exercise discretion in informing CityBuild of any given position; rather, CityBuild is to be universally notified, and a discussion between the developer/contractor and CityBuild can determine whether a CityBuild graduate would be an appropriate placement for any given apprentice level position.
- k. Hire qualified candidate(s) referred through the CityBuild system. In the event of the firing/layoff of any CityBuild graduate, developer/contractor must notify CityBuild staff within two days of the decision and provide justification for the layoff; ideally, developer/contractor will request a meeting with the project's employment liaison as soon as any issue arises with a CityBuild placement in order to remedy the situation before termination becomes necessary.
- 1. Provide a monthly report and/or any relevant workforce records or data from contractors to identify workers employed on the project, source of hire, and any other pertinent information as pertain to compliance with this Agreement.
  - m. Maintain accurate records of your efforts to meet the steps and requirements listed above. Such records must include the maintenance of an on-site First Source Hiring Compliance binder, as well as records of any new hire made by the contractor/developer through a San Francisco CBO whom the contractor believes meets the First Source Hiring criteria. Any further efforts or actions agreed upon by CityBuild staff and the developer/contractor on a project-by-project basis.

### 6. COMPLIANCE WITH THIS AGREEMENT OF SUBCONTRACTORS

In the event that Contractor subcontracts a portion of the work under the Contract, Contractor shall determine how many, if any, of the Entry Level Positions are to be employed by its Subcontractor(s) using Form 1: the CityBuild Workforce Projection Form and minimum hiring goals using Form 2: the CityBuild Workforce Hiring Plan, provided, however, that Contractor shall retain the primary responsibility for meeting the requirements imposed under this Agreement. Contractor shall ensure that this Agreement is incorporated into and made applicable to such Subcontract.

### 7. EXCEPTION FOR ESSENTIAL FUNCTIONS

Nothing in this Agreement precludes Contractor from using temporary or reassigned existing employees to perform essential functions of its operation; provided, however, the obligations of this Agreement to make good faith efforts to fill such vacancies permanently with System Referrals remains in effect. For these purposes, "essential functions" means those functions absolutely necessary to remain open for business.

8. CONTRACTOR'S COMPLIANCE WITH EXISTING EMPLOYMENT AGREEMENTS

V(5/12/2016)

Nothing in this Agreement shall be interpreted to prohibit the continuation of existing workforce training agreements or to interfere with consent decrees, collective bargaining agreements, or existing employment contracts. In the event of a conflict between this Agreement and an existing agreement, the terms of the existing agreement shall supersede this Agreement.

### 9. HIRING GOALS EXCEEDING OBLIGATIONS OF THIS AGREEMENT

Nothing in this Agreement shall be interpreted to prohibit the adoption of hiring and retention goals, first source hiring and interviewing requirements, notice and job availability requirements, monitoring, record keeping, and enforcement requirements and procedures which exceed the requirements of this Agreement.

### 10. OBLIGATIONS OF CITYBUILD

Under this Agreement, CityBuild shall:

- a. Upon signing the CityBuild Workforce Hiring Plan, immediately initiate recruitment and pre-screening activities.
- b. Recruit Qualified individuals to create a pool of applicants for jobs who match Contractor's Job Notification and to the extent appropriate train applicants for jobs that will become available through the First Source Program;
- c. Screen and refer applicants according to qualifications and specific selection criteria submitted by Contractor;
- d. Provide funding for City-sponsored pre-employment, employment training, and support services programs;
- e. Follow up with Contractor on outcomes of System Referrals and initiate corrective action as necessary to maintain an effective employment/training delivery system;
- f. Provide Contractor with reporting forms for monitoring the requirements of this Agreement; and
- g. Monitor the performance of the Agreement by examination of records of Contractor as submitted in accordance with the requirements of this Agreement.

### 11. CONTRACTOR'S REPORTING AND RECORD KEEPING OBLIGATIONS

Contractor shall:

- a. Maintain accurate records demonstrating Contractor's compliance with the First Source Hiring requirements of Chapter 83 of the San Francisco Administrative Code including, but not limited to, the following:
  - (1) Applicants

V(5/12/2016)

- ATTACHMENT 15
- (3)Hires

(2)

(4)Rejections of applicants

Job offers

b.

The Agreement shall require Contractor to report First Source Hiring efforts to FSHA utilizing the submittal of electronic certified payrolls for the purpose of tracking and reporting through the City's Project Reporting System. Submit completed reporting forms based on Contractor's records to CityBuild quarterly, unless more frequent submittals are reasonably required by FSHA. In this regard, Contractor agrees that if a significant number of positions are to be filled during a given period or other circumstances warrant, CityBuild may require daily, weekly, or monthly reports containing all or some of the above information.

If based on complaint, failure to report, or other cause, the FSHA has reason to C. question Contractor's good faith effort. Contractor shall demonstrate to the reasonable satisfaction of the City that it has exercised good faith to satisfy its obligations under this Agreement.

### DURATION OF THIS AGREEMENT 12.

This Agreement shall be in full force and effect throughout the term of the Contract. Upon expiration of the Contract, or its earlier termination, this Agreement shall terminate and it shall be of no further force and effect on the parties hereto.

### 13. NOTICE

All notices to be given under this Agreement shall be in writing and sent by: certified mail, return receipt requested, in which case notice shall be deemed delivered three (3) business days after deposit, postage prepaid in the United States Mail, a nationally recognized overnight courier, in which case notice shall be deemed delivered one (1) business day after deposit with that courier, or hand delivery, in which case notice shall be deemed delivered on the date received, all as follows:

If to FSHA:	First Source Hiring Administration OEWD, 1 South Van Ness 5 <sup>th</sup> Fl. San Francisco, CA 94103 Attn: Ken Nim, Compliance Manager, <u>ken.nim@sfgov.org</u>
If to CityBuild:	CityBuild Compliance Manager OEWD, 1 South Van Ness 5 <sup>th</sup> Fl. San Francisco, CA 94103 Attn: Ken Nim, Compliance Manager, ken.nim@sfgov.org
If to Developer:	

Attn:

#### If to Contractor:

Attn:

- a. Any party may change its address for notice purposes by giving the other parties notice of its new address as provided herein. A "business day" is any day other than a Saturday, Sunday or a day in which banks in San Francisco, California are authorized to close.
- b. Notwithstanding the forgoing, any Job Notification or any other reports required of Contractor under this Agreement (collectively, "Contractor Reports") shall be delivered to the address of FSHA pursuant to this Section via first class mail, postage paid, and such Contractor Reports shall be deemed delivered two (2) business days after deposit in the mail in accordance with this Subsection.

#### 14. ENTIRE AGREEMENT

This Agreement contains the entire agreement between the parties to this Agreement and shall not be modified in any manner except by an instrument in writing executed by the parties or their respective successors in interest.

#### 15. SEVERABILITY

If any term or provision of this Agreement shall, to any extent, be held invalid or unenforceable, the remainder of this Agreement shall not be affected.

#### 16. COUNTERPARTS

This Agreement may be executed in one or more counterparts. Each shall be deemed an original and all, taken together, shall constitute one and the same instrument.

#### 17. SUCCESSORS

This Agreement shall inure to the benefit of and shall be binding upon the parties to this Agreement and their respective heirs, successors and assigns. If there is more than one person comprising Seller, their obligations shall be joint and several.

#### 18. HEADINGS

Section titles and captions contained in this Agreement are inserted as a matter of convenience and for reference and in no way define, limit, extend or describe the scope of this Agreement or the intent of any of its provisions

#### 19. GOVERNING LAW

This Agreement shall be governed and construed by the laws of the State of California.

IN WITNESS WHEREOF, the following have executed this Agreement as of the date set forth above.

#### CONTRACTOR:

-			
1.1	at	ø	•
$\mathcal{L}$	au	c	

Signature:





CITY AND COUNTY OF SAN FRANCISCO OFFICE OF ECONOMIC AND WORKFORCE DEVELOPMENT CITYBUILD PROGRAM



FIRST SOURCE HIRING PROGRAM EXHIBIT A-1 - CITYBUILD CONSTRUCTION CONTRACTS

### FORM 1: CITYBUILD WORKFORCE PROJECTION

#### Instructions

- The Prime Contractor must complete and submit Form 1 within 30 days of award of contract.
- All subcontractors with contracts in excess of \$100,000 must complete Form 1 and submit to the Prime Contractor within 30
  days of award of contract.
- The Prime Contractor is responsible for collecting all completed Form 1's from all subcontractors.
- It is the Prime Contractor's responsibility to ensure the CityBuild Program receives completed Form 1's from all subcontractors in the specified time and keep a record of these forms in a compliance binder at the project jobsite.
- All contractors and subcontractors are required to attend a preconstruction meeting with CityBuild staff.

Construction Project Name:	Construction Project Address:	
Projected Start Date:	Contract Duration:	(calendar days)
Company Name:	Company Address:	
Main Contact Name:	Main Phone Number:	
Main Contact Email :		
Name of Person with Hiring Authority:	Hiring Authority Phone Number:	
Hiring Authority Email:		

Name of Authorized Representative

Signature of Authorized Representative\*

Date

\*By signing this form, the company agrees to participate in the CityBuild Program and comply with the provisions of the First Source Hiring Agreement pursuant to San Francisco Administrative Code Chapter 83.

Table 1: Briefly summarize your contracted or subcontracted scope of work

#### Table 2: Complete on the following page

- List the construction trade crafts that are projected to perform work. Do not list Project Managers, Engineers, Administrative, and any other non-construction trade employees.
- Total Number of Workers on the Project: The total number of workers projected to work on the project per construction trade. This number will include existing workers and new hires. For union contractors this total will also include union dispatches.

Total Number of New Hires: List the projected number of New Hires that will be employed on the project. For union contractors, New Hires will also include union dispatches.

#### Table 2: List all construction trades projected to perform work

Construction Trades	Journey or Apprentice	Union (Yes or No)	Total Work Hours	Total Number of Workers on the Project	Total Number of New Hires
	JOAD	YOND			
	JOAD	YOND			
	JOAD	YOND	1.		
	JOAD	YOND	1		
	JOAD	YOND			
	JOAD	YOND			C
	JOAD	YOND			
	JOAO	YOND			

#### Table 3: List your core or existing employees projected to work on the project

• Please provide information on your projected core or existing employees that will perform work on the jobsite.

"Core" or "Existing" workers are defined as any worker appearing on the Contractor's active payroll for at least 60 out of the 100 working
days prior to the award of this Contract. If necessary, continue on a separate sheet.

Name of Core or Existing Employee	Construction Trade	Journey or Apprentice	City	Zip Code
		JOAD		
		JOAD		
		JOAD		- D.
		JOAD		
FOR CITY USE ONLY: CityBuild Staff: Reason:		Approved: Yes 🗆 No	Da Da	te:

\_\_\_\_\_

CITY AND COUNTY OF OFFICE OF ECONOMIC CITYBUILD PROGRAM	NCISCO SAN FRANCISC	CO DRCE DEVELOPMENT			2	FIRS	CITYBUI CITYBUI CONSTRUC	FIRST SOURCE HIRING PROGRAM CITYBUILD ATTACHMENT 4 CONSTRUCTION CONTRACTS
			FORM 4: F	IRST SOURCE	FORM 4: FIRST SOURCE SUMMARY REPORT	Reporting Period (M	Reporting Period (Month/Year):	ä
Project Name:		Project Address:	ct ess:		Company Name:			Date:
Contractor Represent	Contractor Representative:		Signature:		Email	οz	Contact Number:	
COUNT	LAST	FIRST	ZIP CODE	JOURNEY	CRAFT	REFERRAL SOURCE	NEW HIRE	DATE OF HIRE (New Hires Only)
1 (e.g.)	Doe	John	94080	JOURNEY	LABORER	Union	YES	1/1/2012
2 (e.g.)	Doe	Jane	94124	APPRENTICE	CARPENTER	CityBuild	YES	2/1/2012
3 (e.g.)	Piper	Peter	94502	JOURNEY	PILE DRIVER	Core	Q	9/1/2011

Q



CITY AND COUNTY OF SAN FRANCISCO OFFICE OF ECONOMIC AND WORKFORCE DEVELOPMENT CITYBUILD PROGRAM



FIRST SOURCE HIRING PROGRAM CITYBUILD ATTACHMENT 3 CONSTRUCTION CONTRACTS

### FORM 3: CITYBUILD JOB NOTICE FORM

**INSTRUCTIONS:** To meet the requirements of the First Source Hiring Program (San Francisco Administrative Code Chapter 83), the Contractor shall notify CityBuild, the First Source Hiring Administrator, of all new hiring opportunities with a minimum of 3 business days prior to the start date.

1. Complete the form and fax to CityBuild 415-701-4896 or EMAIL: workforce.development@sfgov.org

2. Contact Workforce Development at 415-701-4848 or by email: local.hire.ordinance@sfgov.org

OR call the main line of the Office of Economic and Workforce Development (OEWD) at 415-701-4848 to confirm receipt of fax or email.

ATTENTION: Please also submit this form to your union or hiring hall if you are required to do so under your collective bargaining agreement or contract. CityBuild is not a Dispatching Hall, nor does this form act as a Request for Dispatch. All formal Requests for Dispatch will be conducted through your union or hiring hall.

Section	A.	Job	Notice	Information
Occurrent.		000		ATTEND I THE PROPERTY OF THE

1

Trade	# of Journeymen	# of Apprentices
Start Date Start Time	Job Duration	
Brief description of your scope of work	k:	
ction B. Union Information (Union of	contractors complete Section B. Oth	erwise, leave Section B blank)
Local # Union Contact Nam	ne	Union Phone #
ection C. Contractor Information		
Project Name:		
Jobsite Location:		
Contractor:		Prime 🗌 Sub 🗌
Contractor Address:		
Contact Name:	Titl	e:
Office Phone:	Cell Phone:	Email:
Alt. Contact:	Phone #:	
Contractor Contact Signature		Date
(	OEWD U	SE ONLY Able to Fill Yes 🗆 No 🗆
4	K	V(5/12/20

### City and County of San Francisco



Edwin M. Lee, Mayor

### First Source Hiring Program

Office of Economic and Workforce Development Workforce Development Division

#### Exhibit B: First Source Hiring Agreement For Business, Commercial, Operation and Lease Occupancy of the Building

This First Source Hiring Agreement (this "Agreement"), is made as of , by and between (the "Lessee"), and the First Source Hiring Administration, (the "FSHA"), collectively the "Parties":

#### RECITALS

WHEREAS, Lessee has plans to occupy the building at [Address] "Premises" which required a First Source Hiring Agreement between the project sponsor and FSHA due to the issuance of building permit for 25,000 square feet or more of floor space or constructed ten or more residential units; and,

WHEREAS, the project sponsor was required to provide notice in leases, subleases and other occupancy contracts for use of the Premises ("Contract");and

WHEREAS, as a material part of the consideration given by Lessee under \_\_contract, Lessee has agreed to execute this Agreement and participate in the Workforce System managed by the Office of Economic and Workforce Development (OEWD) as established by the City and County of San Francisco pursuant to Chapter 83 of the San Francisco Administrative Code;

NOW, THEREFORE, in consideration of the mutual covenants set forth herein and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Parties covenant and agree as follows:

#### 1. DEFINITIONS

For purposes of this Agreement, initially capitalized terms shall be defined as follows:

- a. Entry Level Position: Any non-managerial position that requires no education above a high school diploma or certified equivalency, and less than two (2) years training or specific preparation, and shall include temporary, permanent, trainee and intern positions.
- Workforce System: The First Source Hiring Administrator established by the City and County of San Francisco and managed by the Office of Economic and Workforce Development (OEWD).
- c. Referral: A member of the Workforce System who has been identified by OEWD as having the appropriate training, background and skill sets for a Lessee specified Entry Level Position.

Lessee: Tenant, business operator and any other occupant of the building requiring a First Source Hiring Agreement as defined in SF Administrative Code Chapter 83. Lessee shall include every person tenant, subtenant, or any other entity occupying the building for the intent of doing business in the City and County of San Francisco and possessing a Business Registration Certificate with the Office of Treasurer.

#### 2. OEWD WORKFORCE SYSTM PARTICIPATION

- a. Lessee shall notify OEWD's Business Team of every available Entry Level Position and provide OEWD 10 business days to recruit and refer qualified candidates prior to advertising such position to the general public. Lessee shall provide feedback including but not limited to job seekers interviewed, including name, position title, starting salary and employment start date of those individuals hired by the Lessee no later than 10 business days after date of interview or hire. Lessee will also provide feedback on reasons as to why referrals were not hired. Lessee shall have the sole discretion to interview any Referral by OEWD and will inform OEWD's Business Team why specific persons referred were not interviewed. Hiring decisions shall be entirely at the discretion of Lessee.
- b. This Agreement shall be in full force and effect throughout the Lessee's occupancy of the building.

### 3. GOOD FAITH EFFORT TO COMPLY WITH ITS OBLIGATIONS HEREUNDER

Lessee will make good faith efforts to comply with its obligations under this Agreement. Determination of good faith efforts shall be based on all of the following:

- a. Lessee will execute this Agreement and attachment *Exhibit B-1* upon entering into leases for the commercial space of the building. Lessee will also accurately complete and submit *Exhibit B-1* annually to reflect employment conditions.
- Lessee agrees to register with OEWD's Referral Tracking System, upon execution of this Agreement.
- c. Lessee shall notify OEWD's Business Services Team of all available Entry Level Positions 10 business days prior to posting with the general public. The Lessee must identify a single point of contact responsible for communicating Entry-Level Positions and take active steps to ensure continuous communication with OEWD's Business Services Team
- d. Lessee accurately completes and submits Exhibit B-1, the "First Source Employer's Projection of Entry-Level Positions" form to OEWD's Business Services Team upon execution of this Agreement.
- e. Lessee fills at least 50% of open Entry Level Positions with First Source referrals. Specific hiring decisions shall be the sole discretion of the Lessee.
- f. Nothing in this Agreement shall be interpreted to prohibit the continuation of existing workforce training agreements or to interfere with consent decrees, collective bargaining agreements, or existing employment contracts. In the event of a conflict between this Agreement and an existing agreement, the terms of the existing agreement shall supersede this Agreement.

Lessee's failure to meet the criteria set forth in Section 3 (a.b.c.d.e.) does not impute "bad



faith" and shall trigger a review of the referral process and compliance with this Agreement. Failure and noncompliance with this Agreement will result in penalties as defined in SF Administrative Code Chapter 83, Lessee agrees to review SF Administrative Code Chapter 83, and execution of the Agreement denotes that Lessee agrees to its terms and conditions.

#### 4. NOTICE

All notices to be given under this Agreement shall be in writing and sent via mail or email as follows:

ATTN: Business Services, Office of Economic and Workforce Development 1 South Van Ness Avenue, 5<sup>th</sup> Floor, San Francisco, CA 94103 Email: <u>Business.Services@sfgov.org</u>

5. This Agreement contains the entire agreement between the parties and shall not be modified in any manner except by an instrument in writing executed by the parties or their respective successors. If any term or provision of this Agreement shall be held invalid or unenforceable, the remainder of this Agreement shall not be affected. If Agreement is executed in one or more counterparts, each shall be deemed an original and all, taken together, shall constitute one and the same instrument. Agreement shall inure to the benefit of and shall be binding upon the parties to this Agreement and their respective heirs, successors and assigns. If there is more than one person comprising Seller, their obligations shall be joint and several. Section titles and captions contained in this Agreement are inserted as a matter of convenience and for reference and in no way define, limit, extend or describe the scope of this Agreement or the intent of any of its provisions. This Agreement shall be governed and construed by laws of the State of California.

Date:	Signature::	
· · · · · · · · · · · · · · · · · · ·	Name of Authorized Signer:	
	Company:	
	Address:	
	Phone:	
	Email:	

IN WITNESS WHEREOF, the following have executed this Agreement as of the date set forth above.



CITY AND COUNTY OF SAN FRANCISCO

## ATTACHMENT 15

FIRST SOURCE HIRING PROGRAM

WORKFORCE PROJECTIONS FORM

OFFICE OF ECONOMIC AND WORKFORCE DEVELOPMENT

### EXHIBIT B-1 WORKFORCE PROJECTIONS FOR BUSINESS, COMMERCIAL, OPERATION AND LEASE OCCUPANCY

Date

Business Name:	Phone:	
Main Contact:	Email:	
and the second se		

Signature of authorized representative\*

\*By signing this form, the lessee agrees to participate in the Workforce System managed by the Office of Economic and Workforce Development (OEWD) and comply with the provisions of Exhibit B First Source Hiring Agreement pursuant to San Francisco Administrative Code Chapter 83.

#### Instructions:

- Upon entering into leases for the commercial space of the building, the Lessee must submit to OEWD, a signed Exhibit B and Exhibit B-1. Lessee will also complete and submit an Exhibit B-1 annually to reflect employment conditions.
- The employer must notify the First Source Hiring Program (Contact Info below) If an Entry Level Position becomes available.

#### Section 1: Select your Industry

Auto Repair	Entertainment		Personal Services	
Business Services	Elder Care		Professionals	
Consulting	Financial Services		Real Estate	
Construction	Healthcare		Retail	
Government Contract	Insurance		Security	
Education	Manufacturing		Wholesale	
Food and Drink	I don't see my industr	y (Please L	Describe)	

#### Section 2: Describe Primary Business Activity

#### Section 3: Provide information on all Entry Level Positions

Entry-Level Position Title	Job Description	Number of New Hires	Projected Hiring Date

Please email, fax, or mail this form SIGNED to: ATTN: Business Services Office of Economic and Workforce Development 1 South Van Ness Avenue, 5<sup>th</sup> Floor, San Francisco, CA 94103 Tel: 415-701-4848 Fax: 415-701-4897 mailto:Business.Services@sfgov.org Website: www.workforcedevelopmentsf.org

## Visitacion Valley Redevelopment,

Zone 1

# Grading and Overland Release Master Plan

March 10, 2015



150 California Street, Suite 650 San Francisco, CA 94111 415.930.7900

## FOR REFERENCE ONLY Revised for Phase Application 9.6.16

Prepared by Statement

This Grading and Overland Release Master Plan for the Visitacion Valley Redevelopment, Zone 1 has been prepared by BKF Engineers under the direction of Mr. Todd Michael Adair, P.E., Principal/Vice President.

### TABLE OF CONTENTS

SECTION 1: INTE	RODUCTI	ON AND PROJECT DESCRIPTION	1
1.1	Projec	t Overview	1
1.2	Existin	g Conditions	1
1.3	Propo	sed Conditions	2
1.4	Projec	t Datum	2
Se	ction 1 Fi	gures	3
SECTION 2: GRA	DING	-	4
2.1		ng Master Plan Overview	
2.2		ng Design Criteria	
2.3		g Site Grading	
2.4		sed Site Grading	
	2.4.1	Proposed Site Grading at Conforms	
	2.4.2	Proposed Building and Roadway Areas	
	2.4.3	Open Space Areas	
	2.4.4	Historic Building to Remain	
	2.4.5	Cut/Fill Quantities	8
Se	ction 2 Fig	gures	
SECTION 3: GEO	TECHNIC	AL CONDITIONS	10
3.1	Existin	g Site Geotechnical Conditions	10
3.2		g Site Geotechnical Constraints	
	3.2.1	Liquefaction/Settlement of Sand Layers	
	3.2.2	Settlement of Young Bay Mud	
	3.2.3	Existing Retaining Walls	11
3.3	Geote	chnical Approaches	
	3.3.1	Earthwork Alternative A – Corrective Grading Over Building Pads	
		to Reduce Differential Fill Thickness	12
	3.3.2	Earthwork Alternative B – Over-excavate Portion and Recompact	
		Unsuitable Artificial Fills	12
	3.3.3	Earthwork Alternative C – Ground Improvement Corrective	
		Treatment Over Building Pads to Reduce Settlement	13
		3.3.3.1 Deep Soil Mixing (DSM)	
		3.3.3.2 Drilled Displacement Columns (DDC)	13
	3.3.4	Earthwork Alternative D - Surcharge and Wick Drains	
	3.3.5	Earthwork Alternative E – Lightweight Fill	
	3.3.6	Existing SFPUC Sanitary Sewer Lines	16
SECTION 4: OVER	RLAND F	LOW & 100-YEAR STORM	17
4.1	Introd	uction	17
4.2	2 Desigr	n Criteria	
	4.2.1	Stormwater Runoff Design Criteria	
4.3	100-Y	ear Flow Model	18
	4.3.1	Model Results Discussion	
4.4	Overla	and Release	18

4.4.1	Project Overland Release	19
	Overland Release for Parcel 5100-007	
Section 4 Fi	gures	20

#### FIGURES

Section 1 Figures Figure 1.1 – Project Location Figure 1.2 – Project Site Layout Figure 1.3 – Project Site Phasing Plan Section 2 Figures

Figure 2.1 – Existing Site Conditions

Figure 2.2 – Proposed Project Grading

Section 4 Figures

- Figure 4.1 Combined Sewer System Model Node Identification
- Figure 4.2 Project Overland Release Plan

Figure 4.3 – OMITTED

Figure 4.4 – Conceptual Concrete Channel Cross-Section

### APPENDICES

- Appendix A –Visitacion Valley Redevelopment Zone 1 Geotechnical Exploration Report by ENGEO dated February 2015
- Appendix B 100-Year Storm SWMM Model Results
  - B-1 100-Year Storm Hydrology, XPSWMM Node Table
  - B-2 100-Year Storm Hydraulics, XPSWMM Node Table
  - B-3 100-Year Storm Hydraulics, XPSWMM Pipe Table

### SECTION 1: INTRODUCTION AND PROJECT DESCRIPTION

#### 1.1 Project Overview

The Visitacion Valley Redevelopment, Zone 1 ("The Project") is located within the City and County of San Francisco, along the southern border of San Francisco and adjacent to the City of Brisbane. The site is bounded by Bayshore Boulevard to the west, Sunnydale Avenue to the South, Blanken Avenue to the north, a property owned by the Union Pacific Rail Road to the northeast, and Caltrain tracks to the southeast. The Project comprises a mixed-use community including residential, retail, community use, and parks and recreational open space. Figure 1.1 illustrates the regional location of the Project.

#### 1.2 Existing Conditions

The Project is approximately 20 acres in size. It is located at the former Schlage Lock factory site which operated from 1926 to 1999. The factory was demolished in 2009, and the site was cleared.

The soils at the site are contaminated by VOCs and heavy metals. Remedial actions commenced in 2010 in preparation for site development. Remediation of the heavy metal contaminated soil includes targeted excavation and relocation with capping, excavation and disposal off-site at an approved landfill, or capping in place and recording a State Land Use Covenant and a deed restriction on the title of the impacted parcel. Remediation of VOC-impacted soil includes excavation and aeration to the pad elevations and depths of clean utility corridors. Clean utility corridors are located within the roadways up to a minimum of 1 foot below the level of the proposed utilities, and are filled with clean engineered soil to protect proposed utilities from contamination, and keep contaminants from migrating through utility trenches. Remediation of 2015.

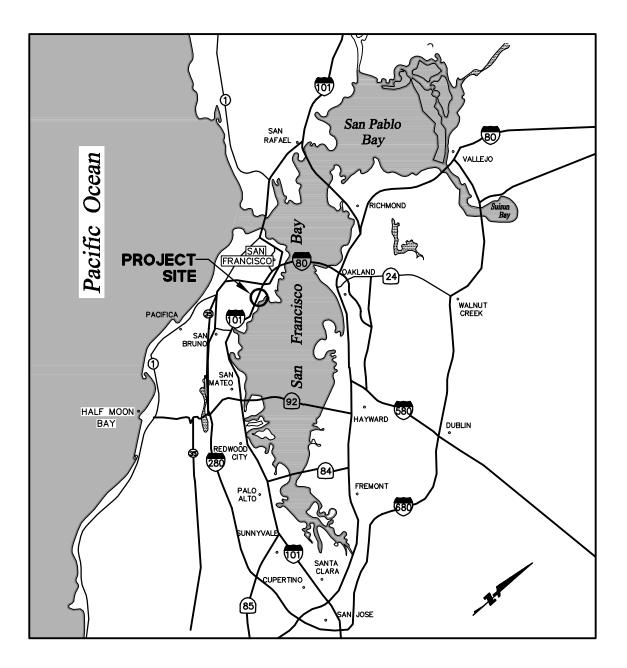
### 1.3 Proposed Conditions

The Project comprises nine development parcels ranging from half an acre to almost two acres. These will include up to 1,679 residential units, and approximately 46,700 square feet of retail space. The project also includes the rehabilitation of an approximately 18,000-square-foot historic building located at the northern end of the site to serve the community, and three parks located across the site, totaling 1.92 acres. Pedestrian access to the Bayshore Caltrain station will be provided thru the site to link the station with the light rail system on Bayshore Boulevard. The proposed Project site plan is shown in Figure 1.2. As shown in Figure 1.3, the infrastructure improvements will be approved as one phase and constructed in as many as three phases to serve the Project. However, it is anticipated that the utility improvements will all be constructed in the first phase.

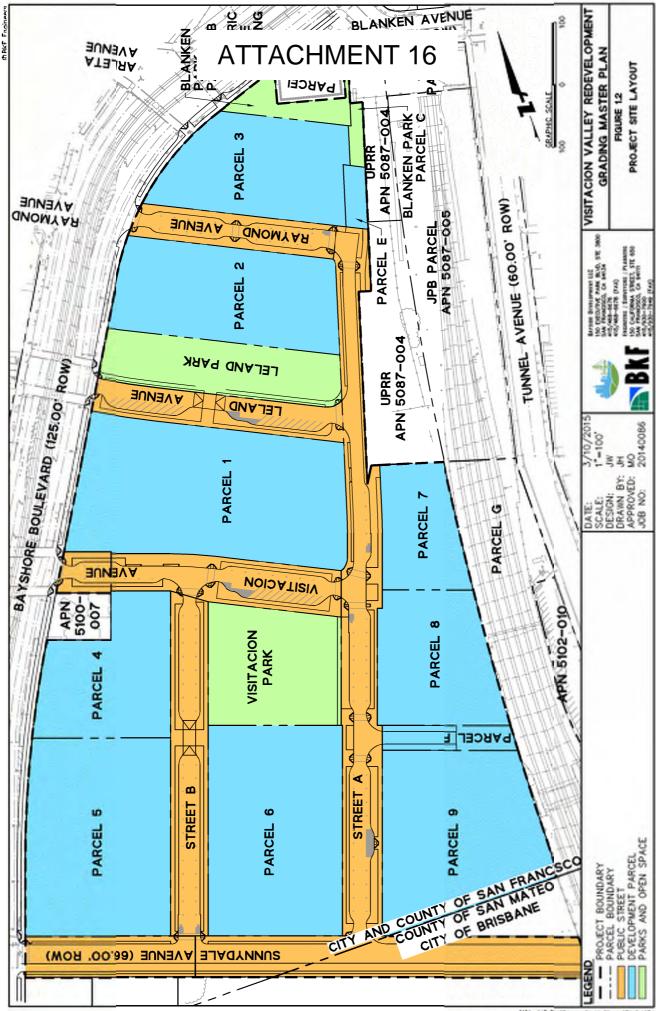
#### 1.4 Project Datum

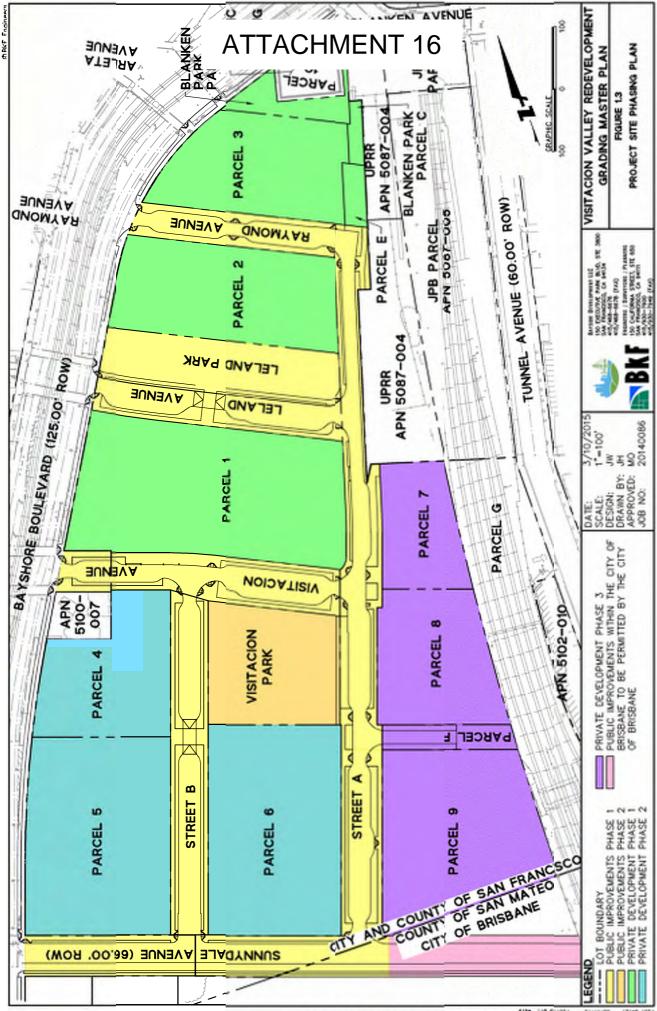
All elevations referenced herein are based on the City of San Francisco datum.

Section 1 Figures



### FIGURE 1.1 PROJECT LOCATION





the way for the state personnel of a sub-phone bill division who wanted a sub-phone state personnel in the personnel and the sub-phone state and the s

### SECTION 2: GRADING

#### 2.1 Grading Master Plan Overview

Proposed grading designs for the Project will match the existing north to south drainage pattern of the existing site. To ensure proper overland release and provide Americans with Disabilities Act (ADA) accessible pathways throughout and adjacent to the site, a new street grid with interconnected open space and pathways will be constructed to link Blanken Avenue with Sunnydale Avenue in the north-south direction and Bayshore Boulevard with Caltrain the east-west direction. Throughout the site, grades less than 5 percent are provided.

### 2.2 Grading Design Criteria

The Project grading design criteria is presented in Table 2.1.

Table 2.1

Parameter	Design Criteria
Minimum street longitudinal grade	0.5% between grade breaks.
Maximum street longitudinal grade	5%
Street cross slope	2%
Maximum street slope in any direction at transit stops, accessible parking spaces, and accessible passenger loading zones	2%
Street intersection grade	Approximate 2% platform, extended beyond the crosswalk and if applicable, ADA parking.
Crosswalks	Americans with Disabilities Act, California Building Code, and the San Francisco Building Code.

	Americans with Disabilities Act, California Building Code, San Francisco Building Code, and San Francisco Standard Specifications.
Sidewalks	Longitudinal slope: 5% maximum
	Cross slope: 1.67% unless otherwise specified and 2% maximum unless approved by the Director on a case-by-case basis.
Requirement for vertical curve	Changes in longitudinal street grades in which the absolute value of the algebraic difference in grades exceeds 1.5%.
Minimum flow line slope	0.5%
Minimum curb height	6 inches (in vehicular areas) 0 inches (shared public way)
Concrete gutter width	1 foot except in front of curb ramps. 2 feet at curbs ramp.
Maximum curb height except at curb returns, crosswalks, accessible parking spaces, and accessible passenger loading zones	8 inches, with approval from the Department of Public Works on a case-by-case basis
100-year storm	Flow in excess of the 5-year storm up to and including the 100-year storm in pipes, channels and/or the street right-of-way, between the top of curb to top of curb with no freeboard. The City Engineer with the consent of the PUC may approve an exception to this standard on a case-by-case basis.

### 2.3 Existing Site Grading

The existing grade within the Project site slopes gradually from north to south. Along the northern and western edges, the site is bounded by and conforms to the existing grades along Bayshore Boulevard. A historic office building exists on the northern edge of the Project, which is to be preserved. To the east, the northern area is elevated above the existing Caltrain railroad tracks by a 20-foot to 25-foot retaining wall while the southeastern edge conforms to the adjacent grade. The southern edge is bounded by, and conforms to a property in the city of Brisbane. The ground elevations range from

approximately 55 (SF Datum) in the northeastern area of the site adjacent to the Historic Office Building to approximately 8 (SF Datum) near the southern edge. In addition to the existing 20-foot to 25-foot tall retaining wall adjacent to the railroad parcels, other smaller on-site retaining walls were installed to stabilize the site and accommodate existing site uses.

### 2.4 Proposed Site Grading

The Developer will be responsible for the design and construction of the proposed grading for the Project. Below is a description of the grading design for the different areas of the site.

#### 2.4.1 Proposed Site Grading at Conforms

Conceptual grading designs generally conform to the existing grades along the northern interface with Blanken Avenue and the existing Historic Office Building and the existing grades along Bayshore Boulevard at the western edge of the project. At the southern boundary of the Project, a new segment of Sunnydale Avenue will be constructed, requiring the placement of 1 to 5 feet of fill to provide overland release and drainage.

At the eastern edge along the boundary shared with the Union Pacific Rail Road (UPRR), a large grade differential exists. To accommodate the 25-foot to 30-foot grade differential between the UPRR property and the Project, a single or tiered retaining wall will be installed. Where buildings are directly adjacent to the UPRR Property, retaining elements will be incorporated into the private development parcel building foundations. Accessible paths of travel and sidewalks within the Project site will be provided to connect to the adjacent Bayshore Caltrain Train Station accessible entrances. Grading solutions to accommodate the development of each Parcel will be based on recommendations provided by the project Geotechnical Engineering consultant.

#### 2.4.2 Proposed Building and Roadway Areas

The proposed on-site street grid will be graded to provide overland release for the Project. As required by the SFPUC, grading and hydrology designs will be developed such that the 100-year HGL is contained within the top of curb elevations on opposite sides of a street throughout the Project site.

Site development and grading designs will be developed to comply with the codified requirements for accessible paths of travel. Proposed slopes along public streets and private alleys will be set at a maximum of 5 percent to provide ADA accessible pathways of travel without requiring handrails.

At street intersections, grades will be tabled at a maximum slope of 2% to provide an accessible path of travel in crosswalks. In addition, vertical curves within the streets will be designed to both begin and end outside the limits of the crosswalk areas.

The existing 0.17-acre parcel, APN 5100-007, at the southeast corner of the intersection of Bayshore Boulevard and future Visitacion Avenue is not part of the Project. Therefore, the new grade at Visitacion Avenue must conform to the existing elevations adjacent to the Parcel, including a low point of elevation 17.1 in the future Visitacion Avenue.

#### 2.4.3 Open Space Areas

The open spaces will be graded to support the open space vision and program for the Project.

#### 2.4.4 Historic Building to Remain

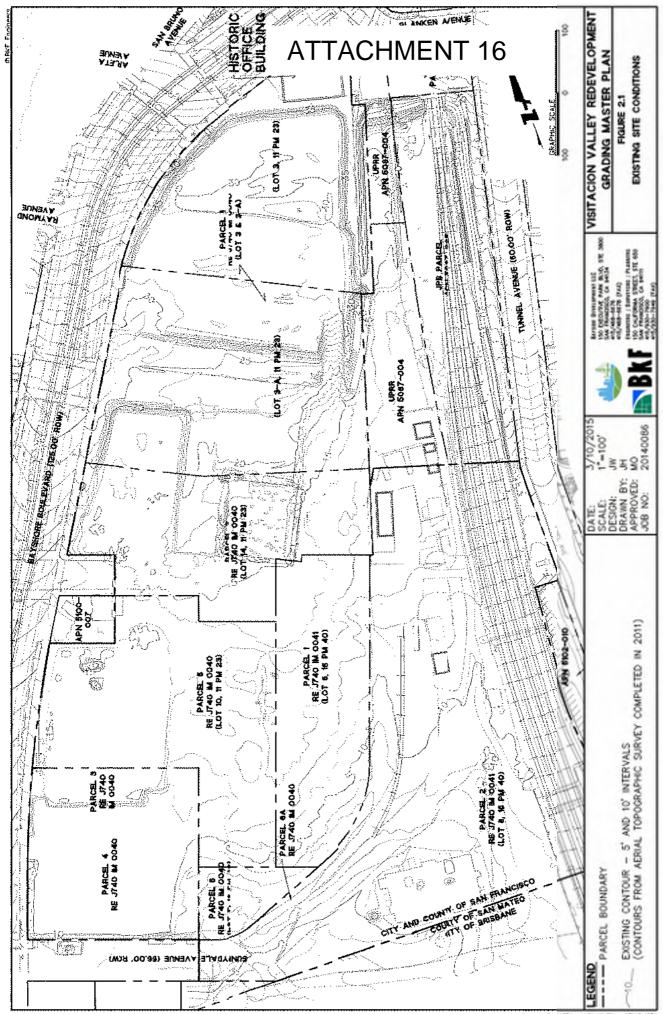
The Historic Office Building adjacent to Blanken Avenue will remain on the Project site. The existing finished floor of this structure is approximately elevation 55.0. This finished floor as well as the ground adjacent to the building will not be modified as part of the Project. A retaining wall approximately 5' tall will be

constructed south of the building to accommodate the elevation difference between the Historic Building Site and the adjacent development parcels and to provide accessible entrances and exits from the Building to Blanken Park.

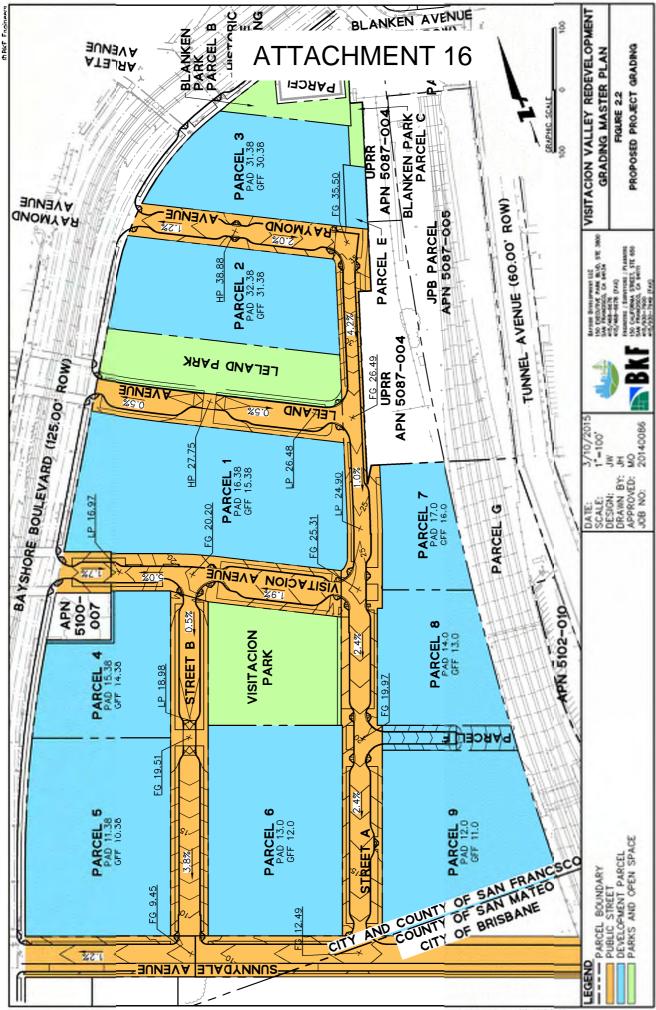
#### 2.4.5 Cut/Fill Quantities

The proposed grading plan will require approximately 10,000 cubic yards (cy) of cut and 96,000 cy of fill. Therefore, for the purposes of this Infrastructure Plan, the Project is estimated to require approximately 85,000 cubic yards of net soil import to complete the grading activity.

Section 2 Figures



ged, eolitanoù getretek (.c. e roge'i/noif gaoriz/atlerach nort vereau/stierun) brou :74 d



QwD, gnibold s112 besogoid 2.2 Prop13/no19 grine and an analysis and an analysis Grading. dwg

### **SECTION 3: GEOTECHNICAL CONDITIONS**

Site geotechnical investigations have been completed and potential site wide geotechnical improvements have been identified by Engeo, culminating in the development of the "Geotechnical Exploration – Visitacion Valley Redevelopment – Zone 1" (Geotechnical Report) by Engeo, dated February 12, 2015. The report is attached as Appendix A.

### 3.1 Existing Site Geotechnical Conditions

The site is essentially divided into two sections with the northern and southern portions of the site each presenting unique geotechnical conditions. The northern and western portions of the site are underlain with 9 to 12 feet of loose to dense Colma sand. The Colma sand is overlain with layers of silty and clayey sand at varying depths. Borings in the northwestern portion of the site adjacent to the railroad tracks indicate the presence of Franciscan Complex bedrock between 36 and 45 feet below ground surface. The southern half of the site contains loose to medium-dense sandy fill. Beneath the sandy fill, the site is underlain with up to eight feet of compressible bay mud fill and a layer of loose to medium-dense marine sand. Bedrock in the southern portion of the Project site is located approximately 61 feet to 126 feet below ground surface.

### 3.2 Existing Site Geotechnical Constraints

3.2.1 Liquefaction/Settlement of Sand Layers

The sands in the northeastern and southern portions of the site are subject to liquefaction and liquefaction-induced settlement during earthquakes. Liquefaction is a phenomenon where saturated, cohesionless soil (such as sand) experiences a temporary reduction in strength during the cyclic loading of an earthquake due to an increase in pore water pressure. The result is immediate settlement and possibly lateral movement of the sand material.

#### 3.2.2 Settlement of Young Bay Mud

The layer of compressible bay mud in the southern portion of the site is susceptible to minor consolidation settlement. The anticipated rate of settlement of the bay mud from the load of the existing site fill is on the order of 1 to 4 inches. It is anticipated that fill may be placed on top of the existing bay mud layer to accommodate the proposed site plan and development. Placing the new fill on top of the existing bay mud layer will initiate a new cycle of consolidation settlements of approximately 3 to 5 inches.

#### 3.2.3 Existing Retaining Walls

Existing retaining walls adjacent to the railroad tracks and Bayshore Boulevard typically consist of cast-in-place concrete walls. Most retaining walls appear visibly to be in serviceable condition, although many existing concrete walls will conflict with the proposed Project plans. The existing retaining walls will be removed and replaced as necessary to accommodate the proposed site development.

### 3.3 Geotechnical Approaches

Successful site development will require engineering design and project construction methods that account for the existing soil conditions. These improvements will help ensure that site accessibility and building access is maintained both during seismic events and as minor long-term consolidation settlement occurs. Specific approaches to mediating the geotechnical constraints will be taken in different areas, depending on the soil conditions in each area. A summary of the recommended geotechnical approaches for the different parcels is presented in Table 3.1, and detailed in Sections 3.3.1-3.3.6.

Table 3.1 Site Geotechnical Alternatives

Parcels	Recommended Earthwork Alternative(s)	
1	A or B	
2,3	В	
4,7,8	В	
5,6,9	С	
Street areas	D or E	
SFPUC Sanitary Sewer	Appendices H and I	

3.3.1 Earthwork Alternative A – Corrective Grading Over Building Pads to Reduce Differential Fill Thickness

Corrective grading may be performed to reduce differential fill thickness over building pads. The differential fill thickness across any building lot should be no greater than 10 feet. Local sub-excavation of soil material and replacement with compacted fill will be necessary to achieve this.

#### 3.3.2 Earthwork Alternative B – Over-excavate Portion and Recompact Unsuitable Artificial Fills

Based on site reconnaissance and explorations performed at the site, an estimated 5½- to 16-foot-thick layer of artificial fill exists across portions of the site. These existing fills could undergo vertical movement that is not easily characterized and could ultimately be inadequate to effectively support the proposed building loads. These soils should be over-excavated in their entirety and replaced with properly compacted engineered fill. Provided the excavated material is free of deleterious and organic material, it can be reused as engineered fill. The extent of fill removal should be determined by an ENGEO Geotechnical Engineer or Certified Engineering Geologist during site grading. After corrective grading is successfully completed, potential risk of settlement is anticipated to be low.

#### 3.3.3 Earthwork Alternative C – Ground Improvement Corrective Treatment Over Building Pads to Reduce Settlement

Geotechnical corrective treatment may be performed to improve the strength of soils in-place without their removal, thereby allowing support of future structures on shallow foundations. Treatment depths are anticipated to range between 10 to 30 feet below existing ground surfaces. Due to the shallow groundwater conditions and potential environmental constraints, deep soil mixing (DSM) or drilled displacement columns (DDC) can be considered practical and effective treatment options for the project site.

#### 3.3.3.1 Deep Soil Mixing (DSM)

Deep soil mixing (DSM) is a stabilization technique that mixes in situ soil with a cementicious reagent, injected as a binder slurry or powder to improve the engineering characteristics of the ground. To construct columns, a powerful drill advances drill steel with radial mixing paddles located near the bottom of the drill string. The slurry is pumped through the drill steel to the tool as it advances and additional soil mixing is achieved as the tool is withdrawn. DSM has proven to be very effective in stabilizing potentially liquefiable soil and strengthening soft compressible soil (Jeremic-Van Nguyen, 2010). DSM typically generates spoils that can range from 30 to 60 percent of the area receiving the treatment and can be used as engineered fill. The layout and design of the DSM system can be prepared by ENGEO and shall be coordinated with the Structural Engineer once foundation plans are developed.

#### 3.3.3.2 Drilled Displacement Columns (DDC)

Drill Displacement Columns (DDC) are constructed by drilling to a desired depth of improvement then slowly raising the auger while simultaneously injecting grout under high pressure to form a well-defined cement column. Steel rebar is then installed within the column, serving as a ground anchor. Similar to deep soil mixing, DDC decreases the proportion of loose or soft soils, thereby decreasing

the susceptibility to excessive deformation resulting from a seismic event or additional loads. DDC has negligible construction vibration and a relatively quiet construction method. The DDC is a displacement corrective treatment method and typically generates less than 3 percent in volume of soil being improved. The DDC are proprietary and should be designed by a design-build or specialty contractor. ENGEO should be provided with the opportunity to review the design to confirm assumed soil profile and soil shear strengths are in conformance with site conditions.

3.3.4 Earthwork Alternative D - Surcharge and Wick Drains

A surcharge program to "pre-consolidate" the compressible soils prior to construction of improvements can be used to reduce post-construction consolidation settlements in the proposed streets. This would involve placing temporary fills, uniformly blanketing future loaded areas until the desired degree of consolidation in these areas has occurred. Lightweight fill, discussed in the next section, may be considered to reduce surcharge height. Desired pre-consolidation should be achieved in approximately 6 months. See Table 3.2 for potential surcharge heights.

### Table 3.2

Future Fill Thickness (feet)	Surcharge Height (feet)
6	5
8	7
10	9

The optimum construction sequence to address the existing fill and compressible soil is as follows:

 Install vertical wick drains in designated surcharge areas. Wick drains should be placed in a triangular grid pattern. Spacing of the wick drains should be no greater than 6 feet on center.

- Wick drains should extend to the top of Colma Sand (approximately El -13 feet).
- Place the recommended thickness of additional engineered fill (including anticipated additional fill to address estimated settlement). Compact engineered fill in accordance with geotechnical recommendations.
- Place the recommended thickness of surcharge fill. Compact surcharge fill to at least 85 percent relative compaction.

Project building loads will be moderate to heavy; therefore surcharging should only be considered as a corrective measure in areas subject only to future fill loads.

#### 3.3.5 Earthwork Alternative E – Lightweight Fill

The use of lightweight fill is an alternate corrective measure for proposed street areas where surcharging may not be practical. This measure mitigates settlement potential by limiting loads using lightweight fill material as compensation loading.

The lightweight fill material anticipated for the project is a cellular concrete material. Unit weights of lightweight "cellular concrete" commonly range between 30 and 60 pcf. For this project, cellular concrete with a unit weight of 30 pcf (90 pcf less than the typical weight of a soil) is specified. The thickness of the cellular concrete underlying improvement areas will be determined so that the weight experienced by the compressible material is less than or equal to the existing condition. Since there is no increase in load, long-term settlement under the new improvements is expected to be negligible. Table 3.3 shows the anticipated thicknesses of cellular concrete to be placed in future street areas.

Table 3.3	
Estimated Cell-Crete	e Thickness
Future Fill Thickness	Cell-Crete Thickn

Future Fill Thickness	Cell-Crete Thickness
(feet)	(feet)*
6	10
8	12½
10	15

\*includes fill used to raise grades

Project building loads will be moderate to heavy; therefore the use of lightweight fill should also only be considered as a corrective measure in areas subject only to future fill loads.

#### 3.3.6 Existing SFPUC Sanitary Sewer Lines

Two existing San Francisco Public Utilities Commission (SFPUC) sanitary sewer lines are located along the southern boundary of the Project site. Impacts to the two sewer lines from future development include loading of fill placement on the pipeline and long-term consolidation settlement. The considerations to mitigate increased loads on the pipelines from future development include:

- Placement of lightweight cellular concrete
- Placement of geofoam
- Structural supported free span over the sewer lines
- Realignment of the Sunnydale Sewer Tunnel

The various alternatives were presented to the SFPUC and are currently being reviewed pending approval.

### SECTION 4: OVERLAND FLOW & 100-YEAR STORM

#### 4.1 Introduction

Overland flow occurs when the capacity of the combined sewer system is exceeded and the hydraulic grade line (HGL) of the combined sewer system surcharges above the flow line elevation of the catch basin. As a result, stormwater flows in the street. Proposed project combined sewer lines are sized to convey the 100-year storm flows and therefore no overland flow within the streets is to occur during 100-year storm events.

#### 4.2 Design Criteria

4.2.1 Stormwater Runoff Design Criteria

The combined sewer system, street section, and street grading will be designed to convey the stormwater runoff from the 100-year storm from the parcels and streets.

The 100-year stormwater runoff will be computed using the Rational Formula as described in the Combined Sewer Master Plan completed by BKF Engineers, submitted concurrently with this Master Plan.

The starting HGL in the 78-inch pipe in Sunnydale Avenue will be at elevation 4.0 (SF Datum). The starting HGL is based on assuming the existing 78-inch line is overflowing at the catch basin at the intersection of Sunnydale and Bayshore Boulevard, which is the most downstream catch basin in Bayhsore Boulevard.

The 100-year storm rainfall intensity will be based on the 100-year storm Intensity– Duration–Frequency (IDF) curve. The 100-year storm IDF curve is defined by the best-fit log-linear line of the Rainfall Depth Duration Frequency table for the San Francisco City Station E70 7772 00 published by the California Department of Water Resources.

The 100-year Intensity-Duration-Frequency (IDF) curve equation is:

$$I = \frac{11.802}{T_{C}^{0.54}}$$

The 100-year storm IDF curve is tabulated in Table 4.1.

Table 4.1

100-Year Storm Intensity – Duration – Frequency (IDF) Curve

Duration (min)	5	6	7	10	15	20	25	30	35	40	45
Intensity (in/hr)	4.95	4.48	4.13	3.40	2.73	2.34	2.08	1.88	1.73	1.61	1.51

### 4.3 100-Year Flow Model

The runoff from a 100-year storm event is routed through the proposed combined sewer system to determine where the capacity of the system is exceeded. If the 100-year storm HGL surcharges above the proposed rim elevation for a node in the model, overland flow occurs and stormwater flows in the street. The combined sewer model nodes are identified in Figure 4.1.

#### 4.3.1 Model Results Discussion

The analyses show that pipe sizes ranging from 12 inches to 24 inches would be sufficient to convey runoff from a 100-year storm event below the elevation of the finished surface of the streets. Therefore, the project proposes to use the combined sewer pipes to convey 100-year storm event runoff. During the 100-year storm event, overland flow will continue to occur within the Sunnydale Avenue street section even with increased pipe sizes. The detailed combined sewer system model results for the 100-year storm are provided in Appendix B.

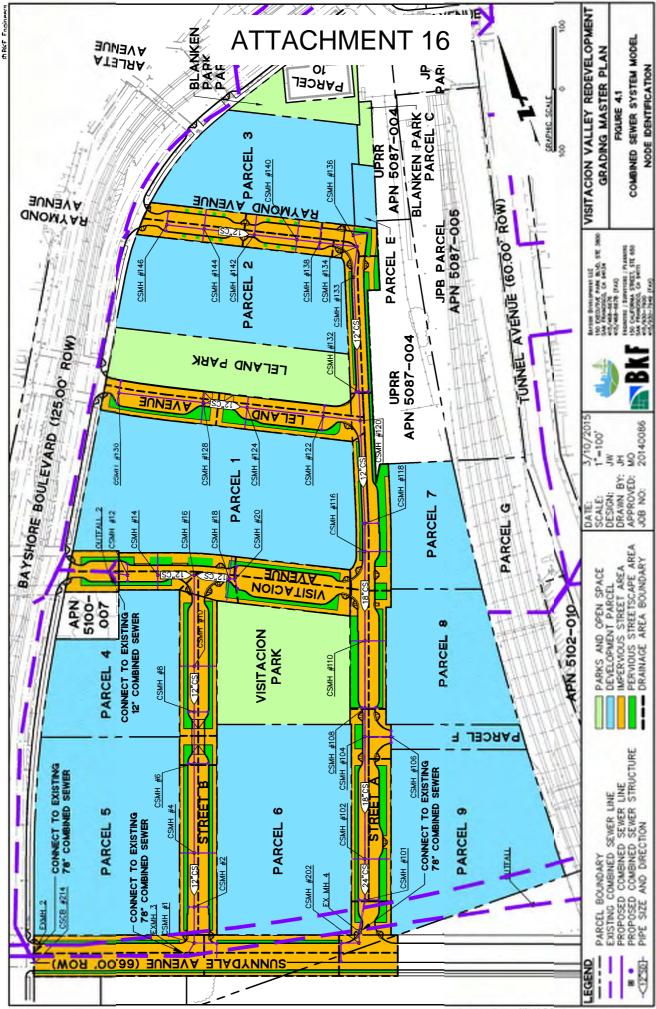
#### 4.4 Overland Release

For storm events larger than the 100-year storm, or if a catch basin becomes clogged, overland flow will be conveyed within the public streets,

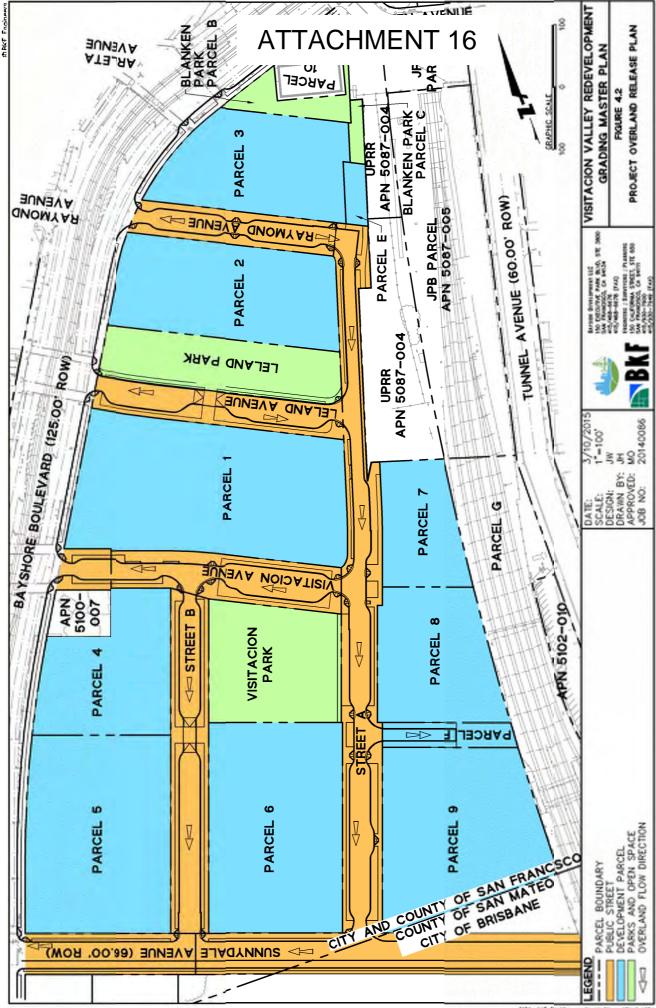
#### 4.4.1 Project Overland Release

There are a few locations in which low points are present in the proposed streets. In these locations, ponding may occur within the right-of-way in the event that the adjacent catch basin becomes clogged, or the HGL rises to the level of the street. The grading for these streets has been designed such that the storm water will overflow to the next street low point or to Sunnydale Avenue and ultimately to Bayshore Boulevard prior to flooding the adjacent parcel.

Section 4 Figures



Dian/Figure 4-1 Combined Sewer Note ID.dwg



gwb.noi9 sepels% bnoi7eVO Joe(o75 4 sugi7/noi9 pri

### Visitacion Valley Redevelopment, Zone 1

### Combined Sewer System Master Plan

### March 10, 2015



150 California Street, Suite 650 San Francisco, CA 94111 415.930.7900

Prepared by Statement

This Combined Sewer System Master Plan for the Visitacion Valley Redevelopment, Zone 1 has been prepared by BKF Engineers under the direction of Mr. Todd Michael Adair, P.E., Principal/Vice President.

### TABLE OF CONTENTS

1.1       Project Overview       1         1.2       Existing Conditions       1         1.3       Proposed Conditions       2         1.4       Project Datum       2         Section 1 Figures       3         SECTION 2: COMBINED SEWER SYSTEM       4         2.1       Existing Combined Sewer System       4         2.2.1       Settlement Design Criteria       6         2.2.2       Service Lateral Connection Design Criteria       6         2.2.1       Settlement Design Criteria       6         2.2.2       Service Lateral Connection Design Criteria       6         2.3.1       System Vertical Layout       6         2.3.2       System Vertical Layout       7         Section 2 Figures       8       8         SECTION 3: SANITARY SEWER FLOW       9       3.1         3.1       Sanitary Sewer Design Criteria       9         3.2       Average Dry Weather Flow (PDWF)       9         3.3       Peak Dry Weather Flow (ADWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11       11         SECTION 4: STORM WATER RUNOFF       12       4.1         4.1	SECTION 1: INTRO	DUCTION AND PROJECT DESCRIPTION	1
1.3       Proposed Conditions       2         1.4       Project Datum       2         Section 1 Figures       3         SECTION 2: COMBINED SEWER SYSTEM       4         2.1       Existing Combined Sewer System       4         2.2       Design Criteria       4         2.2.1       Settlement Design Criteria       6         2.2.2       Service Lateral Connection Design Criteria       6         2.3.1       System Horizontal Layout       6         2.3.2       System Horizontal Layout       7         Section 2 Figures       8         SECTION 3: SANITARY SEWER FLOW.       9         3.1       Sanitary Sewer Design Criteria.       9         3.2       Average Dry Weather Flow (ADWF)       9         3.3       Sanitary Sewer Flow (DVF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11       11         SECTION 4: STORM WATER RUNOFF       12       12         4.1       Stormwater Runoff Design Criteria       12         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4	1.1	Project Overview	1
1.4       Project Datum       2         Section 1 Figures       3         SECTION 2: COMBINED SEWER SYSTEM       4         2.1       Existing Combined Sewer System       4         2.2       Design Criteria       4         2.2.1       Settlement Design Criteria       6         2.2.2       Service Lateral Connection Design Criteria       6         2.3.1       System Horizontal Layout       6         2.3.2       System Vertical Layout       7         Section 2 Figures       8         SECTION 3: SANITARY SEWER FLOW       9         3.1       Sanitary Sewer Design Criteria       9         3.2       Average Dry Weather Flow (ADWF)       9         3.3       Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11       Section 3 Figures       11         SECTION 4: STORM WATER RUNOFF       12       4.1.1       Runoff Curve Number       12         4.1.1       Runoff Curve Number       12       4.1.2       Time of Concentration       13         4.1.2       Time of Concentration       13       4.1.3       Pervious and Impervious Land/Surface Areas	1.2	Existing Conditions	1
Section 1 Figures       3         SECTION 2: COMBINED SEWER SYSTEM       4         2.1 Existing Combined Sewer System       4         2.2 Design Criteria       4         2.2.1 Settlement Design Criteria       6         2.2.2 Service Lateral Connection Design Criteria       6         2.3 Proposed Combined Sewer System Layout       6         2.3.1 System Horizontal Layout       6         2.3.2 System Vertical Layout       7         Section 2 Figures       8         SECTION 3: SANITARY SEWER FLOW       9         3.1 Sanitary Sewer Design Criteria       9         3.2 Average Dry Weather Flow (ADWF)       9         3.3 Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4 Sanitary Sewer Flow Distribution       10         Section 3 Figures       11         SECTION 4: STORM WATER RUNOFF       12         4.1.1 Runoff Curve Number       12         4.1.2 Time of Concentration       13         4.1.3 Pervious and Impervious Land/Surface Areas       13         4.1.4 Design Storm       14         4.2.2 100-Year Storm       14         4.2.1 5-year Storm       14         4.2.2 100-Year Storm       14         4.2.2 100-Year Storm       1	1.3	Proposed Conditions	2
SECTION 2: COMBINED SEWER SYSTEM       4         2.1       Existing Combined Sewer System       4         2.2       Design Criteria       4         2.2.1       Settlement Design Criteria       6         2.2.2       Service Lateral Connection Design Criteria       6         2.3       Proposed Combined Sewer System Layout.       6         2.3.1       System Horizontal Layout.       6         2.3.2       System Vertical Layout.       7         Section 2 Figures.       8         SECTION 3: SANITARY SEWER FLOW.       9         3.1       Sanitary Sewer Design Criteria       9         3.2       Average Dry Weather Flow (ADWF)       9         3.3       Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11       11         SECTION 4: STORM WATER RUNOFF       12       12         4.1.1       Runoff Curve Number       12         4.1.2       Time of Concentration       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4       Design Storm       14         4.2.1       5-year Storm       14	1.4	Project Datum	2
2.1       Existing Combined Sewer System       4         2.2       Design Criteria       4         2.2.1       Settlement Design Criteria       6         2.2.2       Service Lateral Connection Design Criteria       6         2.3       Proposed Combined Sewer System Layout.       6         2.3.1       System Horizontal Layout.       6         2.3.2       System Vertical Layout.       7         Section 2 Figures.       8         SECTION 3: SANITARY SEWER FLOW.       9         3.1       Sanitary Sewer Design Criteria.       9         3.2       Average Dry Weather Flow (ADWF)       9         3.3       Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures.       11       11         SECTION 4: STORM WATER RUNOFF       12       12         4.1       Runoff Curve Number       12         4.1.1       Runoff Curve Number       13         4.1.2       Time of Concentration       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4       Design Storm       14         4.2.2       100-Year Storm       <	Secti	on 1 Figures	3
2.2       Design Criteria       4         2.2.1       Settlement Design Criteria       6         2.2.2       Service Lateral Connection Design Criteria       6         2.3       Proposed Combined Sewer System Layout.       6         2.3.1       System Horizontal Layout.       6         2.3.2       System Vertical Layout.       7         Section 2 Figures.       8         SECTION 3: SANITARY SEWER FLOW.       9         3.1       Sanitary Sewer Design Criteria.       9         3.2       Average Dry Weather Flow (ADWF)       9         3.3       Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11       11         SECTION 4: STORM WATER RUNOFF       12       12         4.1       Runoff Design Criteria       12         4.1.2       Time of Concentration       13         4.1.2       Time of Concentration       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4       Design Storm       14         4.2.2       100-Year Storm       14         4.2.2       100-Year Storm       15 <td>SECTION 2: COMB</td> <td>INED SEWER SYSTEM</td> <td> 4</td>	SECTION 2: COMB	INED SEWER SYSTEM	4
2.2.1       Settlement Design Criteria       6         2.2.2       Service Lateral Connection Design Criteria       6         2.3       Proposed Combined Sewer System Layout.       6         2.3.1       System Horizontal Layout.       6         2.3.2       System Vertical Layout.       7         Section 2 Figures       8         SECTION 3: SANITARY SEWER FLOW.       9         3.1       Sanitary Sewer Design Criteria.       9         3.2       Average Dry Weather Flow (ADWF)       9         3.3       Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11       11         SECTION 4: STORM WATER RUNOFF       12       12         4.1       Runoff Curve Number       12         4.1.1       Runoff Curve Number       12         4.1.2       Time of Concentration       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4       Design Storm       14         4.2.2       100-Year Storm       14         4.2.1       5-year Storm       15         5.1       Sanitary Sewer Flow Analysis	2.1	Existing Combined Sewer System	4
2.2.2       Service Lateral Connection Design Criteria       6         2.3       Proposed Combined Sewer System Layout       6         2.3.1       System Horizontal Layout       6         2.3.2       System Vertical Layout       7         Section 2 Figures       8         SECTION 3: SANITARY SEWER FLOW       9         3.1       Sanitary Sewer Design Criteria       9         3.2       Average Dry Weather Flow (ADWF)       9         3.3       Peak Dry Weather Flow (ADWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11       11         SECTION 4: STORM WATER RUNOFF       12       12         4.1.1       Runoff Curve Number       12         4.1.2       Time of Concentration       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4       Design Storm       14         4.2.2       100-Year Storm       14         4.2.2       100-Year Storm       15         5.1       Sanitary Sewer Flow Analysis       15         5.2.5       Fyear Storm Event Analysis       16         5.2.2       Flow Velocity       16 <td>2.2</td> <td>Design Criteria</td> <td>4</td>	2.2	Design Criteria	4
2.3       Proposed Combined Sewer System Layout		2.2.1 Settlement Design Criteria	6
2.3.1       System Horizontal Layout		2.2.2 Service Lateral Connection Design Criteria	6
2.3.2       System Vertical Layout       7         Section 2 Figures       8         SECTION 3: SANITARY SEWER FLOW       9         3.1       Sanitary Sewer Design Criteria       9         3.2       Average Dry Weather Flow (ADWF)       9         3.3       Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11         SECTION 4: STORM WATER RUNOFF       12         4.1       Stormwater Runoff Design Criteria       12         4.1.1       Runoff Curve Number.       12         4.1.2       Time of Concentration       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4       Design Storm       13         4.1.5       System Storm       14         4.2.2       100-Year Storm       14         4.2.2       100-Year Storm       14         5.1       Sanitary Sewer Flow Analysis       15         5.2       5-Year Storm Event Analysis       16         5.2.1       Model Results Discussion       16         5.2.2       Flow Velocity       16         5.3       100-Year Storm Ev	2.3	Proposed Combined Sewer System Layout	6
Section 2 Figures       8         SECTION 3: SANITARY SEWER FLOW       9         3.1 Sanitary Sewer Design Criteria       9         3.2 Average Dry Weather Flow (ADWF)       9         3.3 Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4 Sanitary Sewer Flow Distribution       10         Section 3 Figures       11         SECTION 4: STORM WATER RUNOFF       12         4.1 Stormwater Runoff Design Criteria       12         4.1.1 Runoff Curve Number       12         4.1.2 Time of Concentration       13         4.1.3 Pervious and Impervious Land/Surface Areas       13         4.1.4 Design Storm       13         4.2 Starting Hydraulic Grade Line       14         4.2.1 5-year Storm       14         4.2.2 100-Year Storm       15         5.1 Sanitary Sewer Flow Analysis       15         5.2 5-Year Storm Event Analysis       16         5.2 100 Velocity       16         5.3 100-Year Storm Event Analysis       16		2.3.1 System Horizontal Layout	6
SECTION 3: SANITARY SEWER FLOW.       9         3.1       Sanitary Sewer Design Criteria.       9         3.2       Average Dry Weather Flow (ADWF)       9         3.3       Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution.       10         Section 3 Figures       11         SECTION 4: STORM WATER RUNOFF       12         4.1       Stormwater Runoff Design Criteria.       12         4.1.1       Runoff Curve Number.       12         4.1.2       Time of Concentration       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4       Design Storm       13         4.1.5       Starting Hydraulic Grade Line.       14         4.2.1       5-year Storm       14         4.2.2       100-Year Storm       15         5.1       Sanitary Sewer Flow Analysis       15         5.2       5-Year Storm Event Analysis       16         5.2.1       Model Results Discussion       16         5.2.2       Flow Velocity       16         5.3       100-Year Storm Event Analysis       16		2.3.2 System Vertical Layout	7
3.1Sanitary Sewer Design Criteria.93.2Average Dry Weather Flow (ADWF).93.3Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF).93.4Sanitary Sewer Flow Distribution.10Section 3 Figures.11SECTION 4: STORM WATER RUNOFF.124.1Stormwater Runoff Design Criteria.124.1.1Runoff Curve Number.124.1.2Time of Concentration.134.1.3Pervious and Impervious Land/Surface Areas.134.1.4Design Storm.134.2Starting Hydraulic Grade Line.144.2.15-year Storm.144.2.2100-Year Storm.155.1Sanitary Sewer Flow Analysis.155.25-Year Storm Event Analysis.165.3100-Year Storm Event Analysis.16	Secti	on 2 Figures	8
3.2       Average Dry Weather Flow (ADWF)       9         3.3       Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11         SECTION 4: STORM WATER RUNOFF       12         4.1       Stormwater Runoff Design Criteria       12         4.1.1       Runoff Curve Number       12         4.1.2       Time of Concentration       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4       Design Storm       14         4.2.1       5-year Storm       14         4.2.2       100-Year Storm       14         SECTION 5: MODEL ANALYSIS AND RESULTS       15         5.1       Sanitary Sewer Flow Analysis       15         5.2       5-Year Storm Event Analysis       16         5.2.1       Model Results Discussion       16         5.2.3       100-Year Storm Event Analysis       16	SECTION 3: SANIT	ARY SEWER FLOW	9
3.3       Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11         SECTION 4: STORM WATER RUNOFF       12         4.1       Stormwater Runoff Design Criteria       12         4.1.1       Runoff Curve Number       12         4.1.2       Time of Concentration       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4       Design Storm       13         4.1.5       Starting Hydraulic Grade Line       14         4.2.1       5-year Storm       14         4.2.2       100-Year Storm       14         SECTION 5: MODEL ANALYSIS AND RESULTS       15         5.1       Sanitary Sewer Flow Analysis       15         5.2       5-Year Storm Event Analysis       16         5.2.1       Model Results Discussion       16         5.2.2       Flow Velocity       16         5.3       100-Year Storm Event Analysis       16	3.1	Sanitary Sewer Design Criteria	9
3.3       Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)       9         3.4       Sanitary Sewer Flow Distribution       10         Section 3 Figures       11         SECTION 4: STORM WATER RUNOFF       12         4.1       Stormwater Runoff Design Criteria       12         4.1.1       Runoff Curve Number       12         4.1.2       Time of Concentration       13         4.1.3       Pervious and Impervious Land/Surface Areas       13         4.1.4       Design Storm       13         4.1.5       Starting Hydraulic Grade Line       14         4.2.1       5-year Storm       14         4.2.2       100-Year Storm       14         SECTION 5: MODEL ANALYSIS AND RESULTS       15         5.1       Sanitary Sewer Flow Analysis       15         5.2       5-Year Storm Event Analysis       16         5.2.1       Model Results Discussion       16         5.2.2       Flow Velocity       16         5.3       100-Year Storm Event Analysis       16	3.2	Average Dry Weather Flow (ADWF)	9
3.4Sanitary Sewer Flow Distribution10Section 3 Figures11SECTION 4: STORM WATER RUNOFF124.1Stormwater Runoff Design Criteria124.1.1Runoff Curve Number124.1.2Time of Concentration134.1.3Pervious and Impervious Land/Surface Areas134.1.4Design Storm134.2Starting Hydraulic Grade Line144.2.15-year Storm14SECTION 5: MODEL ANALYSIS AND RESULTS155.1Sanitary Sewer Flow Analysis155.25-Year Storm Event Analysis165.3100-Year Storm Event Analysis165.3100-Year Storm Event Analysis16	3.3		
SECTION 4: STORM WATER RUNOFF124.1Stormwater Runoff Design Criteria124.1.1Runoff Curve Number124.1.2Time of Concentration134.1.3Pervious and Impervious Land/Surface Areas134.1.4Design Storm134.1.5Starting Hydraulic Grade Line144.2.15-year Storm144.2.2100-Year Storm14SECTION 5: MODEL ANALYSIS AND RESULTS155.1Sanitary Sewer Flow Analysis155.25-Year Storm Event Analysis165.2.1Model Results Discussion165.3100-Year Storm Event Analysis16	3.4	-	
4.1Stormwater Runoff Design Criteria124.1.1Runoff Curve Number124.1.2Time of Concentration134.1.3Pervious and Impervious Land/Surface Areas134.1.4Design Storm134.2Starting Hydraulic Grade Line144.2.15-year Storm144.2.2100-Year Storm14SECTION 5: MODEL ANALYSIS AND RESULTS155.1Sanitary Sewer Flow Analysis155.25-Year Storm Event Analysis165.2.1Model Results Discussion165.3100-Year Storm Event Analysis16	Secti	on 3 Figures	. 11
4.1.1Runoff Curve Number.124.1.2Time of Concentration134.1.3Pervious and Impervious Land/Surface Areas134.1.4Design Storm134.2Starting Hydraulic Grade Line144.2.15-year Storm144.2.2100-Year Storm14SECTION 5: MODEL ANALYSIS AND RESULTS155.1Sanitary Sewer Flow Analysis155.25-Year Storm Event Analysis165.2.1Model Results Discussion165.2.2Flow Velocity165.3100-Year Storm Event Analysis16	SECTION 4: STORM	/ WATER RUNOFF	.12
4.1.1Runoff Curve Number.124.1.2Time of Concentration134.1.3Pervious and Impervious Land/Surface Areas134.1.4Design Storm134.2Starting Hydraulic Grade Line144.2.15-year Storm144.2.2100-Year Storm14SECTION 5: MODEL ANALYSIS AND RESULTS155.1Sanitary Sewer Flow Analysis155.25-Year Storm Event Analysis165.2.1Model Results Discussion165.2.2Flow Velocity165.3100-Year Storm Event Analysis16	4.1	Stormwater Runoff Design Criteria	. 12
4.1.3Pervious and Impervious Land/Surface Areas134.1.4Design Storm134.2Starting Hydraulic Grade Line144.2.15-year Storm144.2.2100-Year Storm145.1Sanitary Sewer Flow Analysis155.1Sanitary Sewer Flow Analysis155.25-Year Storm Event Analysis165.2.1Model Results Discussion165.3100-Year Storm Event Analysis16		•	
4.1.4Design Storm.134.2Starting Hydraulic Grade Line.144.2.15-year Storm.144.2.2100-Year Storm14SECTION 5: MODEL ANALYSIS AND RESULTS.155.1Sanitary Sewer Flow Analysis155.25-Year Storm Event Analysis.165.2.1Model Results Discussion.165.2.2Flow Velocity165.3100-Year Storm Event Analysis.16		4.1.2 Time of Concentration	13
4.1.4Design Storm.134.2Starting Hydraulic Grade Line.144.2.15-year Storm.144.2.2100-Year Storm14SECTION 5: MODEL ANALYSIS AND RESULTS.155.1Sanitary Sewer Flow Analysis155.25-Year Storm Event Analysis.165.2.1Model Results Discussion.165.2.2Flow Velocity165.3100-Year Storm Event Analysis.16		4.1.3 Pervious and Impervious Land/Surface Areas	13
4.2.1       5-year Storm			
4.2.2100-Year Storm14SECTION 5: MODEL ANALYSIS AND RESULTS155.1Sanitary Sewer Flow Analysis155.25-Year Storm Event Analysis165.2.1Model Results Discussion165.2.2Flow Velocity165.3100-Year Storm Event Analysis16	4.2	Starting Hydraulic Grade Line	. 14
SECTION 5: MODEL ANALYSIS AND RESULTS		4.2.1 5-year Storm	14
<ul> <li>5.1 Sanitary Sewer Flow Analysis</li> <li>5.2 5-Year Storm Event Analysis</li> <li>5.2.1 Model Results Discussion</li> <li>5.2.2 Flow Velocity</li> <li>16</li> <li>5.3 100-Year Storm Event Analysis</li> </ul>		4.2.2 100-Year Storm	14
<ul> <li>5.2 5-Year Storm Event Analysis</li></ul>	SECTION 5: MODE	L ANALYSIS AND RESULTS	15
<ul> <li>5.2 5-Year Storm Event Analysis</li></ul>	5.1	Sanitary Sewer Flow Analysis	. 15
5.2.1Model Results Discussion			
5.2.2Flow Velocity165.3100-Year Storm Event Analysis16			
5.3 100-Year Storm Event Analysis16			
		5.2.2 Flow Velocity	16
	5.3	5	

#### FIGURES

FIGURES											
Figure 1.2 –	<ul> <li>Project Location</li> <li>Project Site Layout</li> <li>Project Site Phasing Plan</li> <li>Existing Combined Sewer System</li> <li>Proposed Combined Sewer System and Drainage Areas</li> <li>Typical Street Utility Plan and Section</li> <li>Combined Sewer System Model Node Identification</li> <li>Project Sanitary Sewer Flow Distribution</li> <li>Sanitary Sewer Demand Table</li> <li>ADWF Hydraulics, XPSWMM Pipe Table</li> </ul>										
Figure 2.2 –	Proposed Combined Sewer System and Drainage Areas										
<ul> <li>Figure 1.1 – Project Location</li> <li>Figure 1.2 – Project Site Layout</li> <li>Figure 1.3 – Project Site Phasing Plan</li> <li>Section 2 Figures</li> <li>Figure 2.1 – Existing Combined Sewer System</li> <li>Figure 2.2 – Proposed Combined Sewer System and Drainage Areas</li> <li>Figure 2.3 – Typical Street Utility Plan and Section</li> <li>Section 3 Figures</li> <li>Figure 3.1 – Combined Sewer System Model Node Identification</li> <li>Figure 3.2 – Project Sanitary Sewer Flow Distribution</li> <li>APPENDICES</li> <li>Appendix A – A-1 Sanitary Sewer Demand Table</li> <li>A-2 ADWF Hydraulics, XPSWMM Pipe Table</li> <li>A-3 PWWF Hydraulics, XPSWMM Pipe Table</li> <li>Appendix B – B-1 5-Year Storm Hydrology, XPSWMM Node Table</li> <li>B-2 5-Year Storm Hydraulics, XPSWMM Pipe Table</li> </ul>											
APPENDICES											
A-2	ADWF Hydraulics, XPSWMM Pipe Table										
B-2	5-Year Storm Hydraulics, XPSWMM Node Table										
Appendix C – C-1 C-2	100-Year Storm Hydrology, XPSWMM Node Table 100-Year Storm Hydraulics, XPSWMM Node Table										

C-3 100-Year Storm Hydraulics, XPSWMM Pipe Table

### SECTION 1: INTRODUCTION AND PROJECT DESCRIPTION

#### 1.1 Project Overview

The Visitacion Valley Redevelopment, Zone 1 ("The Project") is located within the City and County of San Francisco, along the southern border of San Francisco and adjacent to the City of Brisbane. The site is bounded by Bayshore Boulevard to the west, Sunnydale Avenue to the South, Blanken Avenue to the north, a property owned by the Union Pacific Rail Road to the northeast, and Caltrain tracks to the southeast. The Project comprises a mixed-use community including residential, retail, community use, and parks and recreational open space. Figure 1.1 illustrates the regional location of the Project.

### 1.2 Existing Conditions

The Project is approximately 20 acres in size. It is located at the former Schlage Lock factory site which operated from 1926 to 1999. The factory was demolished in 2009, and the site was cleared.

The soils at the site are contaminated by VOCs and heavy metals. Remedial actions commenced in 2010 in preparation for site development. Remediation of the heavy metal contaminated soil includes targeted excavation and relocation with capping, excavation and disposal off-site at an approved landfill, or capping in place and recording a State Land Use Covenant and a deed restriction on the title of the impacted parcel. Remediation of VOC-impacted soil includes excavation and aeration to the pad elevations and depths of clean utility corridors. Clean utility corridors are located within the roadways up to a minimum of 1 foot below the level of the proposed utilities, and are filled with clean engineered soil to protect proposed utilities from contamination, and keep contaminants from migrating through utility trenches. Remediation of the Schalge operating unit is ongoing and will be completed by the end of 2015.

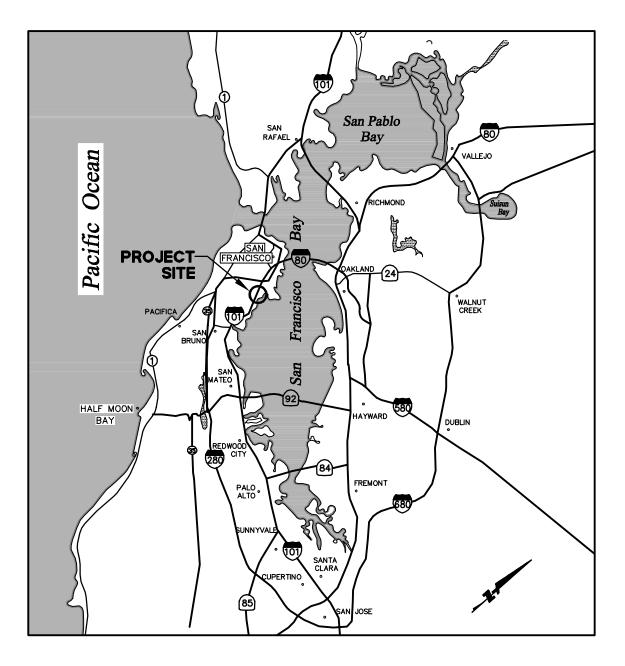
### 1.3 Proposed Conditions

The Project comprises nine development parcels ranging from half an acre to almost two acres. These will include up to 1,679 residential units, and approximately 46,700 square feet of retail space. The project also includes the rehabilitation of an approximately 18,000-square-foot historic building located at the northern end of the site to serve the community, and three parks located across the site, totaling 1.92 acres. Pedestrian access to the Bayshore Caltrain station will be provided thru the site to link the station with the light rail system on Bayshore Boulevard. The proposed Project site plan is shown in Figure 1.2. As shown in Figure 1.3, the infrastructure improvements will be approved as one phase and constructed in as many as three phases to serve the Project. However, it is anticipated that the utility improvements will all be constructed in the first phase.

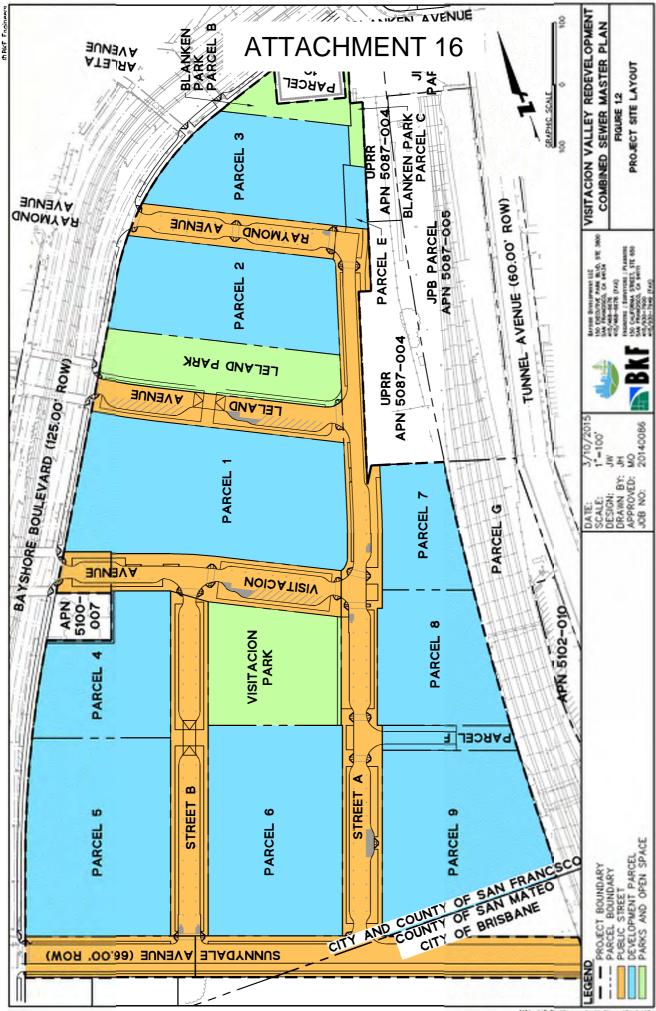
### 1.4 Project Datum

All elevations referenced herein are based on the City of San Francisco datum.

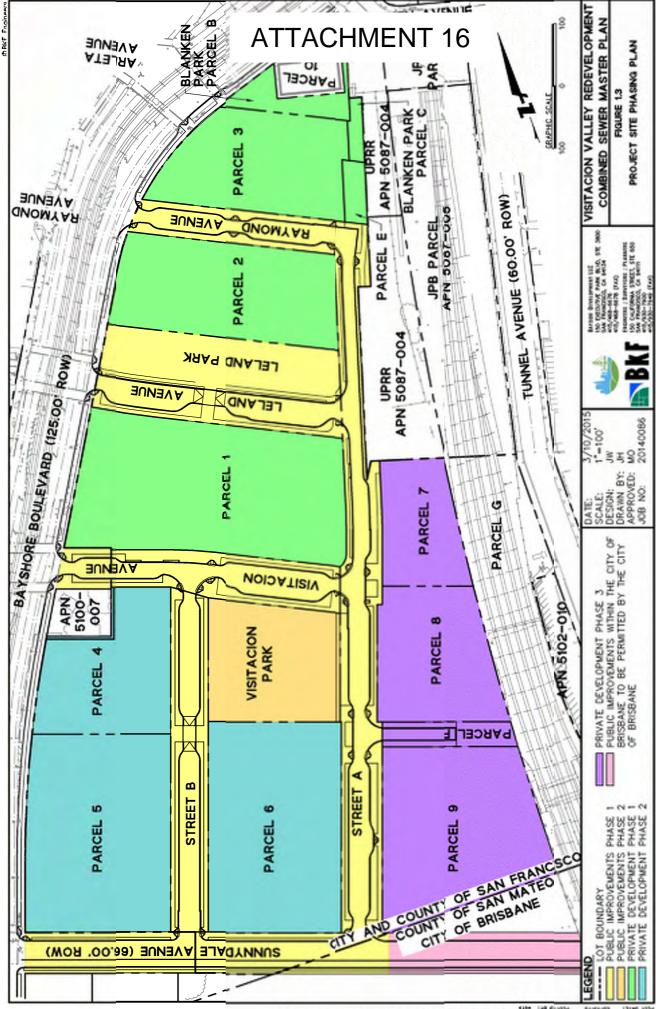
Section 1 Figures



### FIGURE 1.1 PROJECT LOCATION



gwb.luoya sii2 jostoi 2.1 siugi7/noi9 iswa2 bac



Bei ning bering and the total for and young many person/changes and related to the formation (sector) in the terms

### SECTION 2: COMBINED SEWER SYSTEM

### 2.1 Existing Combined Sewer System

Prior to demolition, the Project site was nearly 100 percent impervious, mostly covered with pavement and buildings. Stormwater discharged directly to an on-site combined sewer system that conveyed both the stormwater runoff and sanitary sewer flows from the site. The combined system discharged to the City of San Francisco combined sewer system at four locations—a 12-inch connection to the Bayshore Boulevard combined sewer system, an 18-inch lateral to the 78-inch combined sewer main in Sunnydale Avenue, a 12-inch combined sewer line that runs east beneath the JPB railroad tracks, and a 12-inch storm drain line from the former parking lot at the southwest corner of the site drains into the 78-inch Sunnydale main. The existing combined sewer lines within the site have since been abandoned or removed. The existing combined sewer system is shown in Figure 2.1.

#### 2.2 Design Criteria

The proposed combined sewer system is intended to convey both storm runoff and sanitary sewer flow from the Project site. The physical and hydraulic design criteria for the combined sewer system per City and County of San Francisco (CCSF) subdivision regulations are presented in Table 2.1.

# Table 2.1 Combined Sewer Main Design Criteria per CCSF Subdivision Regulations

Parameter	Value
Minimum pipe size	12-inch inside diameter
Pipe material for pipe sizes 12-inch to 24-inch inside diameter	HDPE SDR 17
Pipe material for pipe sizes larger than 24-inch inside diameter	HDPE SDR 17 subject to the approval of the Director of Public Works with the consent of the PUC on a case-by-case basis
Manhole spacing	300-feet preferred 350-feet maximum
Minimum depth of cover for mains	6-feet minimum unless otherwise approved by the Director with the consent of the SFPUC on a case-by-case basis
ADWF minimum flow velocity	2 fps
Maximum flow velocity	10 fps
Starting hydraulic grade line	Elevation 2.0 for 5-year storm Free outfall for ADWF & PWWF
Minimum freeboard between the storm drain system 5-year storm hydraulic grade line (HGL) and the street gutter flow line	24 inches
Minimum rainfall intensity use based on a minimum time of concentration Tc = 5 min	3.13 in/hr
Manning's n (roughness coefficient) for proposed pipes	HDPE: 0.010
ADWF Maximum Pipe Flow Depth Ratio, d/D	0.50
PWWF Maximum Pipe Flow Depth Ratio, <i>d/D</i>	0.75
Sewer Generation	95% of indoor low pressure water demand

NOTES:

fps = feet per second

d/D = ratio of the depth of flow (*d*) to the pipe inside diameter (*D*)

#### 2.2.1 Settlement Design Criteria

Geotechnical stabilization techniques will be utilized to create a stable platform for the proposed development. The stabilization techniques will mitigate the potential for settlement due to liquefaction in the sandy soils and compression of the bay mud below the site.

#### 2.2.2 Service Lateral Connection Design Criteria

The hydraulic grade line for the 5-year storm will have a minimum of 24-inches of freeboard below the street gutter flow line. The hydraulic grade line for the 100-year storm will be allowed to flow in the streets up to the top of curb elevation per the City and County of San Francisco (CCSF) subdivision regulations.

Combined sewer drains are designed to flow under surcharged conditions, and in the event of extreme storms, the surcharge may rise to the street as overland flow. Gravity service lateral connections from sites lower than street grade (i.e. basements) will include backflow provisions to prevent flooding. Backflow preventers will be installed on private property by the on-site developer and be privately owned and maintained by the property owner.

### 2.3 Proposed Combined Sewer System Layout

#### 2.3.1 System Horizontal Layout

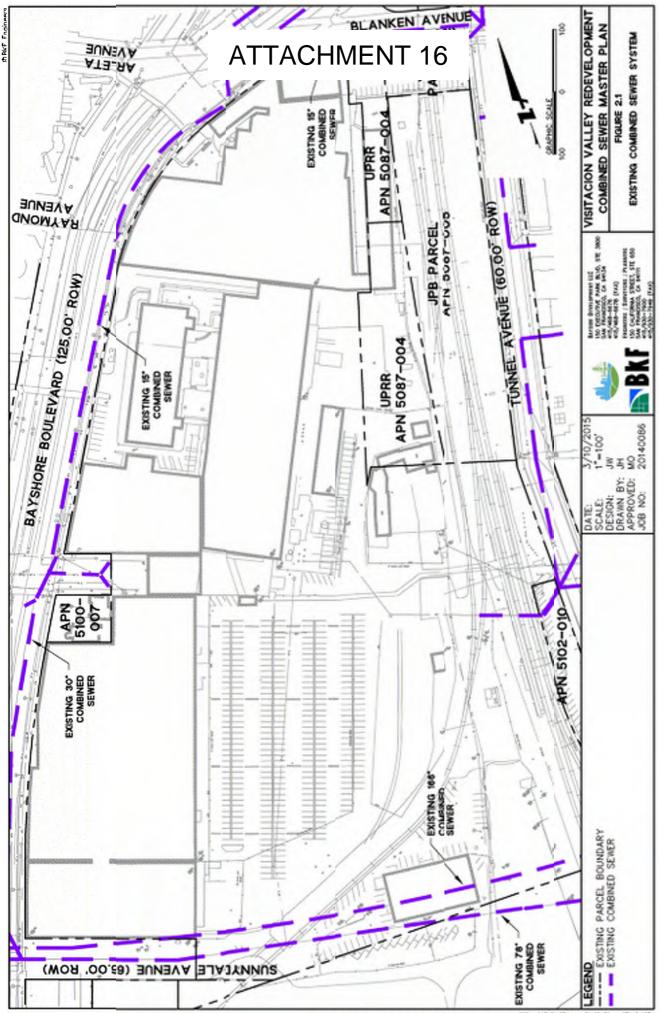
The proposed system will connect to the 78-inch combined sewer line in Sunnydale Avenue at three different existing manholes, and to the combined sewer in Bayshore Boulevard at an existing manhole in Visitacion Avenue. The proposed combined sewer system layout is shown on Figure 2.2. The proposed combined sewer mains will split the center of streets and with the water main such that they maintain a 10-foot separation, and are located more than 5-feet from proposed trees. The proposed typical street utility plan and section are shown in Figure 2.4.

#### 2.3.2 System Vertical Layout

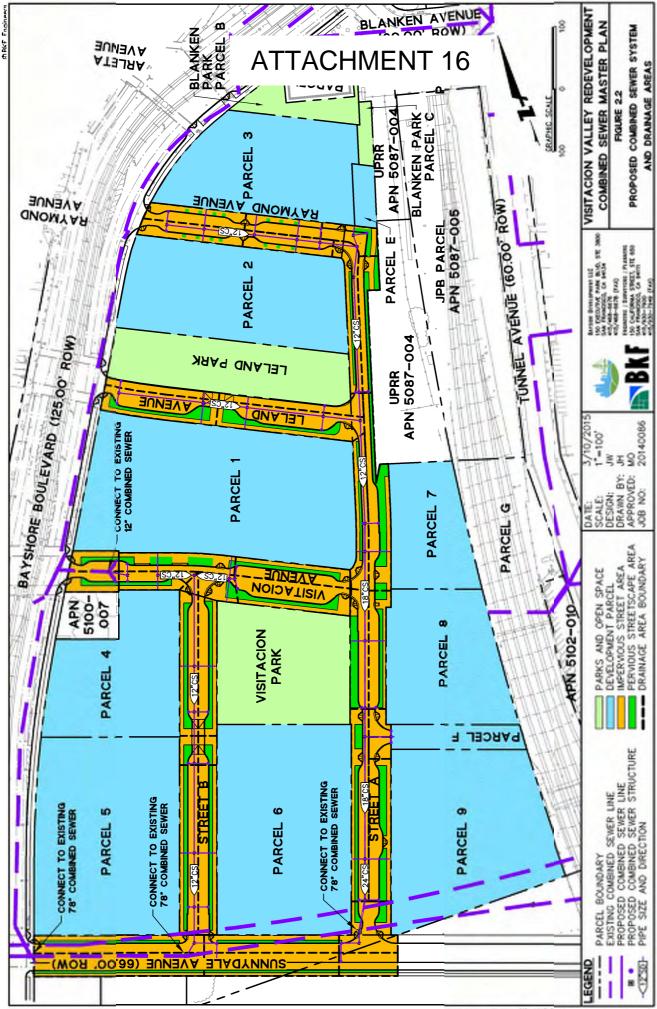
The proposed combined sewer system minimum depth of cover is 6 feet. The following conditions apply:

- The minimum separation from potable water mains shall be based on the current Title 22 and SFPUC Water Enterprise requirements.
- For each Project with pipes having less than 6-feet cover, specific pipe cover calculations and/or different pipe SDR or material shall be submitted.
- For pipes with less than 5-feet cover, pipe bedding shall be determined during final design and modified as necessary.
- Gravity sewer laterals shall take precedence in placement of utilities when the sewer mains do not have 5-feet minimum cover. Other utilities will be designed to accommodate the sewer laterals.
- Sewer service laterals shall be installed perpendicular to the main unless otherwise approved by the Director with the consent of the SFPUC on a case-by-case basis.
- Casings shall be provided for sewer laterals when less than 1-foot vertical separation from other utilities is required or when laterals are installed below other utility structures (e.g. stormwater BMPs).

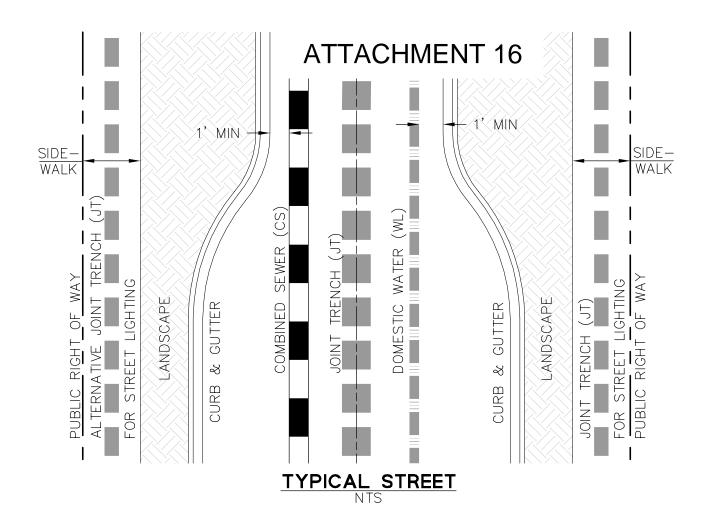
### Section 2 Figures

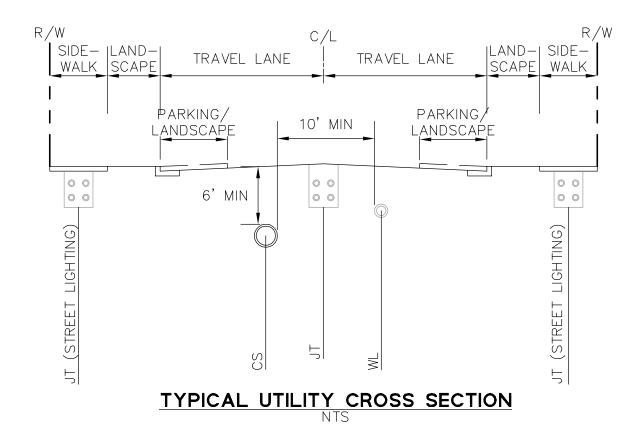


and and the second protocol of the second protocol of the second se



Gwb.reweZ benidmcJ bescport S.S erugi7/nol4 seveS ben





### **SECTION 3: SANITARY SEWER FLOW**

The sewer flows used for the analyses are based on 95% of the low pressure water demand factors for each land use as outlined in the Low Pressure Water Master Plan and shown in Appendix A-1.

#### 3.1 Sanitary Sewer Design Criteria

The combined sewer system will be designed to convey average dry weather flow (ADWF) and peak wet weather flow (PWWF) at 50% and 75% of the pipe diameter, respectively. The ADWF is based on 95% of the the low pressure water average daily demand as described in Section 3.2.

#### 3.2 Average Dry Weather Flow (ADWF)

The sanitary sewer ADWF is intended to be representative of the average day sanitary sewer generation. The sanitary sewer ADWF is a function of the indoor water use Average Day Demand (ADD). Table 3.1 represents indoor water use ADD for each land use shown in the Low Pressure Water Master Plan.

Table 3.1

Land Use	Units	Low Pressure Water (LPW)
1-bedroom Condo	gpd/unit	102
2-bedroom Condo	gpd/unit	125
3-bedroom Condo	gpd/unit	140
Retail/Commercial	gpd/1,000 ft <sup>2</sup>	150

Average Day Demand Water Factors per Land Use

NOTES:

Demand factors are from approved Infrastructure Plan and described in Appendix A-1

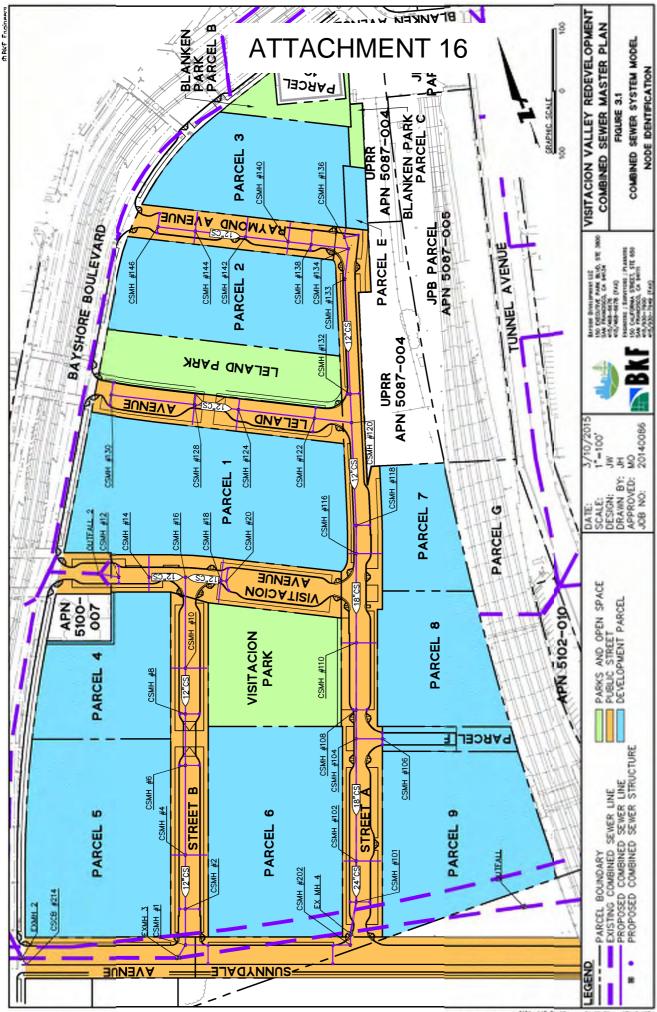
#### 3.3 Peak Dry Weather Flow (PDWF) and Peak Wet Weather Flow (PWWF)

Because this is a combined sewer system, the pipes are already sized to contain a large amount of storm water, and infiltration in those situations will not have a significant impact on the pipe capacity. Therefore, peak wet and dry weather flows do not need to be modeled.

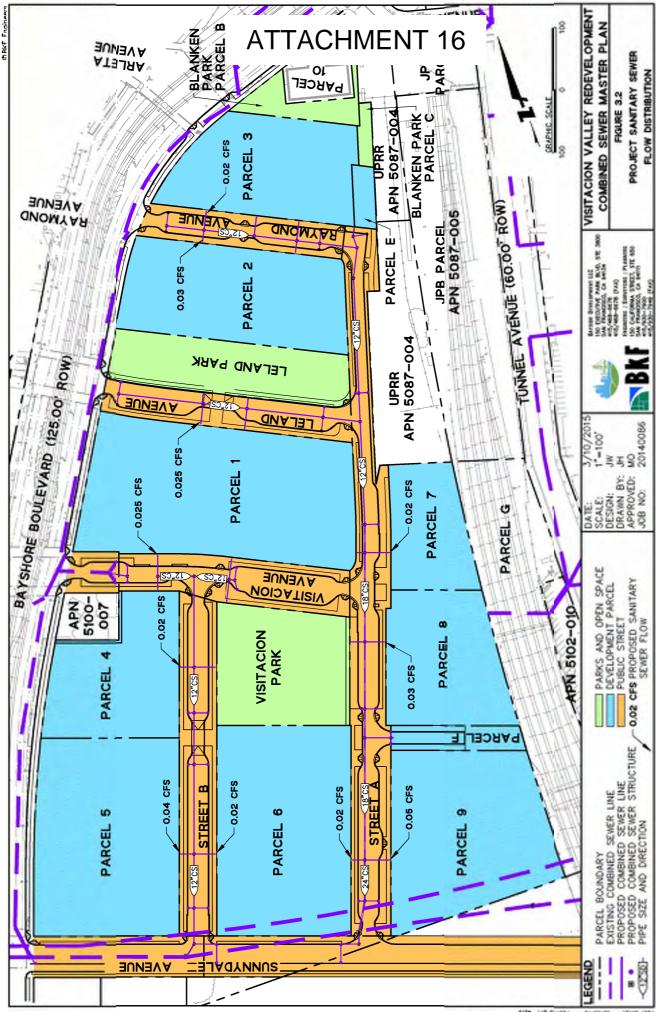
### 3.4 Sanitary Sewer Flow Distribution

Each parcel's total sanitary sewer flow was divided equally amongst the sanitary sewer nodes bordering the parcel as shown in Figure 3.2. The parcel flow entering a node represents a combined sewer lateral point of connection. The nodes are identified in Figure 3.1.

Section 3 Figures



gwb II abwer Spellen in Complete Start Plant Plant



Swort Tewer Flantflaure J.2 Sanitary Seven Plantflaure J.2 Sanitary Seven Flantflaure J.2

### **SECTION 4: STORM WATER RUNOFF**

### 4.1 Stormwater Runoff Design Criteria

The combined sewer system will be designed to convey, at a minimum, the stormwater runoff from the 5-year storm from the Project parcels and streets. Stormwater runoff is computed using Santa Barbara Urban Hydrograph (SBUH) method. The SBUH method is based on the Soil Conservation Service (SCS) curve number (CN) approach. Key variables for the SBUH method include:

- Runoff CN at the site
- Time of Concentration
- Pervious and impervious land/surface areas
- Design storm

#### 4.1.1 Runoff Curve Number

The curve number (CN) for a surface varies based on the hydrologic soil group (HSG) of the native (or existing) soils at the site. The HSG is a NRCS classification system in which soils are categorized into four runoff potential groups. The groups range from type A soils, with high permeability and little runoff production, to type D soils, which have low permeability rates and high runoff production.

In 2010, Treadwell and Rollo performed four percolation tests to characterize soil permeability. The infiltration rates found varied across the site and ranged between 0.3 inches per hour and 0.5 inches per hour. One of the test locations showed 5 inches per hour. This is not consistent with the other tests performed at the site and was most likely an isolated location, thus it was ignored. To be conservative, the project soils are categorized as Hydrologic Soil Group (HSG) Type "D" soils, which correspond to a CN of 80.

#### 4.1.2 Time of Concentration

The time of concentration (Tc) is the time for a drop of water to travel from the farthest point on the upstream end of the drainage area to the downstream end. The minimum time of concentration is 5-minutes. The minimum time-of-concentration is used for project streets tributary to inlets and 10-minutes is used for development parcels tributary to backbone combined sewer lines.

#### 4.1.3 Pervious and Impervious Land/Surface Areas

Pervious areas within the Project site include landscaped features in the development parcels, and landscaping within the proposed parks and street (rights-of-way.) The parcels are planned to be zero lot line buildings and a portion of those roofs may include landscape features. Proposed parks are expected to be 50% pervious. Landscape areas within the on-site street rights-of-way vary for different tributary areas.

#### 4.1.4 Design Storm

The rainfall intensity (I) is based on the 5-year storm Intensity–Duration–Frequency (IDF) curve as defined in the "San Francisco Rainfall Rate Table 1941," Plan L-3903.4 dated February 1941. The 5-year storm IDF curve is shown in Table 2.1.

Table 2.1	
5-Year Storm	<b>IDF</b> Curve

Duration (min)	5	6	7	10	15	20	25	30	35	40	45
Intensity (in/hr)	3.13	2.92	2.74	2.32	1.84	1.53	1.30	1.14	1.01	0.92	0.86

A design storm hyetograph was created from the IDF curve rainfall data using alternating block method.

### 4.2 Starting Hydraulic Grade Line

#### 4.2.1 5-year Storm

A hydraulic grade line of elevation 2.0 (SF Datum) was used as the starting HGL for the 78-inch in Sunnydale Avenue (i.e., at EX CSMH#1). The starting HGL is based on a separate analyses conducted in August 2013 by SFPUC for the 78-inch line.

#### 4.2.2 100-Year Storm

A hydraulic grade line of elevation 4.0 (SF Datum) was used as the starting HGL for the 78-inch in Sunnydale Avenue (i.e., at EX CSMH#2). The starting HGL is based on assuming the existing 78-inch line within Sunnydale Avenue is overflowing at the catch basin at the corner of Sunnydale Avenue and Bayshore Boulevard, which is the most downstream catch basin on Bayshore Boulevard.

### **SECTION 5: MODEL ANALYSIS AND RESULTS**

The combined sewer system was analyzed using the storm water management modeling (SWMM) program by XPSWMM. The model incorporates the different storm and sewer flow rates entering the system at different points. The model routes flow hydrographs through the pipes and produces dynamic hydraulic grade line elevations for the system. Models were developed and run for ADWF, a 5-year storm, and 100-year storm to verify that the proposed system conforms to the requirements laid out in Section 2.

#### 5.1 Sanitary Sewer Flow Analysis

The pipe sizes are sufficiently large to meet the sewer flow depth criteria because the pipes are sized to convey 5-year storm runoff flow which is significantly larger than ADWF or PWWF. The depth of flow is less than half of the pipe diameter during ADWF and PWWF conditions.

The proposed pipe slopes were made steeper than required to contain a 5-year storm scenario and meet the minimum 2 feet per second velocity during ADWF condition. The ADWF model results are detailed in Appendix A-2 and A-3.

Buildings connected to the proposed combined sewer mains shall either have a privately maintained sewer ejector pump on private property or provide design calculations that show the sanitary sewer laterals will have a minimum flow velocity of 2 fps during ADWF. The SFPUC will review future public improvement plans and private development projects to confirm that the laterals serving private development parcels and public parks meet the SFPUC minimum velocity requirements.

### 5.2 5-Year Storm Event Analysis

#### 5.2.1 Model Results Discussion

The analyses showed that using pipe sizes ranging from 12 inches to 24 inches will maintain the peak hydraulic grade line 24 inches below the gutter flow line. The detailed combined sewer system model results for the 5-year storm are provided in Appendix B-1, B-2 and B-3.

#### 5.2.2 Flow Velocity

Combined sewer pipes meet the maximum calculated full pipe flow velocity design criterion of 10 fps.

#### 5.3 100-Year Storm Event Analysis

#### 5.3.1 Model Results Discussion

The analyses show that pipe sizes ranging from 12 inches to 24 inches would be sufficient to convey runoff from a 100-year storm event below the level of the proposed catch basin rims. A route for overland release is also provided across the whole site, so the Project proposes to use the combined sewer pipes to convey 100-year storm event runoff. Flooding may still occur along Sunnydale Avenue, but overland release is provided along that street, so this should be acceptable.

The detailed combined sewer system model results for the 100-year storm are provided in Appendix C-1, C-2 and C-3.

# APPENDIX A

## Sanitary Flows Results



ater I	omestic Water Demand						Sanitary Sewer Demand	pu
	Living Units <sup>(1)</sup> Size <sup>(1)</sup>	Size <sup>(1)</sup>	Load <sup>(2)</sup>	Avg. Daily Demand	Avg. Daily Demand Avg. Daily Demand Avg. Daily Demand	Avg. Daily Demand	Load <sup>(3)</sup>	ADWF
		(SF/Use)		(pdb)	(mdg)	(cfs)		(cfs)
-bedroom Condo	269		102 gpd/unit	71,094	49	0.110	96.9 gpd/unit	0.104
-bedroom Condo	849		125 gpd/unit	106,125	74	0.164	118.75 gpd/unit	0.156
-bedroom Condo	133		140 gpd/unit	18,620	13	0.029	133 gpd/unit	0.027
		43,700	150 gpd/1000 SF	9'222	5	0.010	142.5 gpd/1000 SF	0.010
		0	150 gpd/1000 SF	0	0	0.000	142.5 gpd/1000 SF	0.000
	1679			202,394	141	0.313		0.297
ĺ								

## Notes

1 Living Unit numbers and square footages are based on values provided by UPC.

- 2 1- bedroom (2005 unit demands) and Retail/Office Loads are based on the values provided in the Visitacion Valley Redevelopment Program Draft EIR, dated 06/03/08. 2-bedroom and 3-bedroom units assume 2.5 persons and 2.8 persons per unit, respectively, at 60 gpd/person, per the August 2006 "Projected Water usage for BAWSCA Agencies" Tech Memo by URS.
  - 3 Sanitary sewer demand loads are based on a 95% return on water use.

APPENDIX A-2 Average Dry Weather Sanitary Flow Hydraulics, XPSWMM Node Tal
---

Constant Inflow (cfs)	0	0.02	0	0.07	0	0	0.03	0	0.02	0	0	0	0	0	0.025	0	0	0	0	0	0.025	0.025	0	0.025	0	0	0	0	0	0.06	0	0	0	0	0	0
User Inflow Flag	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Use Interface File Flow Percentage	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Use Interface File Flow Flag	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Continuity Error Volume (% of 1 Node)	0	-0.01	0	0	0.01	0	0	0	0	0	0	0.01	0	-0.01	0	0	-0.01	0.02	0	0	0	0	0	0	0	0	0	0	0	-0.01	-0.01	0	0	0.01	0	-0.03
Continuity Error C Volume (% of Inflow)	0.001	0.002	0.001	900.0	0.011	0.001	0.002	0.002	0.002	0.001	0.002	0.003	0.001	0.002	0	0	0.002	0.005	0.001	0.001	0	0.001	0.001	0	0	0.001	0	0.003	0	0.005	0.002	0.001	0.001	0.016	0.011	0.055
Cc Flood Loss V (ft <sup>3</sup> )	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volume of Ponded Flow Stored (ft <sup>3</sup> )	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Volume of Outflow (ft <sup>3</sup> )	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51644.251
Volume of Interface File Inflow (ft <sup>3</sup> )	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Node Inflow (ft <sup>3</sup> )	0	3456	0	12096	0	0	5184	0	3456	0	0	0	0	0	4320	0	0	0	0	0	4320	4320	0	4320	0	0	0	0	0	10368	0	0	0	0	0	0
Invert Elevation (ft)	-0.5	5.83	-4.35	-3.1	0.62	1.5	3.54	4.96	6.25	7.11	7.85	10.3	11.93	13.68	18.46	20.2	11.32	15.12	16.2	18.13	11	19.24	21.31	23.77	25.57	9.55	10.7	0.08	10.9	0.95	3.4	4.72	-4.63	-5.26	-3.94	-5.89
Ground Elevation (Spill Crest, ft)	9.07	19.26	13.82	15.55	19.98	21.08	23.62	25.12	24.97	24.87	25.13	26.4	26.01	26.52	26.76	26.37	27	34.29	35.45	36.59	18.07	37.33	38.7	37.96	37.21	19.94	20.97	10.38	21.15	13.68	18.75	18.91	9.12	12.91	5.31	7.66
Node Name	CSMH #1	CSMH #10	CSMH #101	CSMH #102	CSMH #104	CSMH #108	CSMH #110	CSMH #112	CSMH #116	CSMH #118	CSMH #119	CSMH #120	CSMH #122	CSMH #124	CSMH #128	CSMH #130	CSMH #132	CSMH #133	CSMH #134	CSMH #138	CSMH #14	CSMH #140	CSMH #142	CSMH #144	CSMH #146	CSMH #16	CSMH #18	CSMH #2	CSMH #20	CSMH #4	CSMH #6	CSMH #8	EXMH 3	EXMH 4	EXMH2(A16)	Outfall

APPENDIX A-3	Average Dry Weather Sanitary Flow Hydraulics, XPSWMM Pipe Table
--------------	---

							1	1						1	1		1				1												_			
Max d/D	(depth/diameter)	0	0.045	0.059	0.059	0.059	0.066	0.063	0.065	0	0.048	0.044	0.079	0.084	0.083	0.054	0.054	0.061	0.064	90.0	0.054	0.056	0.049	0.068	0.068	0.095	0.064	0.064	0.063	0	0.025	0.025	0.048	0	0	0.063
Max Depth	(ft)	0.045	0.045	0.059	0.059	0.059	0.066	0.063	0.065	0.043	0.048	0.044	0.079	0.084	0.083	0.081	0.081	0.092	0.096	0.09	0.108	0.111	0.049	0.068	0.068	0.095	0.097	0.097	0.095	0.08	0.161	0.161	0.048	0.042	-9.00E+99	0.063
Max Velocity Max Depth	(ft/s)	0	2.23	2.16	2.69	2.64	2.26	5.22	3.13	0	2.14	2.09	4.31	2.4	2.43	2.49	2.5	2.74	2.6	2.81	2.92	2.89	2.05	2.09	2.11	2.06	2.19	2.14	2.24	0	0.7	1.15	2.13	0	0	1.99
Time to Peak	(hr)	0	0.05	0.058	0.058	0.075	0.083	8.183	6.283	0	0.075	0.092	7.658	2.625	2.742	2.983	2.808	2.883	2.883	0.475	0.333	0.292	0.05	0.15	0.083	0.108	0.108	0.117	0.117	0	6.317	6.317	0.058	0	0	0.083
Max Flow		0	0.026	0.026	0.051	0.051	0.05	0.05	0.05	0	0.027	0.026	0.075	0.075	0.075	0.095	0.095	0.125	0.125	0.125	0.195	0.196	0.026	0.045	0.047	0.046	0.105	0.106	0.106	0	0.105	0.3	0.026	0	0	0.025
Maximum Water Elevation Downstream	(ft)	23.815	21.351	19.299	18.189	16.353	15.279	11.479	10.459	18.503	11.974	10.442	8.026	7.289	6.428	5.134	3.714	1.683	0.804	-2.917	-4.154	-5.099	9.592	4.788	3.461	1.045	0.177	-0.405	-0.77	-4.55	-5.099	-5.816	13.728	9.592	-9.00E+99	5.893
Maximum V Water Elevation	Upstream (ft)	25.57	23.815	21.351	19.299	18.189	16.266	15.183	11.385	20.2	13.728	11.974	10.379	7.934	7.193	6.331	5.041	3.632	1.596	0.71	-2.992	-4.239	11.049	5.893	4.788	3.461	1.045	0.177	-0.405	-3.94	-4.55	-5.099	18.503	10.7	-9.00E+99	9.592
Ground Elevation (Spill Crest) Downstream		37.96	38.7	37.33	36.59	35.45	34.29	27	26.4	26.76	26.01	26.4	25.13	24.87	24.97	25.12	23.62	21.08	19.98	15.55	13.82	12.91	19.94	18.91	18.75	13.68	10.38	9.07	9.12	9.12	12.91	7.66	26.52	19.94	20.97	19.26
Ground Elevation (Spill Crest)	Upstream (ft)	37.21	37.96	38.7	37.33	36.59	35.45	34.29	27	26.37	26.52	26.01	26.4	25.13	24.87	24.97	25.12	23.62	21.08	19.98	15.55	13.82	18.07	19.26	18.91	18.75	13.68	10.38	9.07	5.31	9.12	12.91	26.76	20.97	21.15	19.94
	Roughness	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
	Conduit Slope	3	3	3	с	3	2	2	2	2.5	2.5	2.508	1.85	1.641	1.652	1.75	1.76	1.796	1.696	1.838	1.742	1.654	2.5	1.5	1.59	1.701	1	1	1.522	0.276	0.225	0.224	2.5	2.018	2.222	2.505
Lenath		09	82	69	37	61	49	185	46	69	70	61	127	39	46	68	75	108	46	197	99	52	58	74	83	144	87	58	23	250	280	281	191	57	6	148.5
Diameter	_	1	-	<b>.</b>	1	1	-	-	٦		1	٦	1	<del>.</del>	-	1.5	1.5	1.5	1.5	1.5	2	2	<b>.</b>	1	-	1	1.5	1.5	1.5	6.5	6.5	6.5	-	1	1	<b>.</b>
		1	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-		-	-	-	1	-	1	-	-	-	-	-	1	-	-	-
Downstream Node Number of	Name	CSMH #144	CSMH #142	CSMH #140	CSMH #138	CSMH #134	CSMH #133	CSMH #132	CSMH #120	CSMH #128	CSMH #122	CSMH #120	CSMH #119	CSMH #118	CSMH #116	CSMH #112	CSMH #110	CSMH #108	CSMH #104	CSMH #102	CSMH #101	EXMH 4	CSMH #16	CSMH #8	CSMH #6	CSMH #4	CSMH #2	CSMH #1	EXMH 3	EXMH 3	EXMH 4	Outfall	CSMH #124	CSMH #16	CSMH #18	CSMH #10
Upstream	~	CSMH #146	CSMH #144	CSMH #142	CSMH #140	CSMH #138	CSMH #134	CSMH#133	CSMH#132	CSMH#130	CSMH #124	CSMH #122	CSMH #120	CSMH #119	CSMH #118	CSMH #116	CSMH #112	CSMH #110	CSMH #108	CSMH #104	CSMH #102	CSMH #101	CSMH #14	CSMH #10	CSMH #8	CSMH #6	CSMH #4	CSMH #2	CSMH #1	EXMH2(A16)	E XIMH 3	EXMH 4	CSMH #128	CSMH #18	CSMH #20	CSMH #16

# APPENDIX B

5-Year Storm Results

Ŵ	Γ	T			Γ					Π					T		Т		Τ			Т	Τ								Ι																		Т	Τ	
Max Flow	(cfs)	0.478	0+00	0.614		0.108		0.438		0.501		0.511				0.498		0.515		0.265	0.372		0.359		0.114	0.286		0.352		0.603		40.C.D	0.368		0.103		0.622		0.684		3.053	1.82	1.501	1.37	2.458	2.448	0.845	1.326	2.157	0.337	1.341
Time of Concentration	(min)	10	2 2	5	5	5	5	5	5	5	5	5	5	5	5	1 5	Ω :	10	5	10	5	2	ы цо	5 1	1 2	1 2	5	5	1 2	c 1	۵ L	o La	21	5	5	5	5	5	5	5	10	10	10	10	10	10	10	10	10	5	10
Total Ru		2.416 2.176	5.11.2	1.942		2.416		2.106		1.867		2.126				2.416		2.377		1.369	2.416		1.93	000	2.09	2.416		2.416		2.09	2 001	C90.7	2.176		2.013		2.147		2.197		2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416	2.416
Total Infiltration	(in)	0 0 511		0.745		0		0.581		0.82		0.561				0		0.31		1.318	0		0.757		0.597	0		0	1	160.0		0.0UZ	0.511		0.674		0.54		0.49		0	0	0	0	0	0	0	0	0	0	0
Total Rainfall	(in)	2.687	100.2	2.687		2.687		2.687		2.687		2.687				2.687		2.687		2.687	2.687		2.687	107.0	2.687	2.687		2.687	14.	7.081		7.001	2.687		2.687		2.687		2.687		2.687	2.687	2.687	2.687	2.687	2.687	2.687	2.687	2.687	2.687	2.687
Sub-Catchment	Flag			-	1	1	1	-	1	1	1	1	1	1	-	·	<u> </u>	<del>, -</del> ,	<b>,</b>	1	1	<del>, -</del> -	<del>, -</del> ,	- ,	, ,	<del>, -</del> ,	-	1	<del>, -</del> ,	- ,		- (-		-	-	1	1	-	-	-	1	1	1	1	1	1	1	-	1	1	-
Catchment	Number		2	<i>(</i>	2	<del>, -</del>	2	<del>, -</del>	2	-	2	<del>.    </del>	2	3	4	<del></del> .	.7	0	2	<del>, -</del>	<del>, -</del>	2	<del>, </del> ,	.7	<u>,                                    </u>	<del>, -</del> 1	2	-	2	- 0	7	- 6	ı <del>.</del>	2	<del>.    </del>	2		2	1	2	1	1	1	1	1	1	1	<del>.    </del>	-	-	-
Infiltration	Reference	CN-Parcel	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	S	S S	CN	S	CN	CN	S	CN	S	N C	S	CN	CN	CN	CN	CN	CN	CN	CN-Parcel	CN-Parcel	CN-Parcel	CN-Parcel							
Impervious	Percentage	100 80 3	87.3	83.6	73.7	100	100	72.7	83.4	87.3	69.1	85.1	66.3	85.7	84.5	83.2	001	33.4	98	33.7	82.4	100	89.4 -0	/3	82.5	100	100	100	100	82.5	82.5	84.3 82.2	89.3	87.3	78	78	82.9	85.7	89.3	88.5	100	100	100	100	100	100	100	100	100	100	100
Area	(ac)	0.328	0.143	0.203	0.189	0.033	0.029	0.155	0.127	0.121	0.205	0.077	0.129	0.064	0.059	0.221	0.082	0.342	0.12	0.294	0.175	0.053	0.125	0.1	0.071	0.089	0.076	0.104	0.099	0.188	0.188	0.129	0.081	0.142	0.033	0.033	0.172	0.212	0.234	0.178	2.095	1.249	1.03	0.94	1.687	1.68	0.58	0.91	1.48	0.194	0.92
	Node Name	BLNK PARK	CSMH #1	FO FE LINASO						CSMH #118			CSMH #12	1		CSMH #122		CSMH #124		CSMH #128	CSMH #130		CSMH #132		CSMH #134	CSMH #138		CSMH #146		CSMH #2		CSMH #20		CSMH #202	7# 110 V.S.J		CSMH #R		FXMH2 (A16)	(a)	PARCEL 1	PARCEL 2	PARCEL 3	PARCEL 4	PARCEL 5	PARCEL 6	PARCEL 7	PARCEL 8	PARCEL 9	PARCEL F	VIS PARK

Constant Inflow (cfs)	(inc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0				0	0	0	0	0	0	0	0	0	0	0	0	0 0	oc	0
( User Inflow Flag	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0				0	0	0	0	0	0	0	0	0	0	0	0	0 0	0 0	0
Use Interface File Flow Percentage	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	001	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Use Interface File Flow Flag	1	. –	1	1	1	1	1	1	1	1		1	1	1	1	-	-	1	1		-		-	1	1	1	1	-	1	1	-	-	1	1	<del>, -</del> ,	- ,						-	1	-	1	1	1	1	1	-	-	-	- ,		
Continuity Error Volume (% of Node)	0.04	0	0	0.01	0.01	-0.01	0	0	0	0	0	0	-0.03	0	0	0.01	-0.01	0	0	0.01	0.01	0	0	0	0	0	0	0	0	0.01	0	0	0	0.01	0	0	0 0	0.12	0 6	-1 51	-2.37	-0.82	-1.11	-0.06	-0.42	0	0.01	0.01	0.01	0.01	-0.01	0.01	0.01	-0.01	-0.09
Continuity Error Continuity Error Volume (% of Volume (% of Inflow) Node)	0.001	0.001	0	0.006	0.012	0.01	0	0.001	0.001	0.002	0.002	0.001	0.001	0	0	0.001	0	0	0	0.003	0.002	0	0.001	0	0	0	0	0	0.001	0	0.001	0	0	0.004	0	0	0 070	0.012	0.00	0.105	0.171	0.024	0.029	0.111	0.011	0	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.008
Flood Loss (ft <sup>3</sup> )	( ) 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0				o c	0	0	0	0	0	0	0	0	0	0	0	0 0	э с	0
Volume of Ponded Flow Stored (ft <sup>3</sup> )	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0	0 0			0	0	0	0	0	0	0	0	0	0	0	0	0 0	0 0	0
Volume of Outflow (ft <sup>3</sup> )	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0				, c	2823.333	0	176164.756	0	0	0	0	0	0	0	0	0 0		0
Volume of Interface File Inflow (ft <sup>3</sup> )	2876.99	2631.16	0	2886.92	0	543.82	2054.39	0	0	0	2345.44	0	2405.15	0	2406.21	2730	1460.75	1791.82	1705.34	0	538.81	0	1447.27	0	0	0	0	1780.57	0	0	2853.41	2393.99	1772.03	0	482.35	2961.97	0 0		1 0000	0	0	0	0	0	0	18375.89	10955.36	9034.45	8245.03	14797.2	14735.8	5087.36	7981.89	1701.63	8069.6
Node Inflow (ft <sup>3</sup> )	2876.999	2631.228	0	2886.996	0	543.836	2054.441	0	0	0	2345.501	0	2405.213	0	2406.278	2730.021	1460.745	1791.871	1705.386	0	538.824	0	1447.306	0	0	0	0	1780.625	0	0	2853.491	2394.051	1772.077	0	482.362	2962.052 2	0 0	0 0	0 2200 102	0 D	o c	561.08	0	24793.788	0	18375.953	10955.401	9034.478	8245.058	14797.247	14735.848	5087.376	7981.918	1701 681	8069.631
Invert Elevation (ff)	19.58	-0.5	5.83	-4.35	-3.1	0.62	1.5	3.54	4.96	6.25	7.11	7.85	14.49	10.3	11.93	13.68	18.46	20.2	11.32	15.12	16.2	16.69	18.13	11	19.24	21.31	23.77	25.57	9.55	10.7	0.08	10.9	4	0.95	3.4	4.72	-3.32	-4.03	07.C-	-3.74		10.09	12.21	-5.89	13.81	11.75	26.78	26.78	11.02	3.9	-3.65	5.55	2.93	-3.85 0.92	3.065
Ground Elevation (Spill Invert Elevation Crest.ft) (ft)	30	9.07	19.26	13.82	15.55	19.98	21.08	23.62	25.12	24.97	24.87	25.13	16.84	26.4	26.01	26.52	26.76	26.37	27	34.29	35.45	35.47	36.59	18.07	37.33	38.7	37.96	37.21	19.94	20.97	10.38	21.15	12.15	13.68	18.75	18.91	5.68 0.12	7.12	12.71 E 21	13.87	13.82	16	18.76	7.66	17.56	18	35	38	20	14	16	25	24	10	24
Node Name	BLNK PARK	CSMH #1	CSMH #10	CSMH #101	CSMH #102	CSMH #104	CSMH #108	CSMH #110	CSMH #112	CSMH #116	CSMH #118	CSMH #119	CSMH #12	CSMH #120	CSMH #122	CSMH #124	CSMH #128	CSMH #130	CSMH #132	CSMH #133	CSMH #134	CSMH #136	CSMH #138	CSMH #14	CSMH #140	CSMH #142	CSMH #144	CSMH #146	CSMH #16	CSMH #18	CSMH#2	CSMH #20	CSMH #202	CSMH#4	CSMH#6	CSMH#8	EXMH 1				Node64	Node81	Node82	Outfall	Outfall 2	PARCEL 1	PARCEL 2	PARCEL 3	PARCEL 4	PARCEL 5	PARCEL 6	PARCEL 7	PARCEL 8	PARUEL Y	VISPARK

APPENDIX B-2 5-Year Storm Hydraulics, XPSWMM Node Table

	5-Year Storm Hydraulics, XPSWMM Pipe Table
--	--

		1					-1		Т							Т		Т	Т	1	Т	Т		Т			Γ						1		1	Γ	1							Т	Т		Т	Т	Т	Г	П	7	٦
Max d/D (depth/diameter)	0.642	0.642	0.824	1.123	2.035	2.17	3.961	4.061	0.199	2.77	3.678	3.778	2.829	0.993	0.997	1.503	2.318	2.57	4.212	00000	700 C	2.707 E 41.7	5.014	4 716	3.042	3.043	3.043	0.167	0	1.26	1.26	1.214	2.6/ 1 158	1.130	23.162	0.529	0.602	0.229	1.09	2.035	2.125	0.448	1.055	6.419	2.354	2.354	4 129	5.91	1.182	2.987	2.028	5.412	3.955
Max Depth (ft)	0.642	0.642	0.824	1.123	2.035	2.17	3.961	4.061	0.199	2.77	3.678	3.778	2.829	1.49	1.495	2.254	3.477	3.855	6.319	1.133	700 C	2.70/ E 41.7	5.014	4 716	4.564	4.565	4.565	0.167	0	8.19	8.19	7.89	2.6/ 5 701	1.559	5.791	0.529	0.602	0.229	1.09	2.035	2.125	0.448	cc0.1	6.419 0.054	2.354	2.354	4 129	5.91	1.182	2.987	2.028	5.412	3.955
Max Velocity (ft/s)	3.1	7	7.19	6.29	6.7	5.81	6.69	5.62	4.52	5.4	5.2	7.39	7.44	5.47	9	5.89	4.91	4.69	4.82	4.04	4.21 5 71	0./I	0.J	6.78	4.11	4.41	4.69	4.34	0	0.78	1.22	1.4	5 db	2.40 6.82	7.12	3.68	3.81	3.65	1.37	1.72	5.64	4.2	4.63	.0.	3.07	7 6.1	-3 29	-3.21	5.12	3.17	3.12	6.63	1.11
Time to Peak (hr)	12.025	12.025	12.025	12.025	12.025	12.025	12.033	12.033	12.025	12.1	11.992	12.05	12.058	12.058	12.042	12.1	12.133	12.133	12.092	12.042	12.042	720.01	12.00/	12.050	12.05	12.042	12.042	12.025	0	1.283	12.067	12.05	12.025 12.058	12.030	23,108	12.025	12.025	12.025	12.017	12.092	12.017	12.025	12.017	12.025	CZ.21	12.017	0.017	0.017	12.025	12.133	11.983	12.075	12.017
Max Flow (cfs)	0.352	3.68	3.67	3.628	3.835	4.275	4.216	4.497	0.372	1.066	1.501	5.9	5.902	6.317	7.081	6.994	8.152	8.354	8.611	2/9/21	13.44/ 2 0/2	2.040 A A2E	4 030	5.046	7.361	7.902	8.402	0.369	0	-1.438	8.931	22.665	0.512 5.20	5 242	0.371	1.501	1.82	0.478	0.835	0.492	2.93	1.368	2.409	2.438	2.884	1.301	-2 619	-2.595	0.635	0.614	0.478	3.207	0.309
Maximum Water Elevation Downstream (ft)	24.412	21.926	20.064	19.253	18.335	17.39	15.381	14.078	18.659	14.7	14.078	10.679	8.6	7.34	6.555	5.894	5.077	4.575	3.319	2.003	2.409	100.21	9.734 8 116	5.455	4.644	4.065	3.56	3.144	0	3.56	2.469	2	16.48 2 701	5.411	2.96	27.871	27.915	19.971	7.34	18.335	13.125	11.822	5.455	3.319	5.894	5.894 3 310	16.339	16	14.862	12.537	12.728	11.242	4.575
Maximum Water Elevation Upstream (ft)	25.712	24.412	21.926	20.065	19.253	18.335	17.39	15.381	20.358	14.862	14.7	14.078	10.679	8.6	7.34	6.555	5.894	5.077	4.5/5	3.319	2.003 1212E	11.010	0 734	8 116	5.455	4.644	4.065	4.167	0	4.18	3.56	2.469	16.523 4 66	6 559	3.791	28.309	28.382	20.809	7.512	18.653	13.424	12.468	5.812	3.585	5.944 6	6.U5 2.E.A.A	16.48	16.339	18.659	12.728	12.734	12.537	4.826
Ground Elevation (Spill Crest) Downstream (ft)	37.96	38.7	37.33	36.59	35.45	34.29	27	26.4	26.76	26.01	26.4	25.13	24.87	24.97	25.12	23.62	21.08	19.98	15.55	13.82	10.01	10.01	18.75	13.68	10.38	9.07	9.12	12.91	5.31	9.12	12.91	7.66	17.56	13.82	13.82	37.96	37.96	35.47	24.97	35.45	18.07	19.26	13.68	15.55	23.02	23.62 15 55	18.76	16	26.52	19.94	20.97	19.26	19.98
Ground Elevation (Spill Crest) Upstream (ft)	37.21	37.96	38.7	37.33	36.59	35.45	34.29	27	26.37	26.52	26.01	26.4	25.13	24.87	24.97	25.12	23.62	21.08	19.98 15 EE	10.00	10.07	10.01	18.01	18.75	13.68	10.38	9.07	12.15	5.68	5.31	9.12	12.91	16.84	19.98	13.82	38	35	30	25	35.47	18	20	14	16	24	24 16	17.56	18.76	26.76	20.97	21.15	19.94	19
Roughness	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	10.0	0.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Conduit Slope	- <sub>~</sub>	3	3	3	3	2	2	2	2.5	2.5	2.508	1.85	1.641	1.652	1.75	1.76	1.796	1.696	1.838	1./42	3 5	1 5	1 50	1 701	1	-	1	3.03	0.667	0.276	0.225	0.224	2	- ~	° -	-	1	2.6	1	1.95	2.5	1.75	1.66/	1.5 75	c/.1	0.83	0.00	2	2.5	2.018	2.222	2.505	1
Length (ft)	(09	82	69	37	61	49	185	46	69	70	61	127	39	46	68	75	108	46	161	8	22	00	,4 83	144	87	58	23	33	93	250	280	281 2.	34	100	10	30	30	30	30	20	30	80	99 99	02	30	30	8 8	106	191	57	6	148.5	30
Diameter (Height, ft)	1	-	1	1	1	1	1	1	-	1	1	-	1	1.5	1.5	1.5	1.5	1.5	c.۱	7 0	1			- ,-	1.5	1.5	1.5	1	6.5	6.5	6.5	6.5	— ц	C	0.25	-	1	1	1	1	-	, -,		,	- ,		- ,-	-	-	1	1	-	
Number of Barrels	-		1	1		-	-	-		-	-	-	-	-		-	1	, - ,	-,	- ,				- ,-		-	-	1	-		-	-,					1	1	1	-	-	,	,	-,	- ,			-	-	1	-	-	
Downstream Node Name	CSMH #144	CSMH #142	CSMH #140	CSMH #138	CSMH #134	CSMH #133	CSMH #132	CSMH #120	CSMH #128	CSMH #122	CSMH #120	CSMH #119	CSMH #118	CSMH #116	CSMH #112	CSMH #110	CSMH #108	CSMH #104	CSMH #102				CSMH #6	CSMH#4	CSMH#2	CSMH#1	EXMH 3	EXMH 4	EXMH2(A16)	EXMH 3	EXMH 4	Outfall	Outrall 2 Node64	Node63	CSMH #101	CSMH #144	CSMH #144	CSMH #136	CSMH #116	CSMH #134	CSMH #14	CSMH #10	CSMH #4	CSMH #102	CSMH #110	CSMH #110	Node82	Node81	CSMH #124	CSMH #16	CSMH #18	CSMH #10	CSMH #104
Upstream Node Name	CSMH #146	CSMH #144	CSMH #142	CSMH #140	CSMH #138	CSMH #134	CSMH #133	CSMH #132	CSMH #130	CSMH #124	CSMH #122	CSMH #120	CSMH #119	CSMH #118	CSMH #116	CSMH #112	CSMH #110	CSMH #108	CSMH #104					CSMH #6	CSMH #4	CSMH #2	CSMH #1	CSMH #202	EXMH 1	EXMH2(A16)	EXMH 3	EXMH 4	CSMH #12 Node63	CSMH #104	Node64	PARCEL 3	PARCEL 2	BLNK PARK	PARCEL 7	CSMH #136	PARCEL 1	PARCEL 4	PARCEL 5	PARCEL 6	VIS PAKK	PARCEL 8 DADCEL 0	Outfall 2	Node82	CSMH #128	CSMH #18	CSMH #20	CSMH #16	PARCEL F

# APPENDIX C 100-Year Storm Results

Max Flow (cfs)	0.739	0.856		0.998		0.163		0.716	1000	U.024	0.026	0.00.0			0.784		0.959		0.554	0.589		0.576		0.182	0.434		0.534		0.965	0.00E	CU8.U	0.578		0.168		0.989		1.069		4.719	2.814	2.32	2.117	3.8	3.784	1.307	2.05	3.334	0.51	2.072
Total Runoff Depth (in) Time of Concentration (min) Max Flow (cfs)	10	5	5	5	5	5	5	۲. ני	<u>م</u>	C L	C L	ט מ	с ц	о LC	0	5	10	5	10	5	5	5	5	5	5	5	5	5	с I	о П	0 10	2	5	5	5	5	5	1 2	5	10	10	10	10	10	10	10	10	10	5	10
		5.042		4.764		5.308		4.962	CL7 V	4.0/2	V 00 V	+04.+			5.308		5.265		3.986	5.308		4.75		4.943	5.308		5.308		4.943	LCO V	4.93/	5.042		4.851		5.009		5.067		5.308	5.308	5.308	5.308	5.308	5.308	5.308	5.308	5.308	5.308	5.308
Total Infiltration (in)	0	0.545		0.823		0		0.625	0.016	C1 4.0	0 403	CUU.U			0		0.322		1.601	0		0.837		0.644	0		0		0.644	0.46	CO.U	0.545		0.736		0.578		0.52		0	0	0	0	0	0	0	0	0	0	0
Total Rainfall (in)	5.587	5.587		5.587		5.587		5.587	E 607	/ 0C.C	5 507	100.0			5.587		5.587		5.587	5.587		5.587		5.587	5.587		5.587		5.587	E E0.7	/ QC.C	5.587		5.587		5.587		5.587		5.587	5.587	5.587	5.587	5.587	5.587	5.587	5.587	5.587	5.587	5.587
Sub-Catchment Flag	° –-	<b>,</b>		1	1		-	,,						- ,		<b>(</b>	-	<del></del>		<del>, -</del>	<del></del>	1	1	-		-	-	<del>, -</del> ,		,	_ ,-		-	-	1	1	-	,,		<u>.                                    </u>	-	1			-	1	-	1	1	-
Catchment Number	-		2	1	2	-	2	0	7 7	- c	7	- c	7 0	с Ф		2	-	2	-	-	2	1	2	1	-	2	-	2	<del>,</del> .	7 7	- ~		2	-	2	1	2	<del>, </del> (	7.	-	-	1	1	-	-	-	1	1	1	-
Infiltration Reference	CN-Parcel	CN	CN	CN	CN	CN	CN	CN	CN CN	S CN	CIN CIN	CN CN		SN CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	CN	S N	CN C	CN	CN	CN	CN	CN	CN	CN	CN	CN-Parcel	CN-Parcel	CN-Parcel	CN-Parcel	CN-Parcel	CN-Parcel	CN-Parcel	CN-Parcel	CN-Parcel	CN-Parcel	CN-Parcel
Impervious Percentage	100	89.3	87.3	83.6	73.7	100	100	72.7	83.4	C.10 1.03	09. I 05 1	1.00	00.3	84.5	83.2	100	33.4	86	33.7	82.4	100	89.4	73	82.5	100	100	100	100	82.5	82.5	82.2	89.3	87.3	78	78	82.9	85.7	89.3	C.88	100	100	100	100	100	100	100	100	100	100	100
Area (ac)	0.328	0.187	0.143	0.203	0.189	0.033	0.029	0.155	0.127	0.121	CU2.U	0.100	0.129	0.004	0.221	0.082	0.342	0.12	0.294	0.175	0.053	0.125	0.1	0.071	0.089	0.076	0.104	0.099	0.188	0.188	0.129	0.081	0.142	0.033	0.033	0.172	0.212	0.234	0.1/8	2.095	1.249	1.03	0.94	1.687	1.68	0.58	0.91	1.48	0.194	0.92
Node Name	BLNK PARK		CSMH #1	CSMAH #101		CSMH #104		CSMH #108		CSMH #118		-	CSMH #12			CSMH #122			CSMH #128			CSMH #120		CSMH #134	CSMH #138	2001 # 114000	CSMH #146		CSMH #2		CSMH #20		CSIVIH #202	7#117430		CSMH #R		EXMH2(A16)		PARCEL 1	PARCEL 2	PARCEL 3	PARCEL 4	PARCEL 5	PARCEL 6	PARCEL 7	PARCEL 8	PARCEL 9	PARCEL F	VIS PARK

# APPENDIX C-1 100-Year Storm Hydrology, XPSWMM Node Table

Visitacion Valley Redevelopment Combined Sewer System Master Plan

BKF Engineers Job No. 20140086

3/5/2015

Constant Inflow	0		0	0	0	0	0	0	0 0			0	0	0	0	0	0	0	0	0	0 0					0	0	0	0	0	0	0 0			0	0	0	0	0 0				0	0	0	0	0	0	0 0	0 0	0	0
CC Liser Inflow Flad			0	0	0	0	0	0	0 0			, c	, o	0	0	0	0	0	0	0	0	0 0	0 0			) 0	0	0	0	0	0	0 0	0 0	0 0	0	0	0	0	0 0				0	0	0	0	0	0	0 0	0 0	0	0
Use Interface File Flow Derrentade		001	100	100	100	100	100	100	100	100	001	100	100	100	100	100	100	100	100	100	100	100	100	001	001	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Use Interface File Flow Flag	1			- 1-	1	1	1	-	, ,		- ,-		- ,	1	1	1	1	-	1	-							1	1	1	1	1	, -,	- ,			1	1	,,	- ,	- ,			- 1-	1	1	1	-	·	- ,	- ,	· 0	1
Continuity Error Volume (% of Node)	000	0.02	0	0	0	-0.01	0	0.01	0 0			-0.05	0.01	0	0	0	0	0	0.01	0.01	0					0.05	0	0	0	0	-0.02	0 0	0		0.04	0	0.09	2.33	/0./1-	-0.37	-0.57	-0.03	0	0.02	0.02	0.01	0	0	0.01	-0.01	-0.01	-0.06
Continuity Error Continuity Error Volume (% of Volume (% of Inflow) Node)	0.001	- 00-0	0	0.003	0.002	0.006	0.001	0.005	0.002	0.002	0.001	0.001	0.002	0	0	0	0	0	0.002	0.003	0	0.001	0 00	0.001	0.00	0.001	0	0	0.001	0	0	0.001	0.001		0.026	0.002	0.004	0.005	0.049	0.011	0.054	0.005	0	0.002	0.002	0.001	0	0.001	0	0.001	0	0.005
Flood Loss	( II )		0	0	0	0	0	0	0 0			o c	o o	0	0	0	0	0	0	0	0	0 0				0	0	0	0	0	0	0 0	0 0		0	0	0	0	0 0				1840.32	0	0	0	0	0	0 0	0	0	0
Volume of Ponded Flow Stored (ft <sup>3</sup> )	(11)		0	0	0	0	0	0	0			0	, 0	0	0	0	0	0	0	0	0	0 0	0			0	0	0	0	0	0	0	0 0		0	0	54.49	0	0 0	0			0	0	0	0	0	0	0 0	0 0	0	0
Volume of Outflow (ft <sup>3</sup> )	( ))		0	0	0	0	0	0	0 0			0 0	0	0	0	0	0	0	0	0	0	0 0				0	0	0	0	0	0	0 0	0 0		0	0	0	0	0	210.7166	U 36270/1 287	0 0	1840.32	0	0	0	0	0	0 0	0 0	0	0
Volume of Interface File Inflow (fft <sup>3</sup> )	(11) 6210.00	03 17.07 6067 54	0	6927.28		1194.46	4956.23	0	0	U E400.40	0.070.07	5788.83	0	5556.56	7234.53	4253.59	4159.69	4031.55	0	1273.91	0	31/8.8				3910.89		0	6746.35	5637.79	4093.36	0	1162.18	0040.00	0		7591.36	0	0 0				40361.25	24062.63	19843.48	18109.58	32500.92	32366.06	111/4	28512.96	3737.5	17724.27
V Node Inflow (ft <sup>3</sup> )	(11) 6210-102	60.19.102 60.67 58.4	0	6927.32	0	1194.47	4956.266	0	0	U E400 720	0000	5788.87	0	5556.607	7234.537	4253.574	4159.721	4031.577	0	1273.92	0	31/8.832				3910.927	0	0	6746.394	5637.828	4093.392	0	1162.192	0450.703	0	0	7591.42	0	0	2/1.33/	U 7 A A TCCAC	04/	40361.339	24062.679	19843.522	18109.622	32500.993	32366.134	111/4.022	28513.022	3737.536	17724.311
Invert Flevation (ft)		-05.00 -05	5.83	-4.35	-3.1	0.62	1.5	3.54	4.96	CZ-0	7.85	14.49	10.3	11.93	13.68	18.46	20.2	11.32	15.12	16.2	16.69	18.13	11	17.24 01 01	73 77	25.57	9.55	10.7	0.08	10.9	4	0.95	3.4	4.12	-4.63	-5.26	-3.94	(	-2	10.09	12.21 5 80	-3.07 13.81	11.75	26.78	26.78	11.02	3.9	-3.65	5.55 2.02	-3.85	0.92	3.065
Ground Elevation (Snill Crest ft)		00 0 07	19.26	13.82	15.55	19.98	21.08	23.62	25.12	74.97	24.0/ 25.13	16.84	26.4	26.01	26.52	26.76	26.37	27	34.29	35.45	35.47	30.59	18.07	7 00	30.7	37.21	19.94	20.97	10.38	21.15	12.15	13.68	10.01	5.68	9.12	12.91	5.31	13.82	13.82	01 10 74	16.70	17 56	18	35	38	20	14	16	22	24 16	19	24
) Node Name		CSMH #1	CSMH #10	CSMH #101	CSMH #102	CSMH #104	CSMH #108	CSMH #110	CSMH #112		CSMH #119 CSMH #119	CSMH #12	CSMH #120	CSMH #122	CSMH #124	CSMH #128	CSMH #130	CSMH #132	CSMH #133	CSMH #134	CSMH #136	CSMH #138	CSIMH #14		CSMH #142	CSMH #146	CSMH #16	CSMH #18	CSMH #2	CSMH #20	CSMH #202	CSMH #4	CSN11 #0	EXMH 1	EXMH 3	EXMH 4	EXMH2(A16)	Node63	Nodeo4	Node81	Duiffall	Outfall 2	PARCEL 1	PARCEL 2	PARCEL 3	PARCEL 4	PARCEL 5	PARCEL 6	PARCEL /	PARCEL 9	PARCEL F	VIS PARK

APPENDIX C-2 100-Year Storm Hydraulics, XPSWMM Node Table

# ATTACHMENT 16

BKF Engineers Job No. 20140086

3/5/2015

Max d/D (depth/diameter)	(acptil) diamotory	10.282	11.366	11.731	12.357	12.457	13.162	13.202 5 A72	3.472 11.721	12.376	12.476	9.981	5.101	4.96 5.463	5.401 F 600	3.090 5.965	7.125	5.628	5.678	8.241	11.032	10.493	9.953 6.25	0.33 6 208	5.945	2.773	0	1.93	1.878	1.697	2.67	0.148 0.078	0	5.742	5.742	9.094	0.98	6 975	5.362	6.214	10.845	8.201	8.201	10.957	4.115	5.91	10.126	8.241 7 166	11.032	9.117
Max Depth (ff)	9 452	10.282	11.366	11.731	12.357	12.457	13.162	13.202 5.477	3.472 11.721	12.376	12.476	9.981	7.651	1.439	8.101	0.04/ 8.947	10.688	11.255	11.355	8.241	11.032	0.493	9.953 0 575	9 312	8.917	2.773	0	12.542	12.204	11.033 2 2	2.6/	0.74 0.222	0	5.742	5.742	9.094	0.98 13 257	6 975	5.362	6.214	10.845	8.201	8.201	10.957	4.115	5.91	10.126	8.241 7.166	11.032	9.117
Max Velocity (ff/s)	3.37	2.06	7.25	6.22	6.68	6.26	6.64	10.0 Co.N	4.02	5.48	8.92	9.02	5.01	5.05 5	5 7 2	20.02 5.97	6.12	5.16	5.43	5.53	5.78	0.52	0.00 F. 06	5.57	6.04	2.26	0	1.04	1.43	2.2	1.06	1.18	0	3.84	3.99	3.78	16.1	5 51	4.43	4.65	4.5	4.16	2.43	3.96	-3.37	-3.3	5.46	2.87	5.78	1.07
Time to Peak (hr)	12.4	12.042	12.05	12.067	12.075	12.117	12.133 12.135	71 CZ I Z	10.042	12.042	12.092	12.1	12.058	12.058	12.058	12.292	12.283	12.067	12.042	11.925	12.225	24.111 21.021	11.9/5	12 033	12.025	12.025	0	0.958	12.033	12.033	12.025	12.242	0	11.967	12.025	11.908	12.033	11 925	12.025	12.025	12.025	12.692	12.017	12.025	0.017	0.017	11.975	12.025	12.233	12.025
Max Flow (cfs)	0 497	4.809	4.639	4.491	4.701	5.274	5.264 E EDO	0 E 6 A	1.612	2.214	7.499	7.464	7.983	9.101	9.038 10.50/	10.300	11.163	16.664	17.569	3.332	4.788 5 411	5.411	0 244	7.244 10 173	10.998	0.571	0	-4.462	12.022	30.042	0.836	0.315	+c.0	2.118	2.592	0.595	0.60/	3 607	2.108	3.773	3.757	3.348	1.977	3.307	-2.659	-2.667	0.959	0./9/	0.0 3.421	0.459
Maximum Water Elevation Downstream (ft)	33 222	31.592	30.606	29.861	28.657	27.374	24.582	72 027	23.651	22.776	17.831	14.761	13.23	12.499	11./41	9.615	7.688	7.005	5.773	17.791	15.213	13.353	0.4/4	8.417 8.417	7.574	5.773	0	7.574	5.773	5	16.48	-4.20 -2 028	0	33.222	33.222	28.894	13.23 20.467	17 975	16.862	10.475	7.688	11.741	11.741	7.688	16.325	16	23.806	17.055 17.055	002.71 2623	9.615
Maximum Water Elevation Ubstream (ft)	H	33.222	31.592	30.606	29.861	28.657	27.374	24.382 22 044	23.944	23.651	22.776	17.831	14.761	13.23	12.499	11.741	9.615	7.688	7.005	17.925	16.862	15.213	13.353 10.475	0.473	8.417	6.134	0	8.602	7.574	5.773	16.49/	-3.881	0 0	33.401	33.488	28.905	13.477 20.004	18	17.207	11.114	8.195	11.955	11.986	8.107	16.48	16.325	23.932	CT0 T1	17.791	10.037
Ground Elevation (Spill Ground Elevation Crest) (Spill Crest) Ubstream (ft) Downstream (ft)	37.96	38.7	37.33	36.59	35.45	34.29	27	20.4 26.76	20.70	26.4	25.13	24.87	24.97	25.12	23.62	21.00	15.55	13.82	12.91	19.94	18.91 10.35	18./5	13.68	9 07	9.12	12.91	5.31	9.12	12.91	7.66	17.05	13.82	13.82	37.96	37.96	35.47	24.97 25 AF	18.07 18.07	19.26	13.68	15.55	23.62	23.62	15.55	18.76	16	26.52	19.94 20.07	20.97	19.98
Ground Elevation (Spill + Crest) Ubstream (ft)		37.96	38.7	37.33	36.59	35.45	34.29 77	17 72	26.52	26.01	26.4	25.13	24.87	24.97	25.12	23.02 21.08	19.98	15.55	13.82	18.07	19.26	18.91 10.7F	12.68	10.38	9.07	12.15	5.68	5.31	9.12	12.91	15.84	10.08	13.82	38	35	30	25 25 A7	18	20	14	16	24	24	16	17.56	18.76	26.76	20.97 21.15	21.12 46.61	19
Roughness		0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Conduit Slope	3000	с С	°	3	3	2	2 0	3 C 7	5.5	2.508	1.85	1.641	1.652	1./5	1./6	1.696	1.838	1.742	1.654	2:5	1.5	6G.1	1. /01			3.03	0.667	0.276	0.225	0.224	.7 -	- 6	r 1	1	1	2.6	1 05	2.57	1.75	1.667	1.5	1.75	1.3	0.83	2	2	2.5	2.018	2.505	-
Length (ft)	60	82	69	37	61	49	185	40	40 70	61	127	39	46	89 1	۲/ ۵۵۲	46	197	99	52	58	74	83	144	69	23	33	93	250	280	281 2.	34	300	01	30	30	30	30	30	30	30	30	30	30	30	80	106	191	/q	148.5	30
Diameter (Heidht, ft)	11		-	1	1	1					1	1	1.5	1.5	1.5	1.5	1.5	2	2	-	- ,		- t	с. Г	1.5	-	6.5	6.5	6.5	6.5		n +	0.25	-	1	- ,		- ,	- ,	-	-	1	1	1	,	<del>,</del> - ,				· <del></del>
Number of Barrels	1		-	1	-	1			-	-	-	1	- ,	- ,	- ,		-	1	1	-	- ,					-	1	1	·	,			- ,	1	1	- ,				-	-	1	1	1	- ,	-	- ,			
Downstream Node Name	CSMH #144	CSMH #142	CSMH #140	CSMH #138	CSMH #134	CSMH #133	CSMH #132		CSIMH #120 CSMH #122	CSMH #120	CSMH #119	CSMH #118	CSMH #116	CSMH #112	CSMH #110	CSMH #108 CSMH #104	CSMH #102	CSMH #101	EXMH 4	CSMH #16	CSMH #8	CSIVIH #6	CSMH #4	CSIMH #1	EXMH 3	EXMH 4	EXMH2(A16)	EXMH 3	EXMH4	Outfall	Outfall 2	Node64 Node63	CSMH #101	CSMH #144	CSMH #144	CSMH #136	CSMH #110 CSMH #124	CSMH #14	CSMH #10	CSMH #4	CSMH #102	CSMH #110	CSMH #110	CSMH #102	Node82	Node81	CSMH #124	CSMH #16	CSMH #10	CSMH #104
Upstream Node Name	CSMH #146	CSMH #144	CSMH #142	CSMH #140	CSMH #138	CSMH #134	CSMH #133	CSMH #132	CSIMH #120 CSMH #124	CSMH #122	CSMH #120	CSMH #119	CSMH #118	CSMH #116	CSMH #112	CSMH #110 CSMH #108	CSMH #104	CSMH #102	CSMH #101	CSMH #14	CSMH #10	CSMH #8	CSMH #6	CSMH#2	CSMH#1	CSMH #202	EXMH 1	EXMH2(A16)	EXMH 3	EXMH 4	CSMH #12	CSMH #104	Node64	PARCEL 3	PARCEL 2	BLNK PARK	PARUEL /	DARCEI 1	PARCEL 4	PARCEL 5	PARCEL 6	VIS PARK	PARCEL 8	PARCEL 9	Outfall 2	Node82	CSMH #128	CSMH #18	CSIMH #20 CSMH #16	PARCELF

# APPENDIX C-3 100-Year Storm Hydraulics, XPSWMM Pipe Table

Visitacion Valley Redevelopment Combined Sewer System Master Plan

BKF Engineers Job No. 20140086



### HABS Documentation

Fina December 18, 2009 Schlage Lock Factory & Southern Pacific Railroad Buildings San Francisco, CA

Prepared for Universal Paragon Corporation San Francisco, CA

Prepared by

PAGE & TURNBULL, INC. 724 Pine Street, San Francisco, California 94108 415.362.5154 / www.page-turnbull.com

#### SCHLAGE LOCK FACTORY & SOUTHERN PACIFIC RAILROAD BUILDINGS 2201 BAYSHORE BOULEVARD, SAN FRANCISCO, CALIFORNIA

LOCATION: 2201 Bayshore Boulevard, Visitacion Valley, San Francisco, California PRESENT OWNER: Universal Paragon Corporation; Joint Powers Board; Union Pacific Railroad PRESENT USE: Vacant

**SIGNIFICANCE:** The Schlage Lock Factory is significant as the long-time headquarters of the Schlage Lock Company, nationally recognized for its revolutionary breakthroughs in lock-making.<sup>1</sup> In addition, the Schlage Lock Factory is significant for its association with a significant individual, inventor Walter Schlage; and for its design and association with architects William P. Day and Alfred F. Roller. Of the thirteen buildings located on the property, twelve were considered significant for surveying for this HABS report. The twelve significant buildings include Building A (1925-26), Building B (1926), Building C (1947), Building D (1962-63), Building F (ca. 1942), Building G (1950), Building H (1966), Building I (ca. 1962), Building J (ca. 1906), two sheds in Building K (ca. 1906), and Building L (ca. 1906). Building E (1974) was not described, since it was not considered significant to the project site.

The Schlage Lock Factory is associated with events that have made a significant contribution to the local, state, and national history. Seven of the surveyed buildings (Buildings A, B, C, D, F, G, and H) are important for their direct association with the Schlage Lock Company, which garnered national recognition as the designer and manufacturer of locks and door hardware for buildings around the world. During World War II, the company contributed to the war effort by producing steel shell casings and bomb rail fuses. It was presented with an Army-Navy E for Excellence in War Production award for its efforts. In 1964, the Schlage Lock Company won international recognition when it supplied all the lock hardware to the Pan American Building in New York City—the largest commercial office building in the world at the time. Another important commission was the Bank of America Headquarters Building in downtown San Francisco, constructed in 1969. In 1974, the Schlage Lock Company was bought by Ingersoll-Rand as a subsidiary of the Door Hardware Group. Under the new leadership, the industrial and administrative buildings on the former Schlage Lock site

<sup>&</sup>lt;sup>1</sup> The Schlage Lock buildings were previously surveyed by Carey & Co. in November 2006, as part of a Historic Resources Technical Report for the Visitacion Valley Redevelopment EIR. Prior to this survey, the only building that had been surveyed was the Old Office Building (Building A), which was recognized in the 1976 Department of City Planning

continued operation until 1999.<sup>2</sup> Locally, the Schlage Lock Factory was an economic stronghold for Visitacion Valley for decades, employing many neighborhood residents. In 1974, *San Francisco Business* reported that Schlage Lock Company employed 1,600 people, making it the largest manufacturing firm in San Francisco.<sup>3</sup>

The other four buildings on the property (Building J, the two sheds included in Building K, and Building L) are significant for their association with the Southern Pacific Railroad, which ran from Third and Townsend streets in downtown San Francisco to San Jose and beyond. The Southern Pacific Railroad was founded in 1865 by a group of San Francisco businessmen and soon purchased by the Big Four (Leland Stanford, Collis P. Huntington, Charles Crocker, and Mark Hopkins). The Big Four completed the western portion of the Transcontinental Railroad in 1869, and the Southern Pacific became the first coast-to-coast railway under one management in 1883 when it reached the Gulf of Mexico. In 1901, Southern Pacific established a western coastal route from San Francisco to Los Angeles, an early freight rail line connecting San Francisco's industrial sector to the burgeoning industrial factory district in the South Bay.<sup>4</sup> The stretch of Southern Pacific Railroad through Visitacion Valley is locally significant for its influence upon infrastructure and building construction in the immediate area, including bay fill and tunnel construction for the Bayshore Cutoff in 1906, and its likely influence upon the new location of the Schlage Lock Company in 1926. Built circa 1906, the Southern Pacific Railroad buildings are the oldest buildings on the site, and were used as a dining hall for railroad workers and storage space for pump cars adjacent to the Bayshore Cutoff tunnel. These buildings are representative of the type of ancillary buildings commonly found along the railways.

The Schlage Lock Factory is associated with persons significant to American history. The property is associated with inventor Walter Schlage (1882-1946), who is a significant figure in local, state, and national history based on his contributions to the field of lock design. The new factory's first buildings, Buildings A and B, were commissioned by the Schlage Lock Company, which was at that time operated by Walter Schlage. Trained in mechanics and engineering in his native Germany, Schlage began experimenting with lock devices and created his first patent in 1909 for a door lock that switched lights on and off. By 1920, he had designed the first push-button door lock and "interchangeably manufactured" locks where parts could be chosen at random and assembled

<sup>2</sup> Carey & Co. Inc., 35

Architectural Quality Survey with a summary rating of 3. Carey & Co. Inc., Visitacion Valley Redevelopment EIR, San Francisco, California: Historic Resources Technical Report (29 April 2008): 34.

<sup>3</sup> Ibid., 12.

<sup>&</sup>lt;sup>4</sup> Ibid., 10.

without the need for custom fitting.<sup>5</sup> In 1925, Schlage purchased 2.5 acres of land in Visitacion Valley, where he built new factory and office buildings for his expanding company. In 1926, Schlage formed a partnership with investor Charles Kendrick, one of San Francisco's most prominent businessmen and manufacturers. In 1940, Schlage was honored with the Modern Pioneer Award, which recognized outstanding American inventors. After Schlage's death in 1946, Kendrick continued to play an integral part in directing management of the company until his retirement in 1969.<sup>6</sup>

The Schlage Lock Factory is also significant because it embodies the distinctive characteristics of several types, periods, and methods of construction. The factory buildings and Southern Pacific Railroad buildings represent a range of construction methods and styles that distinguish each period of construction. Representative examples include the wood-frame utilitarian buildings (Buildings J, K, and L) from circa 1906, the reinforced concrete Spanish Colonial Revival-style office building (Building A) from 1926, and the reinforced concrete Streamline Moderne factory building (Building F) from 1942.

Moreover, the Schlage Lock Factory appears significant as a representation of the work of two of San Francisco's most prominent twentieth-century architects, William P. Day and Alfred F. Roller. William P. Day (1883-1966) trained as an engineer at U.C. Berkeley. In 1916, he formed a partnership with Charles P. Weeks. The firm of Weeks & Day went on to become one of San Francisco's most successful architectural firms in the first half of the twentieth century. Weeks & Day drew from many architectural styles to create eclectic designs for hotels, schools, and movie theaters. The firm's most notable work in San Francisco includes the the Don Lee Building (1921) at 1000 Van Ness Avenue, the Mark Hopkins Hotel (1925), and the Sir Francis Drake Hotel (1928). When the partnership ended, Day continued practicing architecture and used his engineering skills to design industrial buildings in the city. Day designed the Spanish Colonial Revival-style Old Office Building (Building A) and Plant 1 (Building B) at the Schlage Lock site in 1925-26. He designed Plant 2 (Building F) in the Streamline Moderne style in 1942.

Alfred F. Roller (1891-1981) was a San Francisco-based architect known for his concrete commercial buildings and public projects throughout the Bay Area and California. Roller designed several large-scale buildings, including the modern NBC Building (1942) in San Francisco and the World Headquarters Office for the Rexall Drug Company (1947) in Los Angeles. Roller designed Plant 3

<sup>&</sup>lt;sup>5</sup> Ibid., 11.

(Building G) in 1950, utilizing continuous bands of steel-sash windows and projecting eaves to blend with Plant 2 (Building F) to the north. Roller designed Plant 3X (Building H) as an addition to Building G in 1966.

In conclusion, the Schlage Lock Factory is significant based upon its local and national historic context; its relationship to prominent figures, such as founder and inventor Walter Schlage and architects William P. Day and Alfred F. Roller; and its industrial designs that represent various periods and methods of construction.

<sup>6</sup> Ibid., 34.



#### PART I. HISTORICAL INFORMATION: BUILDING A - OLD OFFICE BUILDING

#### A. Physical History

#### 1. Date of Erection:

1925-26

#### 2. Architect:

William P. Day H.M. Michelsen

#### 3. Original and subsequent owners:

1925	Schlage Lock Company
2008	Universal Paragon Corporation

#### 4. Builder, contractor, suppliers:

Leo Ruegg

#### 5. Original plans and construction

Original plans and construction documents were not located. The building was originally designed as a two-story over basement, rectangular-plan building in the Spanish Colonial Revival style. The building featured concrete construction, stucco exterior walls, and a clay tile gable roof. It contained offices and restrooms.

#### 6. Alterations and additions

A one-story basement-level addition was constructed at the west side of the building at an unknown date. A one-story addition was constructed on the south end of Building A to connect it to Building B in 1948.

#### PART II. ARCHITECTURAL INFORMATION: BUILDING A - OLD OFFICE BUILDING

#### A. General Statement

#### 1. Architectural Character

This two-story building is rectangular in plan and has a basement and attic. Constructed in 1926 in the Spanish Colonial Revival style, the reinforced concrete building is clad in stucco and has a clay tile side-gable roof. Facing north toward the intersection of Bayshore Boulevard and Blanken Avenue, the primary façade is symmetrically composed with a central projecting gable entry. The first story exhibits fixed, multi-light steel-sash windows. Round arched multi-light, steel-sash windows are located at the second story. The main entrance is accessed via a flight of brick stairs under a round arched opening that is surrounded by decorative voussiors in the form of a lancet arch. The opening is flanked by hanging lanterns. The inset entry features paired metal and glass doors with the building address on a circular piece of granite above. A pendant light fixture hangs from the ceiling of the entry.

The west and east facades exhibit multi-light, steel-sash awning windows at the first story and round arched multi-light, steel-sash windows on the second story. Round arch openings with louvers are located at the gable ends. The west façade exhibits several windows that have been cut to create doors: two on the second story are wood, flat panel doors while two on the first story are wood, partially-glazed doors. Fire escapes lead from the doors to the basement level. The basement level is only visible on the west elevation and exhibits multi-light, steel-sash awning windows. On the east facade, the basement level is obscured by a one-story addition with skylights on the roof. This addition is accessed from the south façade by a wood flat panel door, east of the door is a multi-light, steel-sash awning window.

The south façade exhibits round arched multi-light, steel-sash windows on the second story. A third floor projects above the roof line and contains multi-light, steel-sash awning windows at an intermediate level and at the third story.

A one-story addition to the west of Building A features an irregular plan and once contained the Schlage Lock Company Archives. The addition features a concrete

foundation, concrete walls, and a flat roof covered with composition roll material. A concrete parapet is located at the east end of the roofline adjacent to Buildings A and B. An enclosed hallway connects between Buildings A and B to the archives room to the west, and features a wood plank ceiling with wood crossbeams. The south wall was previously an exterior wall for Building B. The wall features concrete piers, brick walls and projecting window sills, painted multi-light steel-sash windows, and paired partially glazed wood doors that lead to Building B. An exterior entrance at the southwest end of the hallway features a partially glazed metal door. Additional exterior entrances include a flush metal door on the north façade and a flush metal door with a small metal canopy on the south façade. The addition contains two rooms, separated by a wall with a fixed wood-sash window and partially glazed wood door. The rooms feature acoustical tile ceilings, linoleum tile flooring, partially-glazed metal doors with wire glass, hanging fluorescent lights, and hanging metal ducts.

#### 2. Condition of Fabric

The condition of the Building A fabric is good. The condition of the west addition is fair—it features water damage, deteriorating linoleum tiles, and deteriorating acoustical ceiling tiles.

#### B. Description of Exterior

#### 1. Overall Dimensions

The original building measures 50' x 100' with a rectangular plan. The basement tab connecting to Building B is roughly 35' x 115' and trapezoidal in plan, and the west addition is roughly 30' x 135' with an irregular plan.

#### 2. Foundations

The foundations of Building A are concrete.

#### 3. Walls

The walls of the building are concrete clad in stucco.

#### 4. Structural System

The structural system is reinforced concrete.

#### 5. Porches

The primary façade exhibits a central projecting gable entry with inset porch.

#### 6. Chimneys

There are two vents on the roof of the projecting third floor.

#### 7. Openings

#### a. Doorways and doors

The primary façade features an inset entry with paired metal and glass doors. The west façade contains several windows that have been cut to create doors: two on the second story are flat-panel wood doors while two on the first story are partially-glazed wood doors. The one-story addition on east elevation is accessed from the south façade by a wood flat panel door.

#### b. Windows and shutters

The basement and first story feature fixed multi-light steel-sash windows. Round arched multi-light, steel-sash windows are located at the second story. The south façade feature round-arched, multi-light steel-sash windows on the second story. The projecting third floor on the south elevation contains multi-light, steel-sash awning windows at intermediate levels and at the third story. Round-arched openings with louvers are located at the gable ends.

#### 8. Roof

#### a. Roof Shape, covering

The building is capped by a side gable roof covered in clay tile. The onestory section that connects to Building B features a flat roof with skylights that is covered with tar and gravel.

#### b. Cornice, eaves

None

#### c. Dormers, cupolas, towers

None

#### C. Description of Interior

#### 1. Floor Plan

Building A has a rectangular plan. The basement features partitioned rooms of varying sizes, including two large safes, and a 1-story addition to the east. The first floor is divided into two parts divided by a central hall. The west part features two large meeting rooms, a few offices, and a restroom; and the east part includes open spaces formerly partitioned as offices, as well as some remaining partitioned offices and a large safe. The second (main) floor features a large central room bordered by offices and a large safe. The attic floor is smaller, and contains a restroom, an office, and unfinished storage space.

#### 2. Stairways

The stairway, which runs from the basement to the attic, is located at the center of the south wall and is configured in a dog-leg turn. The wood stairs feature carpeting and a turned wood balustrade.

#### 3. Flooring

Most of the basement features concrete flooring, though some rooms feature linoleum tiles. The first floor hall has linoleum tiles; the rooms to the west have wood and concrete floors, with linoleum tiles in the restrooms; and the east rooms feature carpeted floors. The second (main) floor rooms feature carpeted floors. The attic office features a carpeted floor, while the restroom has linoleum tiles.

#### 4. Wall and ceiling finish

The walls of the building envelope are generally concrete. The interior partition walls in the basement are made of concrete. On the first floor, the southwest meeting room features wood cabinets with large pivot doors that comprise wood paneling, and a plaster ceiling. Other first-floor partition walls are made of gypsum board or metal and glass. The second (main) floor features wood and glass partition walls on the west end and gypsum board partition walls on the east end. The attic rooms have concrete partition walls. Restrooms feature wood stall dividers and doors. Ceiling finishes consist of concrete in the basement, suspended acoustical tiles at the first and second floors, and concrete in the attic.

#### 5. Openings

#### a. Doorways and doors

The south basement wall includes one opening that connects to Building B. This opening features two hanging metal-clad fire doors, one on each side. The partitioned rooms contain partially-glazed wood doors, paneled wood doors, partially-glazed metal doors, and replacement flush wood doors.

#### b. Windows

Interior windows include fixed aluminum- and wood-sash windows set in partition walls. The 1-story basement addition to the east and the attic include skylights.

#### 6. Decorative features and trim

Interior decorative features are concentrated on the second (main) floor and include paneled wood and glass partitions with cornices and egg-and-dart molding, as well as wood-clad structural columns with egg-and-dart molding.

#### 7. Hardware

The building features primarily replacement hardware, consisting of brass and bronze fixtures.



#### 8. Mechanical Equipment

#### a. Heating, Air Conditioning, Ventilation

Heating consists of forced air through vents. Some areas have exposed ducts.

#### b. Lighting

Fluorescent lights with plastic covers are attached to the ceilings. Some basement rooms have fluorescent lights suspended from the ceiling.

#### c. Plumbing

Visible plumbing consists of a sprinkler system. Some basement rooms have exposed plumbing attached to the ceiling.

#### D. Site

#### 1. General Setting and Orientation

The area surrounding the site is characterized by residential and commercial properties. The recently completed MUNI T-Line track is located to the west along Bayshore Boulevard. To the east, the setting is characterized by Caltrain railroad tracks. The Schlage Lock Factory site on which the building is located is industrial in character, and is primarily characterized by chain link fencing and asphalt paving.

The primary façade of Building A is oriented to the north, facing the intersection of Bayshore Boulevard and Blanken Avenue.

#### 2. Historic landscape design

The primary façade is bordered by shrubs and two trees. There are no historic landscape features present on the property.

#### 3. Outbuildings

None



<u>Home</u> > <u>How to Preserve</u> > <u>Preservation Briefs</u> > 31 Mothballing

Some of the web versions of the Preservation Briefs differ somewhat from the printed versions. Many illustrations are new and in color; Captions are simplified and some complex charts are omitted. To order hard copies of the Briefs, see **Printed Publications**.

#### PRESERVATION BRIEFS

## 31 Mothballing Historic Buildings

Sharon C. Park, AIA

Documentation Stabilization Mothballing Mothballing Checklist Maintenance Chart Summary and References Reading List Download the PDF



Appropriately mothballed historic building. Photo: NPS files.

When all means of finding a productive use for a historic building have been exhausted or when funds are not currently available to put a deteriorating structure into a useable condition, it may be necessary to close up the building temporarily to protect it from the weather as well as to secure it from vandalism. This process, known as mothballing, can be a necessary and effective means of protecting the building while planning the property's future, or raising money for a preservation, rehabilitation or restoration project. If a vacant property has been declared unsafe by building officials, stabilization and mothballing may be the only way to protect it from demolition.



This building has been successfully mothballed for 10 years because the roof and walls were repaired and structurally stabilized, ventilation louvers added, and the property maintained. Photo: NPS files.

This Preservation Brief focuses on the steps needed to "de-activate" a property for an extended period of time. The project team will usually consist of an architect, historian, preservation specialist, sometimes a structural engineer, and a contractor. Mothballing should not be done without careful planning to ensure that needed physical repairs are made prior to securing the building. The steps discussed in this Brief can protect buildings for periods of up to ten years; long-term success will also depend on continued, although somewhat limited, monitoring and maintenance. For all but the simplest projects, hiring a team of preservation specialists is recommended to assess the specific needs of the structure and to develop an effective mothballing program.

A vacant historic building cannot survive indefinitely in a boarded-up condition, and so even marginal interim uses where there is regular activity and monitoring, such as a caretaker residence or non-flammable storage, are generally preferable to mothballing. In a few limited cases when the vacant building is in good condition and

in a location where it can be watched and checked regularly, closing and locking the door, setting heat levels at just above freezing, and securing the windows may provide sufficient protection for a period of a few years.

But if long-term mothballing is the only remaining option, it must be done properly. This will require stabilization of the

exterior, properly designed security protection, generally some form of interior ventilation—either through mechanical or natural air exchange systems—and continued maintenance and surveillance monitoring.

Comprehensive mothballing programs are generally expensive and may cost 10% or more of a modest rehabilitation budget. However, the money spent on well-planned protective measures will seem small when amortized over the life of the resource. Regardless of the location and condition of the property or the funding available, the following 9 steps are involved in properly mothballing a building:

#### Documentation

- 1. Document the architectural and historical significance of the building.
- 2. Prepare a condition assessment of the building.

#### Stabilization

- 3. Structurally stabilize the building, based on a professional condition assessment.
- 4. Exterminate or control pests, including termites and rodents.
- 5. Protect the exterior from moisture penetration.

#### Mothballing

- 6. Secure the building and its component features to reduce vandalism or break-ins.
- 7. Provide adequate ventilation to the interior.
- 8. Secure or modify utilities and mechanical systems.
- 9. Develop and implement a maintenance and monitoring plan for protection.

These steps will be discussed in sequence below. Documentation and stabilization are critical components of the process and should not be skipped over. Mothballing measures should not result in permanent damage, and so each treatment should be weighed in terms of its reversibility and its overall benefit.

#### Documentation

Documenting the historical significance and physical condition of the property will provide information necessary for setting priorities and allocating funds. The project team should be cautious when first entering the structure if it has been vacant or is deteriorated. It may be advisable to shore temporarily areas appearing to be structurally unsound until the condition of the structure can be fully assessed. If pigeon or bat droppings, friable asbestos or other health hazards are present, precautions must be taken to wear the appropriate safety equipment when first inspecting the building. Consideration should be given to hiring a firm specializing in hazardous waste removal if these highly toxic elements are found in the building.

#### **Documenting and Recording the Building**

Documenting a building's history is important because evidence of its true age and architectural significance may not be readily evident. The owner should check with the State Historic Preservation Office or local preservation commission for assistance in researching the building. If the building has never been researched for listing in the National Register of Historic Places or other historic registers, then, *at a minimum*, the following should be determined:

- The overall historical significance of the property and dates of construction;
- The chronology of alterations or additions and their approximate dates; and,
- Types of building materials, construction techniques, and any unusual detailing or regional variations of craftsmanship.

Old photographs can be helpful in identifying early or original features that might be hidden under modern materials. On a walk-through, the architect, historian, or preservation specialist should identify the architecturally significant elements of the building, both inside and out.

By understanding the history of the resource, significant elements, even though deteriorated, may be spared the trash pile. For that reason alone, any materials removed from the building or site as part of the stabilization effort should be carefully scrutinized and, if appearing historic, should be photographed, tagged with a number, inventoried, and safely stored, preferably in the building, for later retrieval.

A site plan and schematic building floor plans can be used to note important information for use when the building is eventually preserved, restored, or rehabilitated. Each room should be given a number and notations added to the plans

Boarding up without adequate ventilation and maintenance has accelerated deterioration of this property. Photo: NPS files.





Documenting a building's history and assessing its condition provide information to set priorities for stabilization and repair, prior to mothballing. Photo: NPS files.

regarding the removal of important features to storage or recording physical reatments undertaken as part of the stabilization or repair.

Because a mothballing project may extend over a long period of time, with many different people involved, clear records should be kept and a building file established. Copies of all important data, plans, photographs, and lists of consultants or contractors who have worked on the property should be added to the file as the job progresses. Recording actions taken on the building and identifying where elements that have been removed are stored will be helpful in the future.

The project coordinator should keep the building file updated and give duplicate copies to the owner. A list of emergency numbers, including the number of the key holder, should be kept at the entrance to the building or on a security gate, in a transparent vinyl sleeve.

#### Preparing a Condition Assessment of the Building

A condition assessment can provide the owner with an accurate overview of the current condition of the property. If the building is deteriorated or if there are significant interior architectural elements that will need special protection during the mothballing years, undertaking a condition assessment is highly recommended, but it need not be exhaustive.

A modified condition assessment, prepared by an architect or preservation specialist, and in some case a structural engineer, will help set priorities for repairs necessary to stabilize the property for both the short and long-term. It will evaluate the age and condition of the following major elements: foundations; structural systems; exterior materials; roofs and gutters; exterior porches and steps; interior finishes; staircases; plumbing, electrical, mechanical systems; special features such as chimneys; and site drainage.

To record existing conditions of the building and site, it will be necessary to clean debris from the building and to remove unwanted or overgrown vegetation to expose foundations. The interior should be emptied of its furnishing (unless provisions are made for mothballing these as well), all debris removed, and the interior swept with a broom. Building materials too deteriorated to repair, or which have come detached, such as moldings, balusters, and decorative plaster, and which can be used to guide later preservation work, should be tagged, labeled and saved.

Photographs or a videotape of the exterior and all interior spaces of the resource will provide an invaluable record of "as is" conditions. If a videotape is made, oral commentary can be provided on the significance of each space and architectural feature. If 35mm photographic prints or slides are made, they should be numbered, dated, and appropriately identified. Photographs should be cross-referenced with the room numbers on the schematic plans. A systematic method for photographing should be developed; for example, photograph each wall in a room and then take a corner



Buildings seriously damaged by storms or deterioration may need to be braced before architectural evaluations can be made. Photo: John Milner Architects. Photo: NPS files

shot to get floor and ceiling portions in the picture. Photograph any unusual details as well as examples of each window and door type.

For historic buildings, the great advantage of a condition assessment is that architectural features, both on the exterior as well as the interior, can be rated on a scale of their importance to the integrity and significance of the building. Those features of the highest priority should receive preference when repairs or protection measures are outlined as part of the mothballing process. Potential problems with protecting these features should be identified so that appropriate interim solutions can be selected. For example, if a building has always been heated and if murals, decorative plaster walls, or examples of patterned wall paper are identified as highly significant, then special care should be taken to regulate the interior climate and to monitor it adequately during the mothballing years. This might require retaining electrical service to provide minimal heat in winter, fan exhaust in summer, and humidity controls for the interior.

#### Stabilization

Stabilization as part of a mothballing project involves correcting deficiencies to slow down the deterioration of the building while it is vacant. Weakened structural members that might fail altogether in the forthcoming years must be braced or reinforced; insects and other pests removed and discouraged from returning; and the building protected from moisture damage both by weatherizing the exterior envelope and by handling water run-off on the site. Even if a modified use or



Loose or detached elements should be identified, tagged and stored, preferably on site. Photo: NPS files

caretaker services can eventually be found for the building, the following steps should be

# ATTACHMENT 18

#### Structurally Stabilizing the Building

While bracing may have been required to make the building temporarily safe for inspection, the condition assessment may reveal areas of hidden structural damage. Roofs, foundations, walls, interior framing, porches and dormers all have structural components that may need added reinforcement.



Interior bracing which will last the duration of the mothballing will protect weakened structural members. Photo: John Milner Architects,

Structural stabilization by a qualified contractor should be done under the direction of a structural engineer or a preservation specialist to ensure that the added weight of the reinforcement can be sustained by the building and that the new members do not harm historic finishes. Any major vertical post added during the stabilization should be properly supported and, if necessary, taken to the ground and underpinned.

If the building is in a northern climate, then the roof framing must be able to hold substantial snow loads. Bracing the roof at the ridge and mid-points should be considered if sagging is apparent. Likewise, interior framing around stair openings or under long ceiling spans should be investigated. Underpinning or bracing structural piers weakened by poor drainage patterns may be a good precaution as well. Damage caused by insects, moisture, or from other causes should be repaired or reinforced and, if possible, the source of the damage removed. If features such as porches and dormers are so severely deteriorated that

they must be removed, they should be documented, photographed, and portions salvaged for storage prior to removal.

If the building is in a southern or humid climate and termites or other insects are a particular problem, the foundation and floor framing should be inspected to ensure that there are no major structural weaknesses. This can usually be done by observation from the crawl space or basement. For those structures where this is not possible, it may be advisable to lift selective floor boards to expose the floor framing. If there is evidence of pest damage, particularly termites, active colonies should be treated and the structural members reinforced or replaced, if necessary.

#### **Controlling Pests**

Pests can be numerous and include squirrels, raccoons, bats, mice, rats, snakes, termites, moths, beetles, ants, bees and wasps, pigeons, and other birds. Termites, beetles, and carpenter ants destroy wood. Mice, too, gnaw wood as well as plaster, insulation, and electrical wires. Pigeon and bat droppings not only damage wood finishes but create a serious and sometimes deadly health hazard.

If the property is infested with animals or insects, it is important to get them out and to seal off their access to the building. If necessary, exterminate and remove any nests or hatching colonies. Chimney flues may be closed off with exterior grade plywood caps, properly ventilated, or protected with framed wire screens. Existing vents, grills, and louvers in attics and crawl spaces should be screened with bug mesh or heavy duty wire, depending on the type of pest being controlled. It may be advantageous to have damp or infected wood treated with insecticides (as permitted by each state) or preservatives, such as borate, to slow the rate of deterioration during the time that the building is not in use.

#### Securing the Exterior Envelope from Moisture Penetration

It is important to protect the exterior envelope from moisture penetration before securing the building. Leaks from deteriorated or damaged roofing, from around windows and doors, or through deteriorated materials, as well as ground moisture from improper site run-off or rising damp at foundations, can cause long-term damage to interior finishes and structural systems. Any serious deficiencies on the exterior, identified in the condition assessment, should be addressed.

To the greatest extent possible, these weatherization efforts should not harm historic materials. The project budget may not allow deteriorated features to be fully repaired or replaced in-kind. Non-historic or modern materials may be used to cover historic surfaces temporarily, but these treatments should not destroy valuable evidence necessary for future preservation work. Temporary modifications should be as visually compatible as possible with the historic building.



Regrading has protected this masonry foundation wall from excessive damp during its 10-year mothballing. Note the attic and basement vents, temporary stairs, and interpretive sign. Photo: NPS files.

Roofs are often the most vulnerable elements on the building exterior and yet in some ways they are the easiest element to stabilize for the long term, if done correctly. "Quick fix" solutions, such as tar patches on slate roofs, should be avoided as they will generally fail within a year or so and may accelerate damage by trapping moisture. They are difficult to undo later when more permanent repairs are undertaken. Use of a tarpaulin over a leaking roof should be thought of only as a very temporary emergency repair because it is often blown off by the wind in a subsequent storm.

If the existing historic roof needs moderate repairs to make it last an additional ten years, then these repairs should be undertaken as a first priority. Replacing cracked or missing shingles and tiles, securing loose flashing, and reanchoring gutters and downspouts can often be done by a local roofing contractor. If the roof is in poor condition, but the historic materials and configuration are important, a new temporary roof, such as a lightweight aluminum channel system over the existing, might be considered. If the roofing is so deteriorated that it must be replaced and a lightweight aluminum system is not affordable, various inexpensive options might be considered. These include covering the existing deteriorated roof with galvanized corrugated metal roofing panels, or 90 lb. rolled roofing, or a rubberized membrane (refer back to cover photo). These alternatives should leave as much of the historic sheathing and roofing in place as evidence for later preservation treatments.



Urban buildings often need additional protection from unwanted entry and graffiti. This commercial building uses painted plywood panels to cover its glass storefronts. The upper windows on the street sides have been painted to resemble 19th century sash. Photo: NPS files.

For masonry repairs, appropriate preservation approaches are essential. For example, if repointing deteriorated brick chimneys or walls is necessary to prevent serious moisture penetration while the building is mothballed, the mortar should match the historic mortar in composition, color, and tooling. The use of hard portland cement mortars or vapor-impermeable waterproof coatings are not appropriate solutions as they can cause extensive damage and are not reversible treatments.

For wood siding that is deteriorated, repairs necessary to keep out moisture should be made; repainting is generally warranted. Cracks around windows and doors can be beneficial in providing ventilation to the interior and so should only be caulked if needed to keep out bugs and moisture. For very deteriorated wall surfaces on wooden frame structures, it may be necessary to sheathe in plywood panels, but care should be taken to minimize installation damage by planning the location of the nailing or screw patterns or by installing panels over a frame of battens. Generally, however, it is better to repair deteriorated features than to cover them over.

Foundation damage may occur if water does not drain away from the building. Run-off from gutters and downspouts should be directed far away from the foundation wall by using long flexible extender pipes equal in length to twice the depth of the basement or crawl space. If underground drains are susceptible to clogging, it is recommended that the downspouts be disconnected from the drain boot and attached to flexible piping. If gutters and downspouts are in bad condition, replace them with inexpensive aluminum units.

If there are no significant landscape or exposed archeological elements around the foundation, consideration should be given to regrading the site if there is a documented drainage problem. If building up the grade, use a fiber mesh membrane to separate the new soil from the old and slope the new soil 6 to 8 feet (200 cm-266 cm) away from the foundation making sure not to cover up the dampcourse layer or come into contact with skirting boards. To keep vegetation under control, put down a layer of 6 mil black polyethylene sheeting or fiber mesh matting covered with a 2"-4" (5-10 cm.) of washed gravel. If the building suffers a serious rising damp problem, it may be advisable to eliminate the plastic sheeting to avoid trapping ground moisture against foundations.

#### Mothballing

The actual mothballing effort involves controlling the long-term deterioration of the building while it is unoccupied as well as finding methods to protect it from sudden loss by fire or vandalism. This requires securing the building from unwanted entry, providing adequate ventilation to the interior, and shutting down or modifying existing utilities. Once the building is de-activated or secured, the long-term success will depend on periodic maintenance and surveillance monitoring.

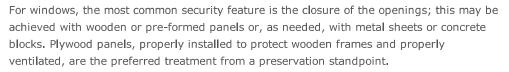
#### Securing the Building from Vandals, Break-ins, and Natural Disasters

Securing the building from sudden loss is a critical aspect of mothballing. Because historic buildings are irreplaceable, it is vital that vulnerable entry points are sealed. If the building is located where fire and security service is available then it is highly recommended that some form of monitoring or alarm devices be used.

To protect decorative features, such as mantels, lighting fixtures, copper downspouts, iron roof cresting, or stained glass windows from theft or vandalism, it may be advisable to temporarily remove them to a more secure location if they cannot be adequately protected within the structure.

Mothballed buildings are usually boarded up, particularly on the first floor and basement, to protect fragile glass windows from breaking and to reinforce entry points. Infill materials for closing door and window openings include plywood, corrugated panels, metal grates, chain fencing, metal grills, and cinder or cement blocks. The method of installation should not result in the destruction of the opening and all associated sash, doors, and frames should be protected or stored for future reuse.

Generally exterior doors are reinforced and provided with strong locks, but if weak historic doors would be damaged or disfigured by adding reinforcement or new locks, they may be removed temporarily and replaced with secure modern doors. Alternatively, security gates in an new metal frame can be installed within existing door openings, much like a storm door, leaving the historic door in place. If plywood panels are installed over door openings, they should be screwed in place, as opposed to nailed, to avoid crowbar damage each time the panel is removed. This also reduces pounding vibrations from hammers and eliminates new nail holes each time the panel is replaced.





The first floor openings of this historic building have been filled with cinder blocks and the doors, window sash, and frames removed for safe keeping. The security metal door features heavy duty locks. Photo: NPS files.

There are a number of ways to set insert plywood panels into windows openings to avoid damage to frame and sash. One common method is to bring the upper and lower sash of a double hung unit to the mid-point of the opening and then to install pre-

cut plywood panels using long carriage bolts anchored into horizontal wooden bracing, or strong backs, on the inside face of the window. Another means is to build new wooden blocking frames set into deeply recessed openings, for example in an industrial mill or warehouse, and then to affix the plywood panel to the blocking frame. If sash must be removed prior to installing panels, they should be labeled and stored safely within the building.

Plywood panels are usually 1/2"-3/4" (1.25-1.875 cm.) thick and made of exterior grade stock, such as CDX, or marine grade plywood. They should be painted to protect them from delamination and to provide a neater appearance. These panels may be painted to resemble operable windows or treated decoratively. With extra attention to detail, the plywood panels can be trimmed out with muntin strips to give a shadow line simulating multi-lite windows. This level of detail is a good indication that the building is protected and valued by the community.

If the building has shutters simply close the shutters and secure them from the interior. If the building had shutters historically, but they are missing, it may be appropriate to install new shutters, even in a modern material, and secure them in the closed position. Louvered shutters will

help with interior ventilation if the sash are propped open behind the shutters.

There is some benefit from keeping windows unboarded if security is not a problem. The building will appear to be occupied, and the natural air leakage around the windows will assist in ventilating the interior. The presence of natural light will also help when periodic inspections are made. Rigid polycarbonate clear storm glazing panels may be placed on the window exterior to protect against glass breakage. Because the sun's ultraviolet rays can cause fading of floor finishes and wall surfaces, filtering pull shades or inexpensive curtains may be options for reducing this type of deterioration for significant interiors. Some acrylic sheeting comes with built-in ultraviolet filters.

Securing the building from catastrophic destruction from fire, lightning, or arson will require additional security devices. Lightning rods properly grounded should be a first consideration if the building is in an area susceptible to lightning storms. A high security fence should also be installed if the property cannot be monitored closely.



A view showing the exterior of the Brearley House, New Jersey, in its mothballed condition Photo: Michael Mills, Ford Farewell Mills Gatsch, Architects.

These interventions do not require a power source for operation. Since many buildings will not maintain electrical power, there are some devices available using battery packs, such as intrusion alarms, security lighting, and smoke detectors which through audible horn alarms can alert nearby neighbors. These battery packs must be replaced every 3 months to 2 years, depending on type and use. In combination with a cellular phone, they can also provide some level of direct communication with police and fire departments.

If at all possible, new temporary electric service should be provided to the building. Generally a telephone line is needed as well. A hard wired security system for intrusion and a combination rate-of-rise and smoke detector can send an immediate signal for help directly to the fire department and security service. Depending on whether or not heat will be maintained in the building, the security system should be designed accordingly. Some systems cannot work below  $32 \infty F$  ( $0 \infty C$ ). Exterior lighting set on a timer, photo electric sensor, or a motion/infra-red detection device provides additional security.



This painted trompe l'eoil scene on plywood panels is a neighborhood-friendly device. Photo: NPS files.

#### Providing Adequate Ventilation to the Interior

Once the exterior has been made weathertight and secure, it is essential to provide adequate air exchange throughout the building. Without adequate air exchange, humidity may rise to unsafe levels, and mold, rot, and insect infestation are likely to thrive. The needs of each historic resource must be individually evaluated because there are so many variables that affect the performance of each interior space once the building has been secured.

A mechanical engineer or a specialist in interior climates should be consulted, particularly for buildings with intact and significant interiors. In some circumstances, providing heat during the winter, even at a minimal  $45\infty$  F ( $7\infty$ C), and utilizing forced-fan ventilation in summer will be recommended and will require retaining electrical service. For masonry buildings it is often helpful to keep the interior temperature above the spring dew point to avoid damaging condensation. In most buildings it is the need for summer ventilation that outweighs the winter requirements.

Many old buildings are inherently leaky due to loose-fitting windows and floorboards and the lack of insulation. The level of air exchange needed for each building, however, will vary according to geographic location, the building's construction, and its general size and configuration.

There are four critical climate zones when looking at the type and amount of interior ventilation needed for a closed up building: hot and dry (southwestern states); cold and

damp (Pacific northwest and northeastern states); temperate and humid (Mid-Atlantic states, coastal areas); and hot and humid (southern states and the tropics).

Once closed up, a building interior will still be affected by the temperature and humidity of the exterior. Without proper ventilation, moisture from condensation may occur and cause damage by wetting plaster, peeling paint, staining woodwork, warping floors, and in some cases even causing freeze thaw damage to plaster. If moist conditions persist in a property, structural damage can result from rot or returning insects attracted to moist conditions. Poorly mothballed masonry buildings, particularly in damp and humid zones have been so damaged on the interior with just one year of unventilated closure that none of the interior finishes were salvageable when the buildings were rehabilitated.

The absolute minimum air exchange for most mothballed buildings consists of one to four air exchanges every hour; one or two air exchanges per hour in winter and twice that amount in summer. Even this minimal exchange may foster mold and mildew in damp climates, and so monitoring the property during the stabilization period and after the building has been secured will provide useful information on the effectiveness of the ventilation solution.

There is no exact science for how much ventilation should be provided for each building. There are, however, some general rules of thumb. Buildings, such as adobe structures, located in hot and arid climates may need no additional ventilation if they have been well weatherized and no moisture is penetrating the interior. Also frame buildings with natural cracks and fissures for air infiltration may have a natural air exchange rate of 3 or 4 per hour, and so in arid as well as temperate climates may need no additional ventilation once secured. The most difficult buildings to adequately

ventilate without resorting to extensive louvering and/or mechanical exhaust fan systems are masonry buildings in humid climates. Even with basement and attic vent grills, a masonry building many not have more than one air exchange an hour. This is generally unacceptable for summer conditions. For these buildings, almost every window opening will need to be fitted out with some type of passive, louvered ventilation.

Depending on the size, plan configuration, and ceiling heights of a building, it is often necessary to have louvered opening equivalent to 5%-10% of the square footage of each floor. For example, in a hot humid climate, a typical 20'x30' (6.1m x 9.1m) brick residence with 600 sq. ft.(55.5 sq.m) of floor space and a typical number of windows, may need 30-60 sq. ft. (2.75sq.m-5.5 sq. m) of louvered openings per floor. With each window measuring 3'x5'(.9m x 1.5 m) or 15 sq. ft. (1.3 sq.m), the equivalent of 2 to 4 windows per floor will need full window louvers.

Small pre-formed louvers set into a plywood panel or small slit-type registers at the base of inset panels generally cannot provide enough ventilation in most moist climates to offset condensation, but this approach is certainly better than no louvers at all. Louvers should be located to give cross ventilation, interior doors should be fixed ajar at least 4" (10cm) to allow air to circulate, and hatches to the attic should be left open.

Monitoring devices which can record internal temperature and humidity levels can be invaluable in determining if the

This exhaust fan has tamper-proof

housing. Photo: Michael Mills, Ford Farewell Mills Gatsch, Architects.



temperature and humidity conditions in

NPS files.

historic buildings during mothballing. Photo:



internal climate is remaining stable. These units can be powered by portable battery packs or can be wired into electric service with data downloaded into laptop computers periodically. This can also give long-term information throughout the mothballing years. If it is determined that there are inadequate air exchanges to keep interior moisture levels under control, additional passive ventilation can be increased, or, if there is electric service, mechanical exhaust fans can be installed. One fan in a small to medium sized building can reduce the amount of louvering substantially.

If electric fans are used, study the environmental conditions of each property and determine if the fans should be controlled by thermostats or automatic timers. Humidistats, designed for enclosed climate control systems, generally are difficult to adapt for open mothballing conditions. How the system will draw in or exhaust air is also important. It may be determined that it is best to bring dry air in from the attic or upper levels and force it out through lower basement windows. If the basement is damp, it may be best to zone it from the rest of the building and exhaust its air separately. Additionally, less humid day air is preferred over damper night air, and this can be controlled with a timer switch mounted to the fan.

The type of ventilation should not undermine the security of the building. The most secure installations use custom-made grills well anchored to the window frame, often set in plywood security panels. Some vents are formed using heavy millwork louvers set into existing window openings. For buildings where security is not a primary issue, where the interior is modest, and where there has been no heat for a long time, it may be possible to use lightweight galvanized metal grills in the window openings. A cost effective grill can be made from the expanded metal mesh lath used by plasterers and installed so that the mesh fins shed rainwater to the exterior.

#### Securing Mechanical Systems and Utilities

At the outset, it is important to determine which utilities and services, such as electrical or telephone lines, are kept and which are cut off. As long as these services will not constitute a fire hazard, it is advisable to retain those which will help protect the property. Since the electrical needs will be limited in a vacant building, it is best to install a new temporary electric line and panel (100 amp) so that all the wiring is new and exposed. This will be much safer for the building, and allows easy access for reading the meter.

Most heating systems are shut down in long term mothballing. For furnaces fueled by oil, there are two choices for dealing with the tank. Either it must be filled to the top with oil to eliminate condensation or it should be drained. If it remains empty for more than a year, it will likely rust and not be reusable. Most tanks are drained if a newer type of system is envisioned when the building is put back into service. Gas systems with open flames should be turned off unless there is regular maintenance and frequent surveillance of the property. Gas lines are shut off by the utility company.

If a hot water radiator system is retained for low levels of heat, it generally must be modified to be a self-contained system and the water supply is capped at the meter. This recirculating system protects the property from extensive damage from burst pipes. Water is replaced with a water/glycol mix and the reserve tank must also be filled with this mixture. This keeps the modified system from freezing, if there is a power failure. If water service is cut off, pipes should be drained. Sewerage systems will require special care as sewer gas is explosive. Either the traps must be filled with glycol or the sewer line should be capped off at the building line.

#### **Developing a Maintenance and Monitoring Plan**

While every effort may have been made to stabilize the property and to slow the deterioration of materials, natural disasters, storms, undetected leaks, and unwanted intrusion can still occur. A regular schedule for surveillance, maintenance, and monitoring should be established. The fire and police departments should be notified that the property will be vacant. A walk-through visit to familiarize these officials with the building's location, construction materials, and overall plan may be invaluable if they are called on in the future.

The optimum schedule for surveillance visits to the property will depend on the location of the property and the number of people who can assist with these activities. The more frequent the visits to check the property, the sooner that water leaks or break-ins will be noticed. Also, the more frequently the building is entered, the better the air exchange. By keeping the site clear and the building in good repair, the community will know that the building has not been abandoned. The involvement of neighbors and community groups in caring for the property can ensure its protection from a variety of catastrophic circumstances.

The owner may utilize volunteers and service companies to undertake the work outlined in the maintenance chart. Service companies on a maintenance contract can provide yard, maintenance, and inspection services, and their reports or itemized bills reflecting work undertaken should be added to update the building file.

#### **Mothballing Checklist**

In reviewing mothballing plans, the following checklist may help to ensure that work items are not inadvertently omitted.

#### Moisture

- Is the roof watertight?
- Do the gutters retain their proper pitch and are they clean?
- Are downspout joints intact?
- Are drains unobstructed?
- Are windows and doors and their frames in good condition?
- Are masonry walls in good condition to seal out moisture?
- Is wood siding in good condition?
- Is site properly graded for water run-off?
- Is vegetation cleared from around the building foundation to avoid trapping moisture?

#### Pests

- Have nests/pests been removed from the building's interior and eaves?
- Are adequate screens in place to guard against pests?
- Has the building been inspected and treated for termites, carpenter ants, rodents, etc.?
- If toxic droppings from bats and pigeons are present, has a special company been brought in for its disposal?

#### Housekeeping

- Have the following been removed from the interior: trash, hazardous materials such as inflammable liquids, poisons, and paints and canned goods that could freeze and burst?
- Is the interior broom-clean?
- Have furnishings been removed to a safe location?
- If furnishings are remaining in the building, are they properly protected from dust, pests, ultraviolet light, and other potentially harmful problems?
- Have significant architectural elements that have become detached from the building been labeled and stored in a safe place?
- Is there a building file?

#### Security

- Have fire and police departments been notified that the building will be mothballed?
- Are smoke and fire detectors in working order?
- Are the exterior doors and windows securely fastened?
- Are plans in place to monitor the building on a regular basis?
- Are the keys to the building in a secure but accessible location?
- Are the grounds being kept from becoming overgrown?

#### Utilities

- Have utility companies disconnected/shut off or fully inspected water, gas, and electric lines?
- If the building will not remain heated, have water pipes been drained and glycol added?
- If the electricity is to be left on, is the wiring in safe condition?

#### Ventilation

- Have steps been taken to ensure proper ventilation of the building?
- Have interior doors been left open for ventilation purposes?
- Has the secured building been checked within the last 3 months for interior dampness or excessive humidity?

#### **Maintenance Chart**

#### 1-3 months; periodic

- regular drive by surveillance
- check attic during storms if possible
- monthly walk arounds
- check entrances

- check window panes for breakage
- mowing as required
- check for graffiti or vandalism
- enter every 3 months to air out
- check for musty air
- check for moisture damage
- check battery packs and monitoring equipment
- check light bulbs
- check for evidence of pest intrusion

#### Every 6 months; spring and fall

- site clean-up; pruning and trimming
- gutter and downspout check
- check crawlspace for pests
- clean out storm drains

#### **Every 12 months**

- maintenance contract inspections for equipment/utilities
- check roof for loose or missing shingles
- termite and pest inspection/treatment
- exterior materials spot repair and touch up painting
- remove bird droppings or other stains from exterior
- check and update building file

#### **Summary and References**

Providing temporary protection and stabilization for vacant historic buildings can arrest deterioration and buy the owner valuable time to raise money for preservation or to find a compatible use for the property. A well planned mothballing project involves documenting the history and condition of the building, stabilizing the structure to slow down its deterioration, and finally, mothballing the structure to secure it. The three highest priorities for a mothballed building are 1) to protect the building from sudden loss, 2) to weatherize and maintain the property to stop moisture penetration, and 3) to control the humidity levels inside once the building has been secured.

While issues regarding mothballing may seem simple, the variables and intricacies of possible solutions make the decisionmaking process very important. Each building must be individually evaluated prior to mothballing. In addition, a variety of professional services as well as volunteer assistance is needed for careful planning and repair, sensitively designed protection measures, follow-up security surveillance, and cyclical maintenance.

In planning for the future of the building, complete and systematic records must be kept and generous funds allocated for mothballing. This will ensure that the historic property will be in stable condition for its eventual preservation, rehabilitation, or restoration.

#### Acknowledgements

The author, **Sharon C. Park**, Senior Historical Architect, Heritage Preservation Services Division, National Park Service, would like to acknowledge the assistance of the following individuals in the preparation and review of this publication. H. Ward Jandl served as the technical editor and assisted with producing this Preservation Brief. In addition the following persons have provided invaluable information and illustrations: Ernest A. Conrad, PE; Doug Hicks, NPS Williamsport Preservation Training Center; Thomas C. Taylor, Colonial Williamsburg; Karen Gordon, Seattle Urban Conservation Office; Kevin B. Stoops, Seattle Department of Parks and Recreation; Michael Mills, AIA; Christina Henry, architect, Mary Beth Hirsch, Ohio Historical Society. Thanks also to Heritage Preservation Services Division staff members Michael J. Auer, Anne E. Grimmer, Kay D. Weeks, Tim Buehner, and Jean Travers, and to the numerous staff members of the NPS Regional offices who submitted comments. All photographs and drawings are by the author unless otherwise noted.

This publication has been prepared pursuant to the National Historic Preservation Act of 1966, as amended, which directs the Secretary of the Interior to develop and make available information concerning historic properties. Technical Preservation Services (TPS), National Park Service prepares standards, guidelines, and other educational materials on responsible historic

preservation treatments to a broad public.

September 1993

#### **Reading List**

Cotton, J. Randall. "Mothballing Buildings." <u>The Old-House Journal.</u> July/August, 1993.

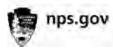
Fisher, Charles E. and Thomas A. Vitanza. "Temporary Window Vents in Unoccupied Historic Buildings." Preservation Tech Note (Windows, No. 10). Washington, DC: National Park Service, 1985.

Frazier Associates. "Mothballing Historic Buildings." Preserving Prince William, 2. County of Prince William, VA, 1990.

Michell, Eleanor. Emergency Repairs for Historic Buildings. London: Butterworth Architecture, 1988.

"Mothballing Vacant Buildings," <u>An Anti-Arson Kit for Preservation and Neighborhood Action</u>. Washington, DC: Federal Emergency Management Agency, 1982.

Solon, Thomas E. "Security Panels for the Foster-Armstrong House." <u>Association for Preservation Technology</u> <u>Bulletin.</u> Vol XVI no. 3 and 4, 1984. (note the design of the panels, but be aware that additional louvering may be needed on other projects).



EXPERIENCE YOUR AMERICA"

From: Vu, Doug (CPC) [mailto:doug.vu@sfgov.org]
Sent: Monday, February 29, 2016 6:55 PM
To: Brad Mooney <bmooney@bsdsf.com>;

Subject: RE: Response to Vis Valley 8/31/2015 letter

Peter and Marcial,

First off, I apologize that it has taken the department six months to provide a response to your August 31, 2015 letter. Although there is no acceptable excuse, it has been extremely difficult to convene all the necessary staff for a meeting to address not only your questions, but also a broader approach to reviewing any future plans that require interpretation of the SUD and D4D, and a determination whether such changes would be deemed minor or major modifications, as defined in the SUD.

At our meeting today, I (and other staff who have joined this team after adoption of the regulations) was informed about the design process for drafting and finalizing the SUD and D4D that included multiple meetings and thorough participation from Pyatok and other stakeholders to propose, negotiate and agree upon every aspect of the development. This includes, but is not limited to, determining the site plan for the project, formalizing the arrangement, massing, height and volume of the proposed buildings, and developing controls that would ensure the design guidelines would be met. I understand this process took over two years to complete, and the final documents would establish the framework for the project's detailed design and review process. Upon the discussion of this process and level of participation by the stakeholders, the project team does not believe the proposed changes would be consistent with the SUD and D4D. It was also agreed that any deviation from the controls would be quantified and carefully reviewed to determine if they are considered minor or major alterations, and would follow the appropriate review/approval process described in the SUD.

Regarding your questions about upper floor setbacks:

- 1.1 The minimum requirements cannot be re-arranged, distributed, or averaged throughout other areas of the building to meet the 15% requirement, due in part to the fact that the adopted setbacks were thoroughly reviewed, designed, and vetted.
- 1.2 This also applies to the requirements between buildings (3A and 3B) because although they share a ground-level podium, the buildings visually read as separate structures that must each provide the necessary setbacks. The intent of these setbacks is to reduce the bulk, minimize the visual impact and provide a human scale to the buildings.
- 1.3 Areas beneath proposed bays that increase the volumetric area of the respective unit cannot be counted towards the required amount of floor plate reduction. This interpretation is consistent with the criteria under Planning Code (PC) Section 136, which requires a minimum 7'-6" head

clearance for bays to be considered "permitted obstructions." Any proposed bays would require this minimum head clearance from the floorplate below to qualify as a setback area.

- 1.4 The setback area shall be measured from the face of the primary building wall, or foundation wall and not the property line. This interpretation is consistent with the method used to measure the depth of a building, and the distance from similar features for structures throughout the city.
- 1.5 By measuring the setback distance from the building wall as described above, the setback area will follow the shape of the building.

Regarding your questions about ground floor uses:

2. All proposed retail areas for the project were thoroughly reviewed, designed, and vetted during the adoption process. Therefore, a new retail space at the proposed location of Block 5 would require a major modification from the SUD.

Regarding your questions about residential entries at streets:

- 3.1 The spacing between the entrances of ground floor units must average 25 feet. Any deviation greater than 10 percent of this distance would require a major modification. Due to the location of the liner units, the area of the parking garage can be reduced by rearrangement of the parking spaces and reducing the width of the one-way access lanes, which measure approximately 25 feet. This may provide the additional floor area needed to provide dwelling units that meet the spacing requirement.
- 3.2 The intent of this requirement is to establish a streetwall similar to the traditional residential lot pattern in the city. Since not all city streets have this uniform spacing between entrances, the proposed use of averaging by dividing the number of entrances per length of frontage will be reviewed on a case-by-case basis.
- 3.3 Figure 2-4 on page 41 of the D4D establishes the maximum stories permitted per building. The maximum building heights were determined using the standard 10-feet height per floor at and above the second story, and a ground floor height between 16- and 18-feet to provide attractive, clearly defined street frontages that are pedestrian-oriented, and finegrained with commercial and other non-residential uses. Any height reduction of the ground or upper floors in order to create an additional story would prevent the desired activation of ground floor uses and the livability of the upper floors, respectively.

The project team is confident that Pyatok and MBH can design this first phase for the development of Blocks 1 through 6 with exceptional buildings that are also consistent with the D4D's design guidelines and development controls. If you would like to follow up this e-mail with a call, please let me know so I can arrange for our appropriate team members to participate.

Regards, Doug

M. Douglas Vu, AICP/ASLA City Planner / Preservation Technical Specialist Southeast Quadrant, Current Planning Planning Department | City and County of San Francisco 1650 Mission Street, Suite 400, San Francisco, CA 94103 Direct: 415-575-9120 | Fax: 415-558-6409 Email: Doug.Vu@sfgov.org Web: www.sfplanning.org

