Responses to Public Comment and Questions Regarding Draft Sustainability Parameters

Balboa Reservoir Community Advisory Committee (CAC)

February 8, 2016

The following matrix contains City staff responses to questions regarding the draft Sustainability parameters. Public comment was raised during 1/11/2016 CAC meeting and in written form before or after the meeting. The original draft parameters and latest revisions can be found at sf-planning.org/brcac.

Principle #1: *[ENERGY] Building on the City's robust energy efficiency requirements, reduce or eliminate greenhouse gas (GHG) emissions from new buildings to the greatest extent feasible. Maximize the use of renewable energy (generated on the Balboa Reservoir site, to the extent feasible) and realize 100% of electricity in all new development from renewable (GHG-free) sources.*

	Question/Comment	City Response
1	I know that wind turbines have come a long way. This is a particularly windy area, as the residents of Sunnyside can probably attest to. Is there any way to harness that as part of any-thing that we end up doing here?	The project will require that renewable energy generation on site be realized to the maximum extent feasible, which could include wind energy, geothermal, solar, etc. As with other parameters, the idea is not to be prescriptive with how the principles and parameters are achieved, but encourage the most innovative and efficient solutions. Any proposal would then undergo environmental review to understand and mitigate potential adverse impacts.
2	I know there is a problem with the whining of the turbines. It's been a few years and every new generation provides better and better green types of implements for buildings. So I'm wondering if that's a possibility now. Because it hasn't work out to the -- it hasn't work out as much as we'd hoped in the past.	See comment 1. Agreed. Technologies, especially in the sustainability sector, continue to improve. This is partly why the RFP seeks to encourage innovative solutions without prescribing specific technologies. Noise is one of many potential impacts studied under environmental review.
3	Provide more examples like the slides with embedding solar in the terra-cotta roof tiles?	As these proposals evolve, the goal is to maximize renewable energy generation in a way that is also aesthetically pleasing, while potentially providing co-benefits like greening. We will continue building our library of case studies and best practices.
4	If there is a concern about using too much	Per Parameter 5d, the project will be planned

	power I want to err on the side of using too much power for electric vehicles because that is very sustainable and it's only going to get cleaner especially when we have zero energy sources.	with sufficient energy supply to meet the demand of the optimum number of electric vehicle charging stations. Per Parameter 1d, buildings will be efficient, solar energy maximized, and renewable and GHG-free energy will provide the energy needed for the site.
5	What if we were able to "store" energy at the site for use in electricity? Homes fed solar connected back to a centralized area for public needs, such as train operation, bus systems, lighting and heating. Solar Battery storage systems are coming more mainline and thus with water-storage, wind, and electricity there could be potential with the geothermal efforts adjacent at CCSF to be thinking outside the box on solutions for energy on the SFPUC site.	Potential innovation 1g has been revised and references the potential for on-site battery storage and other renewable energy / load sharing strategies.
6	Please add the reduction or elimination of emissions from re-grading, and construction, transportation of materials to the site. Including 100% realization of electricity in all new developments AND construction processes on and off-site during manufacturing.	Construction-related emissions, run-off, and transportation impacts are regulated by the San Francisco Green Building Code requirements, which exceed California's requirements related to energy, water, construction debris and occupant health. Similar controls are also part of the LEED analysis, which all City buildings must comply with. The environmental review process analyzes all development proposals for potential impacts and establishes mitigation measures for any findings, such as construction and transportation impacts. (See background information in the December 4th Memorandum to the Balboa Reservoir project for more details.)
7	1.e. please note that a washer/dryer in every unit is not energy efficient. Shared facilities and co-op shared areas are required to reduce actual individual use of facilities.	Noted. Draft Parameter 1a has been amended to include the potential for shared, on-site facilities.
8	1.a. Weight should be given to powering electric cars over traditional cars, even if means using more electric power. The sources of electricity are on a trajectory to become cleaner.	Per Parameter 5d, the project will support an optimal number of electric vehicle (EV) charging stations to encourage EVs over other vehicle fuels.

Principle #2: *[WATER] Building on the City's robust water efficiency requirements, maximize non-potable water use in buildings and open spaces.*

	Question/Comment	City Response
9	With regards, on the aspect of water, the SFPUC CAC has in the past supported water metering allowing each individual housing unit the capability of each knowing how much water they're using so that is a commonly sort of respective water conservation measure. I wanted to take that up as a potential aspect to consider	Providing water consumption information to housing occupants better enables water conservation. Metering individual housing units will be evaluated as part of project development.
10	What is district-scale?	District- (or neighborhood-) scale infrastructure planning seeks to maximize service delivery performance and efficiency, while reducing costs by developing larger consolidated systems that multiple buildings share, rather than individual buildings developing onsite systems. For example, three buildings could connect to one non-potable water system rather than each building requiring a treatment and reuse system. The same concept applies to a large solar installation on one roof that services other buildings that are shadowed and not conducive to producing solar energy.
11	Roofs and gutter systems along with retainage ponds, and reservoirs that collect and process the water and waste systems on site should be included in the overall planning and construction of the facilities.	Yes, the site will be planned to coordinate a variety of stormwater and wastewater management tools that work together to meet the associated requirements and create efficiencies and co-benefits.

Principle #3: *[STORMWATER] Optimize onsite stormwater management to improve water quality and minimize potential for urban flooding and help prevent overflows of the City's combined sewage system into the Bay.*

	Question/Comment	City Response
12	But as the parking lot is now, it is not very sustainable. It is my understanding for a parking lot to actually be sustainable and green it would have to be pebbles and not asphalt. Is that correct?	Potential innovation 3e suggests maximizing permeable paving solutions and technologies in all non-roadway hardscapes; e.g., plazas, parking spaces, sidewalks. See comment 13, below.
13	With regard to permeability, I think it's	A comprehensive stormwater management

	important we also take a look at our sidewalks. … making sure that they can also absorb the water. I was looking at the rain this weekend. Within a couple of minutes the streets were all pretty well flooded.	plan would coordinate both building specific tools and open space/public realm tools to meet all requirements, including the elimination of urban flooding and standing water from the site. The comprehensive plan would include appropriate sidewalk, street, and materials design to optimize drainage and stormwater manage on the site.
14	We should be having things like bulb-outs as far as the permeable sidewalks and to make sure we have our drains before the bulb out and not afterwards.	See comment 13.
15	3.c. We support the parameters, as long as mechanisms are provided to discourage unwanted visitors, such as breeding mosquitoes, that will be attracted to sitting water. Please note that there are numerous skunks, raccoons, coyotes and rats in this area.	Noted, see comment 13. The environmental review process will analyze any development proposal for potential impacts and will require mitigation measures for potentially significant impacts. Likewise, any stormwater storage and use proposal will be carefully reviewed as part of project permitting, as required under the San Francisco Stormwater Management Ordinance.
16	Prior stormwater "water-game" sessions held by the SFPUC at multiple sites (SFSU-CSU and Golden Gate Park) had board games where the majority of people placed large storage and retention facilities at the Balboa Reservoir Site to collect storm and run-off at the high points due to the larger area available on site for collection prior and currently. Designs should prioritize inventive "lake-front" housing solutions that incorporate a water-body as a central element (*Example given prior of Woodlake housing Condo development in San Mateo as an architectural precedent).	As noted in the Sustainability Parameters, a proposed project would be reviewed for compliance with the Stormwater Management Ordinance and Non-Potable Water Ordinance (aka, Mandatory Use of Alternate Water Supplies In New Construction Ordinance), both of which encourage beneficial use of stormwater. SFPUC staff participated in the identified workshops and associated watershed assessment reports (http://sfwater.org/index.aspx?page=615), and will use that information when evaluating project stormwater design and water use proposals required under the two ordinances. See also comment 13.
17	3.c. please include the wording RESERVOIR(S) in the type of stormwater management tools available to be incorporated as design concepts.	3c includes "detention pond," which is a form of stormwater storage reservoir that allows for flexible uses during the drier seasons. Project compliance with the Stormwater Management and Non-Potable Water ordinances may also lead to the use of subsurface stormwater storage tanks; see comment 16.

Principle #4: *[ECOLOGY / GREENING] Connect all residents, workers, and visitors to nature by maximizing habitat supportive trees and landscaping on roofs, streetscapes, and open space areas, as appropriate.*

	Question/Comment	City Response
18	Now that said, when you look at innovative technologies I think we have to look to the long-term too. It's great when it new. Particularly when you look at living walls, green roofs. Looks great when it's new but what does it look like in 5 or ten years? We have examples in this neighborhood showing it can look terrible. So and can add to the long-term cost and up-keep.	All infrastructure and sustainability systems would be required to provide maintenance and operations plans along with necessary funding Any living wall or green roof proposed will incorporate best practices and lessons learned, and address the neighborhood micro-climate
19	Want to reiterate the challenge of green roofs in this neighborhood. If you are going to do anything a green roof is a solar roof.	Living roofs would need to be designed with native, drought tolerant plants known to succeed in the Balboa Reservoir neighborhood micro-climate. Solar systems have been shown to be more efficient when combined with living roof installations.
20	4.c. We'd like to minimize landscaping on the roofs and instead prioritize energy production and storm water management for roofs rather than green roof objectives. This windy location is not ideal for open space and growing trees.	As with other sections of the RFP, rather than prescribe how the principles are achieved, the sustainability parameters encourage the most innovative and efficient solutions appropriate to the site. For example, solar energy systems have been shown to be more efficient when combined with living roof installations. So perhaps there are planting solutions appropriate to the neighborhood that could also improve energy production. Ultimately, design objectives (e.g., energy production, building design, and stormwater management) and site considerations (e.g., wind) are best balanced and explored when a developer, designer, and sustainability specialist are selected. At that point, the community can have a more detailed conversation about particular project elements. City staff invite further community participation in these detailed discussions.
21	4.a. I think a lot of people spoke in favor of Public Park and open space on the site.	Comment noted.

22	4.a. please correct the sentence to include "a comprehensive network of PUBLIC parks,"	This parameter is focused on the creation of ecological habitat and connected corridors, including public and private open spaces. 4a has been revised to clarify this point. The system of public and private open spaces is further addressed in the Public Realm section of the RFP.
23	4.a. please include a reference under item "f" to include in the community garden the idea of "vertical" garden platforms, in public or private areas, and to provide "green-houses" for more difficult to grow plants during winter months.	4f has been revised to include indoor and outdoor community garden spaces.

Principle #5: *[AIR QUALITY] Support a healthy environment by reducing indoor and outdoor air quality impacts, such as toxins in building materials and vehicle idling. NOTE: Outdoor air quality is also enhanced through the "greening" parameters discussed in Principle #4.*

	Question/Comment	City Response
24	I want to come back to zero emission vehicles. And making sure we have at least 110 voltage for all parking spaces so at least everybody has a place to charge; Use electric charging stations as a carrot providing benefits to parking within the site over parking in neighboring residential areas. In garage parking areas which don't have electric charging stations, provide outlets to accommodate transitioning from gas-powered cars to EVs.	See comment 8. It is possible that regulations, voltages or standards will be different in the future. Development will need to accommodate all current (at time of approval) regulations and technical requirements.
25	Ensure that fuel trucks, construction vehicle, worker vehicles are energy efficient and they look at commuting to the site not just driving and parking in the area; please include the review of air impact quality during periods of DEMOLITION and CONSTRUCTION especially for FUEL TRUCKS, and CONSTRUCTION VEHICLES including filters and systems attached to vehicle exhaust to prevent fumes and toxic air around communities and the city during construction.	See comment 6.

26	The other concern is that enforcement of that is a key thing. Enforcements of speed as a transit issue and we also have to have enforcement of idling and lastly micro climate. This is a micro climate here. So when we build up and build big we have to look into and consider what happens with mold and fog. It's something considered on the west side of the city a lot, and most people realize that.	Comment noted. See comment 6 regarding environmental impacts.
27	Regarding 100% renewable energy, there is no mention of energy STORAGE and the possibilities of the large land site housing energy battery storage systems from electricity generation, and water retention and co-generation capability. Solar, Geo-thermal (existing @ CCSF) and possibly connecting this to the requirements for energy creation and storage on site.	See comment 5 and revision to Potential Innovation 1g.
28	Please include the issue of MICRO-CLIMATE conditions on site and the concerns due to the issue of MOLD and fog-conditions, with the increase in height, air-issues arise as was seen on the western side of SF (SFSU-CSU) during construction of towers and bigger buildings, buildings in the shadows of new construction had an increase in mold and north-side wall mold growth where air and sunlight did not reach. Heights of buildings have a direct proportional relationship with air-quality in the western side of SF due to special micro-climates (FOG) and the effects (MOLD) if not designed correctly. Low courtyards help in air-flow and sun-light and reduce mold growth. Residents in units on the west-side of SF typically have to air-out their units frequently to reduce mold growth.	See comment 6 regarding environmental impacts and the revised Principle #5: Air Quality, which encourages building design and materials that address the Balboa Reservoir micro-climate and mitigate potential mold issues. There will also be several future opportunities for public input on design and potential environmental impacts.

Principle #6: *[SOLID WASTE] Achieve the City's Zero Waste goal and a litter-free public realm.*

	Question/Comment	City Response
29	Do the parameters contemplate the waste stream from the construction process? Or is it just for the operation?	See comment 6 regarding minimizing impacts from construction and waste management: See the City's Zero Waste policy as well: *http://www.sfenvironment.org/zero-waste/overview/zero-waste-faq*
30	There's another issue here, we have the SFPUC where they had multiple water games where SFSU as well as at Golden Gate park and during that session most people put large storage facilities of water on the site and included in that was the issue of sewage treatment. We have 2 low lying plants on the east and west side of the city. We do not have a secondary system to deal with waste treatment. So part of the issue of including later on in the principle 6 site organic waste dealing with waste in general should be a serious consideration for any higher level elevation bring it down to 1 site and processing it. Look at downhill theory for waste.	Please see response to Comment 16. Evaluation of project elements for solid waste and sewage/wastewater management, including site-wide considerations, will be evaluated in coordination with a project proposal.
31	Please include in the innovation the use of SITE-based organic waste in local ON-SITE energy production, bio-mass collection and processing on site can lead to direct savings in lessening transit and post production costs, if they can be processed and treated on site, and distributed locally to required areas for re-use.	See Potential Innovation 6g: Use organic waste in local energy production / district energy center

Additional Comments

	Question/Comment	City Response
32	When you talk about inter departmental collaboration I wonder if you can tell us who is representing this interdepartmental collaboration because I hear a lot about that. Sounds like a catch word but doesn't always come out in the wash so maybe you can elaborate about how these standards have come about.	The sustainability strategy is led by the Planning Department with help from the Department of the Environment (Better Roofs policy), Office of Economic and Workforce Development, and the SFPUC. Staff is working together on how the project may best respond to the current regulations in a way that benefits any future user of the site as well as

		the surrounding neighborhood. We are also working to ensure that sustainable and healthy environments are realized in affordable housing as they do in market-rate development. For example, it is critical that affordable housing has the lowest possible utility bills.
33	Got to be green for this neighborhood which has a special unique weather climate to it. And which is great and challenging.	Agreed
34	Partnering with City College as a part of the design for this for actual jobs and how do we build that in so we are training the next generation of green workers as a part of I don't know what the certificate program is at City College right now but that might be an interesting partnership to think about.	Proposing developers are invited to collaborate strategically with local non-profit organizations and/or institutions, such as City College. Those who innovate and present the strongest partnerships will perform better in this regard in the RFP process.
35	Items 1,2,3 please add an item on code requirements on the Feasibility information, code requirements, and a formal study for the inclusion of a larger body of water (Reservoir Development) and the required Army Corp of Engineer's approvals for a new proposal for water-retention on site and processing of water/sewage on site.	Links to information on project development and design requirements are noted in the parameter memo introduction. Relevant non-potable water code can be found at http://library.amlegal.com/nxt/gateway.dll/California/health/article12calternatewatersourcesfornon-po?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$anc=JD_Article12C Stormwater management code is found at: http://library.amlegal.com/nxt/gateway.dll/California/publicworks/article42sewersystemmanagement?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$anc=JD_147 Storage of a "larger body of water" as part of this project is not an expected project element, thus the need for project review by the U.S. Army Corps of Engineers and California Division of Safety of Dams is not anticipated. See response to comment 16 which includes links to information on regulatory review and permit processes for stormwater retention and water reuse.