

**Office of Community
Investment and Infrastructure**
(Successor to the San Francisco
Redevelopment Agency)

One South Van Ness Avenue
San Francisco, CA 94103
415.749.2400



EDWIN M. LEE, Mayor

Mara Rosales, Chair
Marily Mondejar
Darshan Singh
Miguel Bustos

Tiffany Bohee, Executive Director

126-0822014-000

NOTICE OF PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT

Date: November 19, 2014

Case No.: Office of Community Investment and Infrastructure (OCII):
ER 2014-919-97
Planning Department: 2014.1441E

Project Title: **Event Center and Mixed-Use Development at Mission Bay Blocks 29-32**

Zoning: MB-RA; Mission Bay South Redevelopment Plan – Commercial/Industrial/
Retail Designation; Design for Development for the Mission Bay South
Project Area Height Zone 5

Block/Lot: Mission Bay South Redevelopment Plan Blocks 29-32; Assessor's Block 8722,
Lots 001 and 008

Blocks Size: Mission Bay Blocks 29-32: Approximately 11 acres

Project Sponsor: GSW Arena LLC
David Kelly
(510) 986-2200
dkelly@warriors.com

Lead Agency: OCII

Staff Contact: Catherine Reilly, OCII – (415) 749-2516
catherine.reilly@sfgov.org

PROJECT DESCRIPTION

GSW Arena LLC (GSW), an affiliate of Golden State Warriors, LLC, which owns and operates the Golden State Warriors National Basketball Association (NBA) team, proposes to construct a multi-purpose event center and a variety of mixed uses, including office, retail, open space and structured parking on an approximately 11-acre site (Blocks 29-32) within the Mission Bay South Redevelopment Plan Area of San Francisco. The project site is bounded by South Street on the north, Third Street on the west, 16th Street on the south, and by the future planned realigned Terry A. François Boulevard on the east. The proposed event center would host the Golden State Warriors basketball team during the NBA season, as well as provide a year-round venue for a variety of other uses, including concerts, family shows, other sporting events, cultural events, conferences and conventions. GSW has entered into an agreement to purchase the project site from the current site owner, an affiliate of salesforce.com. The project is subject to review under the California Environmental Quality Act (CEQA) and a number of local and state approvals.

FINDING

This project may have a significant effect on the environment and a Subsequent Environmental Impact Report (SEIR) is required. This determination is based upon the criteria of the State CEQA Guidelines, Sections 15063 (Initial Study), 15064 (Determining Significant Effect), and 15065 (Mandatory Findings of Significance), and for the reasons documented in the Environmental Evaluation (Initial Study) for the project, which is attached.

PUBLIC SCOPING PROCESS

The Office of Community Investment and Infrastructure (OCII) will hold a PUBLIC SCOPING MEETING on Tuesday, December 9, 2014, at 6:30 p.m. at the Mission Creek Senior Community, 225 Berry Street, Second Floor Cafeteria, San Francisco. The purpose of this meeting is to receive comments to assist the OCII in reviewing the scope and content of the environmental impact analysis and information to be contained in the SEIR for the project. To request a language interpreter or to accommodate persons with disabilities at the scoping meeting, please contact the staff listed above at least 72 hours in advance of the meeting. Written comments will also be accepted until 5:00 p.m. on December 19, 2014. Written comments should be sent to Tiffany Bohee, OCII Executive Director c/o Brett Bollinger, San Francisco Planning Department, 1650 Mission Street, Suite 400, San Francisco, CA 94103, or by email to warriors@sfgov.org.

If you work for a responsible State agency, we need to know the views of your agency regarding the scope and content of the environmental information that is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency may need to use the SEIR when considering a permit or other approval for this project. Please include the name of a contact person in your agency.

Members of the public are not required to provide personal identifying information when they communicate with the OCII Commission, OCII or the Planning Department. All written or oral communications, including submitted personal contact information, may be made available to the public for inspection and copying upon request and may appear on the OCII or Planning Department's website or in other public documents.

11-17-14
Date


Tiffany Bohee
Executive Director
Office of Community Investment and Infrastructure

INITIAL STUDY

**Event Center and Mixed-Use Development at Mission Bay Blocks 29-32
Office of Community Investment and Infrastructure Case No. ER 2014-919-97
Planning Department Case No. 2014.1441E**

Table of Contents

	<i>Page</i>
List of Abbreviations and Acronyms	iii
A. Project Description	1
A.1 Overview	1
A.2 Background	4
A.3 Project Characteristics	9
B. Project Setting	18
B.1 Mission Bay	18
B.2 Project Site and Existing Uses	18
B.3 Surrounding Uses	20
B.4 Approvals Required	21
C. Compatibility With Existing Zoning And Plans	22
D. Summary of Environmental Effects and Approach to Analysis	22
D.1 Summary of Environmental Effects	22
D.2 Approach to Analysis	22
E. Evaluation of Environmental Effects	27
1. Land Use and Land Use Planning	27
2. Aesthetics	36
3. Population and Housing	38
4. Cultural and Paleontological Resources	45
5. Transportation and Circulation	58
6. Noise	59
7. Air Quality	60
8. Greenhouse Gas Emissions	60
9. Wind and Shadow	61
10. Recreation	61
11. Utilities and Service Systems	64
12. Public Services	73
13. Biological Resources	76
14. Geology and Soils	84
15. Hydrology and Water Quality	93
16. Hazards and Hazardous Materials	106
17. Mineral and Energy Resources	122
18. Agricultural and Forest Resources	126

	<u>Page</u>
F. Mitigation Measures and Improvement Measures.....	127
G. Determination	135
H. Initial Study Preparers	136

Appendices

A. Special Status Species Tables	A-1
--	-----

List of Figures

Figure 1	Aerial Photograph of Mission Bay.....	2
Figure 2	Existing Roadway Network in Mission Bay	3
Figure 3	Land Uses in the Mission Bay Redevelopment Plan.....	5
Figure 4	Conceptual Project Site Plan.....	10
Figure 5	Aerial Photograph of Project Site Vicinity.....	19

List of Tables

Table 1	Summary of Proposed Project Facilities	11
Table 2	Project Employment Population.....	42
Table 3	Estimated Annual Project-Generated Solid Waste.....	70

List of Abbreviations and Acronyms

1990 FEIR	Mission Bay Final Environmental Impact Report
ABAG	Association of Bay Area Governments
AB 26	California Assembly Bill 26
AB 32	California Global Warming Solutions Act (California Assembly Bill 32)
AB 939	California Integrated Waste Management Act of 1989 (California Assembly Bill 939)
AB 900	California Assembly Bill 900
AB 1484	California Assembly Bill 1484
ATCM	Airborne Toxic Control Measure
BAAQMD	Bay Area Air Quality Management District
BMPs	best management practices
Btu	British thermal units
CCSF	City and County of San Francisco
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRHR	California Register of Historical Resources
CSC	California Species of Concern
CSD	combined sewer discharges
CSO	combined sewer overflow
CWA	Federal Clean Water Act
cy	cubic yards
DPH	San Francisco Department of Public Health
DBI	San Francisco Department of Building Inspection
DPW	San Francisco Department of Public Works
EIR	Environmental Impact Report
FARR	Final Archaeological Resources Report
FTE	full-time equivalent

GHGs	Greenhouse gases
gsf	gross square feet
GSW	Golden State Warriors Arena, LLC
HEPA	High Efficiency Particulate Air Filter
HMBP	hazardous materials business plan
I-280	Interstate 280
I-80	Interstate 80
kWh	kilowatt-hours
LEED®	Leadership in Energy and Environmental Design
mgd	million gallons per day
LRDP	Long Range Development Plan
Mission Bay FEIR	Mission Bay Final Environmental Impact Report
Mission Bay FSEIR	Mission Bay Final Subsequent Environmental Impact Report
Mission Bay TMA	Mission Bay Transportation Management Association
MMcf	million cubic feet
MMRP	Mitigation Monitoring and Reporting Program
MLD	Most Likely Descendant
Muni	San Francisco Municipal Railway
NAHC	Native American Heritage Commission
NAVD88	North American Vertical Datum of 1988
NBA	National Basketball Association
NIH	National Institutes of Health
NOP	Notice of Preparation
North Design for Development	Design for Development for the Mission Bay North Project Area
North Plan	Mission Bay North Redevelopment Plan
North Plan Area	Mission Bay North Redevelopment Plan Area
NWIC	Northwest Information Center
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
OCII	Office of Community Investment and Infrastructure
OPA	Owners Participation Agreement
OPR	Governor's Office of Planning and Research
PDA	Priority Development Area

PDR	Production, Distribution, and Repair
Port	Port of San Francisco
RMP	Risk Management Plan
RRMP	Revised Risk Management Plan
ROSE	San Francisco General Plan Recreation and Open Space Element
RWQCB	Regional Water Quality Control Board
SB 743	California Senate Bill 743
Secretary's Standards	Secretary of the Interior's Standards for the Treatment of Historic Properties
SEWPCP	Southeast Water Pollution Control Plant
SEIR	Subsequent EIR
sf	square feet
SFD	San Francisco City Datum
SFPUC	San Francisco Public Utilities Commission
SFFD	San Francisco Fire Department
SFMTA	San Francisco Municipal Transportation Agency
SFUSD	San Francisco Unified School District
SHPO	State Historic Preservation Officer
SoMa	South of Market
South Design for Development	Design for Development for the Mission Bay South Project Area
South Plan	Mission Bay South Redevelopment Plan
South Plan Area	Mission Bay South Redevelopment Plan Area
SVP	Society of Vertebrate Paleontology
SWL	Seawall Lot
SWPPP	Stormwater Pollution Prevention Plan
TACs	toxic air contaminants
TMP	Transportation Management Plan
TSP	Transit Service Plan
UCMP	University of California Museum of Paleontology
UCSF	University of California at San Francisco
U.S. 101	U.S. Highway 101
USFWS	United States Fish and Wildlife Service
UWMP	Urban Water Management Plan
WAS	Water Availability Study

This page intentionally left blank

INITIAL STUDY

Event Center and Mixed-Use Development at Mission Bay Block 29-32 Office of Community Investment and Infrastructure Case No. ER 2014-919-97 Planning Department Case No. 2014.1441E

A. PROJECT DESCRIPTION

A.1 Overview

GSW Arena LLC (GSW), an affiliate of Golden State Warriors, LLC, which owns and operates the Golden State Warriors National Basketball Association (NBA) team, proposes to construct a multi-purpose event center and a variety of mixed uses, including office, retail, open space and structured parking on an approximately 11-acre site (Blocks 29-32) within the Mission Bay South Redevelopment Plan Area of San Francisco (see **Figure 1** for aerial photograph and **Figure 2** for existing roadway network in Mission Bay). The project site is bounded by South Street on the north, Third Street on the west, 16th Street on the south, and by the future planned realigned Terry A. François Boulevard on the east. The proposed event center would host the Golden State Warriors basketball team during the NBA season, as well as provide a year-round venue for a variety of other uses, including concerts, family shows, other sporting events, cultural events, conferences and conventions. GSW has entered into an agreement to purchase the project site from the current site owner, an affiliate of salesforce.com. The project is subject to review under the California Environmental Quality Act (CEQA) and a number of local and state approvals.

Development is allowed within the Mission Bay South Redevelopment Plan Area, including Blocks 29-32, consistent with the land use program and subject to the development controls of the *Mission Bay South Redevelopment Plan*, *Mission Bay South Design for Development*, and other related documents (see *Background*, below). No amendment to the South Plan would be required, although the proposed project at Blocks 29-32 would require certain amendments and/or variations to other documents.

The *Mission Bay Final Subsequent Environmental Impact Report* (Mission Bay FSEIR), certified in September 1998, is a program EIR under CEQA Guidelines 15168 and a redevelopment plan EIR under CEQA Guidelines 15180 (see *Background*, below). The Mission Bay FSEIR analyzed the environmental impacts associated with the development program proposed for the entire plan area, including the program under the Mission Bay South Redevelopment Plan, which includes Blocks 29-32. Thus, under CEQA, the proposed project at Blocks 29-32 is considered a subsequent activity under the Mission Bay South Redevelopment program, and this Initial Study evaluates the environmental effects of the proposed project relative to the certified Mission Bay FSEIR.

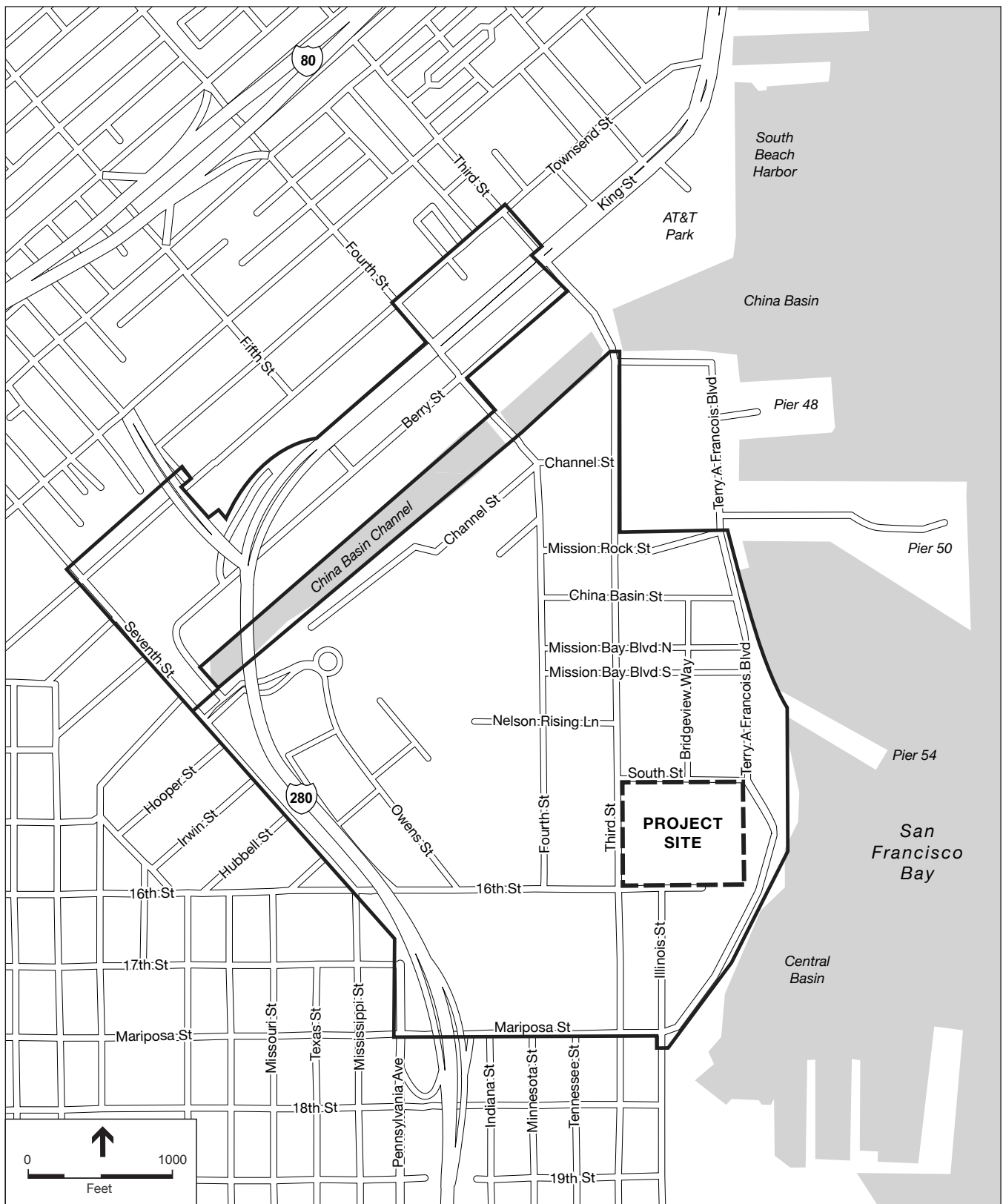
This Initial Study is prepared in accordance with the CEQA Guidelines Section 15063, which provides for preparation of an initial study to determine if a project may have a significant effect on the environment, and with CEQA Guidelines Section 15168(c), which provides for subsequent activities in a program to be examined in the light of a previously certified program EIR. The City's Office of Community Investment and Infrastructure (OCII) is the CEQA lead agency for this project, and has entered into an agreement with the San Francisco Planning Department, Environmental Planning Division, to assist in the preparation of the related environmental review documents.



SOURCE: Google Maps, ESA, 2014

OCII Case No. ER 2014-919-97; Planning Department Case No. 2014.1441E:
Event Center and Mixed-Use Development at Mission Bay Blocks 29-32

Figure 1
Aerial Photograph of Mission Bay



- Mission Bay Redevelopment Plan Area Boundary
- - - Project Site Boundary

SOURCE: ESA, 2014

OCl Case No. ER 2014-919-97; Planning Department Case No. 2014.1441E:
Event Center and Mixed-Use Development at Mission Bay Blocks 29-32

Figure 2
Existing Roadway Network in Mission Bay

This Initial Study, consistent with CEQA Guidelines Sections 15063(b)(1)(C) and 15168(d)(1), provides documentation to determine which of the project's effects were adequately examined in the Mission Bay FSEIR and which topics warrant more detailed environmental analysis (see Section D, Approach to Analysis, below). The topics which warrant more detailed environmental analysis are those that implementation of the proposed project could result in either new significant effects or substantially more severe impacts than were previously identified in the Mission Bay FSEIR. For these topics, a focused environmental impact report (EIR) will be prepared; the focused EIR will be a Subsequent EIR (SEIR) per CEQA Guidelines Section 15162.

A.2 Background

Mission Bay South Redevelopment Plan Approval Process and Prior Environmental Review

On August 23, 1990, the San Francisco Board of Supervisors certified the *Mission Bay Final Environmental Impact Report* (the "1990 FEIR").¹ The 1990 FEIR assessed the development program that was ultimately adopted as the *Mission Bay Plan, an Area Plan of the San Francisco General Plan*. In 1996-97, the former San Francisco Redevelopment Agency, with Catellus Development Corporation as project sponsor, proposed a new project for the Mission Bay area, consisting of two separate redevelopment plans (*Mission Bay North Redevelopment Plan* and *Mission Bay South Redevelopment Plan*) ("North Plan" and "South Plan" or, collectively, the "Plans") in two redevelopment project areas separated by the China Basin Channel.

On September 17, 1998, the San Francisco Planning Commission and the former Redevelopment Agency Commission certified the *Mission Bay Final Subsequent Environmental Impact Report* ("Mission Bay FSEIR").² The Mission Bay FSEIR analyzed reasonably foreseeable development under the Plans. It incorporated by reference information from the original 1990 FEIR that continued to be accurate and relevant for analysis of the Plans. Thus, the 1990 FEIR and the Mission Bay FSEIR together constitute the environmental documentation for the Plans. The 1990 FEIR and Mission Bay FSEIR are program EIRs under CEQA Guidelines 15168 and redevelopment plan EIRs under CEQA Guidelines 15180.

The former Redevelopment Agency Commission adopted the North and South Plans on September 17, 1998, along with the Mission Bay North Owner Participation Agreement (as subsequently amended, the "North OPA") and Mission Bay South Owner Participation Agreement (as subsequently amended, the "South OPA"), which are between the former Redevelopment Agency, now OCII as successor to the Redevelopment Agency, and the Mission Bay Master Developer (originally Catellus Development Corporation and now FOCIL-MB, LLC, the successor to Catellus Development Corporation).³ The land uses in the adopted Mission Bay plan are generally illustrated in **Figure 3**.⁴

¹ Planning Department Case No. 86.505E.

² Planning Department Case No. 96.771E, Redevelopment Agency Case No. ER 919-97.

³ Resolution No. 191-98, and No. 188-98, respectively.

⁴ It should be noted that the land use program in the adopted Mission Bay plan was developed from the proposed plan plus a combination of plan variants described and analyzed in the Mission Bay FSEIR. Specifically, the adopted Mission Bay Redevelopment Plan was based on the plan description in the Mission Bay FSEIR, plus Variant 1 (Terry A. François Boulevard Variant/Expanded Bayshore Open Space Proposal), Variant 2 (Esprit Commercial Industrial/Retail Variant), Variant 3A (Modified No Berry Street Crossing Variant), and Variant 5 (Castle Metals Block Commercial Industrial/Retail Variant). The adopted plan was described in the Mission Bay FSEIR Chapter III, Project Description, and Section VII.G, Combination of Variants Currently under Consideration by the Project Sponsors. The Mission Bay FSEIR concluded that the environmental effects of the combination of plan variants would be similar to those of the proposed plan, and consequently, would not result in any new or substantially more severe significant effects identified in the Mission Bay FSEIR for the proposed plan.



SOURCE: OCII, ESA, 2014

OCII Case No. ER 2014-919-97; Planning Department Case No. 2014.1441E:
 Event Center and Mixed-Use Development at Mission Bay Blocks 29-32

Figure 3
 Land Uses in the Mission Bay Redevelopment Plan

The North and South OPAs incorporated into the Plan the mitigation measures identified in the Mission Bay FSEIR and adopted by the former Redevelopment Agency Commission at the time of Plan approval.⁵ As authorized by the Plans, the former Redevelopment Agency Commission simultaneously adopted design guidelines and standards governing development, contained in companion documents, the Design for Development for the Mission Bay North Project Area (the “North Design for Development”) and the Design for Development for the Mission Bay South Project Area (the “South Design for Development”), respectively.⁶ The San Francisco Board of Supervisors adopted the North Plan on October 26, 1998, and the South Plan on November 2, 1998.⁷ The South OPA has been amended four times, the first amendment dated February 17, 2004, the second dated November 1, 2005, the third dated May 21, 2013, and the fourth dated June 4, 2013.

The Redevelopment Agency has prepared nine addenda to the Mission Bay FSEIR (completed between 2000 and 2013) for specific developments within Mission Bay that required additional environmental review of specific issues beyond those that were covered in the 1998 FSEIR; in all of these cases, none of the conditions triggering a Subsequent or Supplemental EIR were met. These addenda are as follows:

- The first addendum, dated March 21, 2000, analyzed the ballpark parking lots.
- The second addendum, dated June 20, 2001, addressed Infrastructure Plan revisions related to the 7th Street bike lanes and relocation of a storm drain outfall.
- The third addendum, dated February 10, 2004, addressed revisions to the South Design for Development with respect to the maximum allowable number of towers, tower separation, and required setbacks.
- The fourth addendum, dated March 9, 2004, addressed revisions to the South Design for Development with respect to the permitted maximum number of parking spaces for biotechnical and similar research facilities, and specified certain changes to the North OPA to reflect a reduction in permitted commercial development and associated parking.
- The fifth addendum, dated October 4, 2005, addressed revisions to the University of California San Francisco (UCSF) Long Range Development Plan and the Final Environmental Impact Report for the Long Range Development Plan.
- The sixth addendum, dated September 10, 2008, addressed revisions of the UCSF Medical Center at Mission Bay.
- The seventh addendum, dated January 7, 2010, analyzed the development of a Public Safety Building on Mission Bay Block 8 to accommodate the headquarters of the San Francisco Police Department, a local Police Station, and new San Francisco Fire Department station, and adaptive reuse of historic Fire Station 30, along with parking for these uses.
- The eighth addendum, dated May 15, 2013, analyzed amendments to the South Plan and South OPA to allow a mix of hotel, residential, and retail use on Block 1.
- The ninth addendum, dated May 30, 2013, addressed development on Block 7E for a facility housing extended stay bedrooms and associated facilities to support families of patients receiving medical treatment primarily at UCSF’s medical facilities.

⁵ North and South OPAs, Attachment L.

⁶ Resolution No. 191-98 and Resolution No. 186-98, respectively.

⁷ Ordinance No. 327098 North and South OPAs, Attachment L and Ordinance No. 335-98, respectively.

Successor Agency/Oversight Board Jurisdiction

The former San Francisco Redevelopment Agency, along with all 400 redevelopment agencies in California, was dissolved on February 1, 2012, by order of the California Supreme Court in a decision issued on December 29, 2011 (*California Redevelopment Association et al. v. Ana Matosantos*). On June 27, 2012, the California Legislature passed and the Governor signed Assembly Bill (AB) 1484, a bill making technical and substantive changes to AB 26, which was the original bill that resulted in the dissolution of all redevelopment agencies. (Together, AB 26 and AB 1484 are referred to as “Dissolution Law,” which is codified at California Health and Safety Code Sections 34161 – 34191.5). In response to the Dissolution Law the San Francisco Redevelopment Agency became the Successor Agency to the Redevelopment Agency of the City and County of San Francisco (Successor Agency), commonly known as the Office of Community Investment and Infrastructure (OCII). Pursuant to state and local legislation, the Successor Agency is governed by two bodies, the Oversight Board of the Successor Agency and the Commission on Community Investment and Infrastructure.

On January 24, 2012, the Board of Supervisors of the City and County of San Francisco adopted Resolution No. 11-12 in response to the Supreme Court’s December 29, 2011 decision upholding AB 26. On September 25, 2012, the Board of Supervisors adopted Ordinance No. 215-12 in response to the Governor’s approval of AB 1484. Together, these two local laws (“Successor Agency Legislation”) create the governing structure of the OCII. Pursuant to the Successor Agency Legislation, the Commission on Community Investment and Infrastructure exercises certain land use, development and design approval authority for the Mission Bay North and Mission Bay South Plan areas (and other major approved development projects), and the Oversight Board exercises certain fiscal oversight and other duties required under the Dissolution Law.

South Plan Area Development Controls

The primary development controls for the Mission Bay South Redevelopment Plan Area (“South Plan Area”) are the South Plan and the South Design for Development, which together specify development standards for the project site at Blocks 29-32, including standards and guidelines for height, setbacks, and coverage. In accordance with California Community Redevelopment Law, when the Board of Supervisors approved the South Plan in 1998, land use and zoning approvals within Mission Bay came under the jurisdiction of the former Redevelopment Agency, now OCII, as described above. Together, the South Plan and South Design for Development constitute the regulatory land use framework for the project site, and they supersede the City’s *Planning Code*, except as otherwise specifically provided in those documents and associated documents for implementing the Plans.

The infrastructure serving the South Plan Area is provided by the master developer, FOCIL-MB, LLC, consistent with the South OPA, including the Mission Bay South Infrastructure Plan (Attachment D to the South OPA). The South OPA includes triggers for the phasing of required infrastructure improvements based on adjacency, ratios, and performance standards to ensure that the master developer phases the required infrastructure to match the phasing of private development occurring on adjacent blocks. In addition to the South Plan and South Design for Development, the other major development controls that apply to the project site include:

- Mitigation measures included in the Mission Bay FSEIR and which OCII has identified as required to be implemented by the developer of the project site;
- All other associated adopted plans and documents that apply in the South Plan Area under the Plan and OPA, such as the 1999 Mission Bay Risk Management Plan, with amendments (including Article 22A of the San Francisco Health Code for analyzing soils for hazardous waste), Mission Bay South Streetscape Master Plan, and Mission Bay South Signage Master Plan; and
- Other adopted City plans and regulations that apply in the South Plan Area, such as the San Francisco Building Code; Chapter 7 of the San Francisco Environment Code, “Resource Efficiency Requirements,” and any engineering requirements applicable under City Code to the development.

Relevant portions of the South Plan and South Design for Development as they pertain to Blocks 29-32 are described below.

South Plan Development Controls for Blocks 29-32

In addition to providing overall planning objectives for the plan area, the South Plan designates land uses for specific parcels. Proposed land uses to be permitted for Blocks 29-32 are designated as Commercial Industrial/Retail (Attachment 3 of the South Plan), and the plan provides for either principal or secondary uses at this site. Primary uses are permitted in accordance with the plan’s provisions, and secondary uses are permitted provided that such use generally conforms with redevelopment objectives and planning and design controls established pursuant to this plan. The OCII Executive Director must make a determination that secondary uses make a positive contribution to the character of the plan area, and that the secondary use “will provide a development that is necessary or desirable for, and compatible with, the neighborhood or the community.”

The South Plan identifies the following principal uses under the Commercial Industrial/Retail land use designation applicable to Blocks 29-32: manufacturing; institutions; retail sales and services; arts activities and spaces; office use; home and business services; animal care; wholesaling; automotive; and other uses (e.g., greenhouse, nursery, open recreation and activity areas, parking and certain telecommunications-related facilities). The following secondary uses are identified: institutions, assembly and entertainment, and other uses (public structure or use of a nonindustrial character).

The South Plan also describes general controls and limitations for development, and sets limits on leasable square footages of various uses within defined zones within the plan area, including the project site. The plan sets a maximum floor area ratio of 2.9 to 1 for the commercial industrial/ retail uses at the project site, and the maximum building height within the entire plan area is 160 feet. The plan further indicates that within the limits, restrictions and controls established in the plan, OCII is authorized to establish height limits of buildings, land coverage, density, setback requirements, design and sign criteria, traffic circulation and access standards and other development and design controls in the Design for Development.

South Design for Development Controls for Blocks 29-32

The Mission Bay South Design for Development, a companion document to the South Plan, contains the design standards and design guidelines applicable to Blocks 29-32. The project site is within Height Zone 5,

which specifies that 7 percent of the developable area (within the entire height zone) may be occupied by a maximum of three towers up to 160 feet in height, and the remaining 93 percent of the development could be at a maximum of 90 feet. However, buildings along Terry A. François Boulevard, including Blocks 30 and 32, may not exceed 90 feet in height, and no towers are permitted on Blocks 30 and 32.

Within this Height Zone 5, the South Design for Development also establishes bulk limits for development at a height greater than 90 feet (i.e., towers). The maximum tower length above 90 feet is 200 feet, and the maximum floor plate is 20,000 square feet. Further, the South Design for Development identifies setback requirements applicable to Blocks 29-32, with a minimum of 5 feet along Third Street and 20 feet along 16th Street; these setbacks are in addition to specified sidewalk widths on these streets and may be used for paved pathways and landscaping as appropriate. The minimum streetwall height is 15 feet.

Design guidelines for Commercial/Industrial buildings along the Bayfront Park (adjacent to the project site) indicate that homogeneous and unrelieved façades should be avoided. Design guidelines for city-serving retail uses at Blocks 29-32 include: street level frontage should provide visually interesting features; the block façade line should be consistent with block development throughout Mission Bay; and curb cuts are strongly discouraged along Third Street.

A.3 Project Characteristics

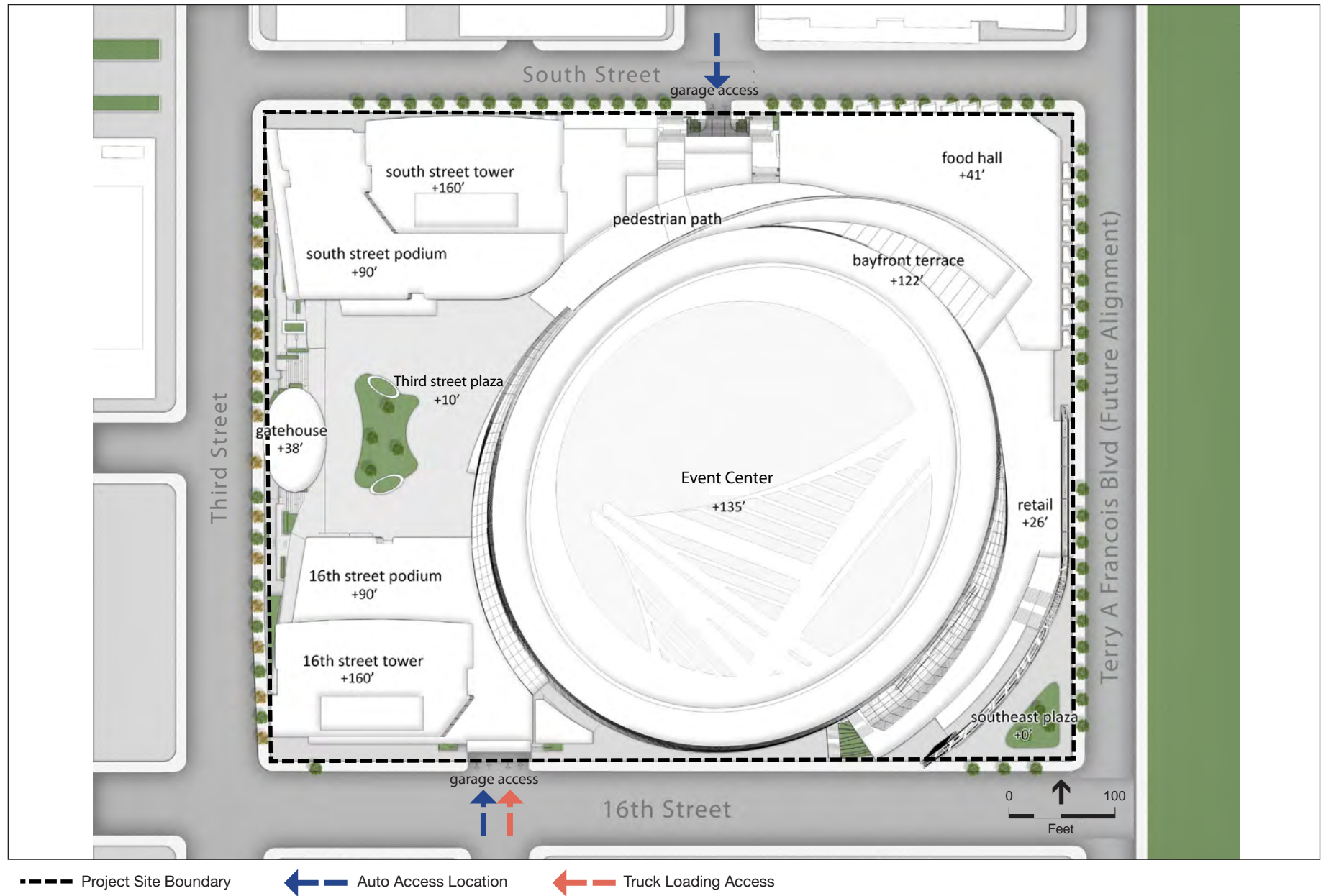
Proposed Facilities

Development Plan Overview

Under the project, Blocks 29-32 would be developed with a multi-purpose event center and a variety of mixed uses, including office, retail, open space and structured parking on the approximately 11-acre site. **Figure 4** presents the conceptual project site plan, illustrating primary project features and associated building heights.⁸ **Table 1** provides a summary overview of the key characteristics of the project facilities.

The proposed roughly circular-shaped event center building would be located in the central-east portion of the site. The event center building would be approximately 135 feet at its roof peak, and would include multiple levels of varying elevations. The event center would include a wide variety of facilities, including spectator seating and suites, restaurants/bars and clubs, meeting rooms; spectator support facilities such as food service/kitchens, concessions, merchandising and restrooms; Golden State Warriors management offices and practice facility; media support facilities, and event center operations such as loading, staging and marshaling areas, mechanical/electrical/ plumbing space and storage and maintenance facilities. Two

⁸ For purposes of this Initial Study, ground elevations and building heights, except where noted otherwise, are as measured relative to San Francisco City Datum (SFD). SFD establishes the City's zero point for surveying purposes at approximately 8.6 feet above the mean sea level established by 1929 U.S. Geological Survey datum, and approximately 11.3 feet above the current 1988 North American Vertical Datum. Note there is also a Mission Bay Datum, equal to SFD + 100 feet. It should also be noted the method used in this Initial Study for measuring building heights differs from that specified in Section 102.12 of the San Francisco Planning Code, which provides a method for measuring building heights for purposes of consistency with the Planning Code. Under Section 102.12, building heights are generally measured from the height of the curb of the sidewalk most proximate to the property.



SOURCE: Manica Architecture, 2014

Note: Elevation values as measured relative to San Francisco City Datum

OCII Case No. ER 2014-919-97; Planning Department Case No. 2014.1441E:
Event Center and Mixed-Use Development at Mission Bay Blocks 29-32

Figure 4
Conceptual Project Site Plan

TABLE 1
SUMMARY OF PROPOSED PROJECT FACILITIES

Project Component	Characteristic
Event Center Basketball Seating Capacity	18,064 seats ^a
Size	Total GSF
Event Center ^b	750,000
Golden State Warriors Office Space	25,000
Office Space	580,000
Retail Space ^c	125,000
Parking and Loading	<u>475,000</u>
Total Building Area	1,955,000 GSF^d
Height^e/Levels	
Event Center	135 feet
Office and Retail Buildings	160 feet (11 stories) total [90-foot (6-story) podiums with 70-foot (5-story) towers above]; retail uses within street level and plaza-level floors
Retail-only Buildings	41 feet in market hall building northeast corner of site; 38 feet in gatehouse building along Third Street
Parking/Loading Spaces	Blocks 29-32: 950 parking stalls below-grade or at-grade (concealed by Third Street Plaza) 13 truck docks below-grade Existing off-site at 450 South Street Parking Garage: 132 parking stalls
Vehicular Access	Access point for autos and all large trucks on 16th Street at Illinois Street Access point for autos and small trucks on South Street at Bridgeview Way
Open Space	3.2 acres

NOTES:

GSF = gross square feet.

^a Presented maximum seating capacity is for basketball games. However, as discussed under *Proposed Operations and Employment*, below, there would other types of events at the event center, including certain concerts and conventions, that would be able to accommodate a maximum attendance of up approximately 18,500 patrons.

^b The event center would include a variety of supporting uses, including Golden State Warriors practice facility and management offices, bayfront terrace, limited retail, and other uses. For purposes of estimating areas, the Golden State Warriors management office space square footage is presented separately from square footage of the other event center uses.

^c Proposed retail uses are approximately 51,500 GSF sit-down restaurant, 11,000 quick-service restaurant, and 62,500 GSF soft goods retail including food retail.

^d The CEQA analyses are based on gross square footage. However, the Mission Bay South Redevelopment Plan permits development based on adjusted gross square footage and leasable square footage. Gross Square Footage and Leasable Square Footage as defined in the Mission Bay South Redevelopment Plan for this project would be less than the gross square footage presented in this environmental document.

^e Building heights as measured relative to San Francisco City Datum (SFD). Excludes unoccupied top floor level with mechanical equipment.

SOURCE: Manica Architecture, 2014

office and retail buildings would be located on the west side of the project site, at the corner of Third Street and South Street (northwest corner of site) and at the corner of Third Street and 16th Street (site southwest corner). The two office and retail buildings would each consist of 11 stories (160 feet tall); each office and retail building would consist of a podium ground level plus 5 podium levels (90 feet tall), with a 5-story (70-foot) tower (with smaller floorplate than the podium) above. These buildings could serve a variety of office and/or research and development uses. Retail uses would occupy several areas of the site, including the lower floor(s) of the two office and retail buildings, within or adjacent to certain plaza-facing areas of the

event center (including in the 38-foot high “gate house” building located along Third Street), and 41-foot high retail building along Terry A. François Boulevard and South Street.

Three levels of enclosed on-site parking (two below grade, and one at street level) providing 950 parking spaces would be located below the office and retail buildings and plaza areas. (See also *Off-site Parking Facilities*, below.) Approximately 3.2 acres of open space would be located on-site, including a proposed Third Street Plaza (elevated at approximately 8 feet above Third Street) on the west side of the project site between the event center and Third Street, and a proposed ground-level Southeast Plaza in the southeastern corner of the site.⁹ These plazas would be connected by a pedestrian ramp wrapping around the exterior of the north and eastern-sides of the event center, and an outdoor covered passageway, or atrium, wrapping around the southwest portion of the event center.

While the project would not be subject to the City’s *Standards for Bird-Safe Buildings*, the project sponsor proposes to incorporate bird-safe measures that would reduce the potential effects of the project on birds.

Vehicular Access and Circulation

All vehicular ingress/egress for the garage would occur at 16th Street (at Illinois Street) or South Street (at Bridgeview Way). The 16th Street driveway would serve as the primary vehicular access point for autos to the parking garage, and the sole access point for trucks to the below-grade loading docks. Most proposed loading and service areas would be located on the lower level, while one loading slip would be provided at grade (concealed from view beneath the pedestrian path) to serve retail located at the site’s northeastern corner. A total of 13 truck docks would be provided to serve the event center and office and retail uses. The South Street driveway would provide a secondary access for autos to the garage and small delivery trucks for retail located at the site’s northeastern corner. (See also *Proposed Operations*, below, for a description of the proposed *Transportation Management Plan* that the sponsor would implement as part of the project.)

Pedestrian and Bicycle Access

The primary pedestrian access to the event center for large attendance events would be via the Third Street Plaza. The Southeast Plaza would serve as a primary pedestrian access for smaller-attendance events, and as a secondary access point for large-attendance events. Pedestrian access to the two office and retail buildings would be available on South and 16th Streets and from the Third Street plaza, with additional access to ground-floor retail uses within those buildings available via South and Third Streets. The retail buildings in the northeast corner of the site would be accessed directly via Terry A. François Boulevard and South Street. New sidewalks would be constructed along the perimeter of the project site.

Bike storage rooms would be located in each of the proposed office and retail buildings. Bike parking and storage racks would also be available at various locations along the perimeter of the project site, with bike valet service in proximity to the site and temporary bike corrals located within the plaza areas to serve patrons as needed.

⁹ It should be noted that midpoint on the sidewalk on Terry A. François Boulevard adjacent to the site is approximately 0 feet SFD, and midpoint on the sidewalk on Third Street adjacent to the site is approximately 2 feet SFD.

Infrastructure Improvements

The project proposes all new utility infrastructure facilities on-site, including water supply (low- and high-pressure water lines and recycled water lines); wastewater collection; storm drainage; electrical/gas, and communications. Infrastructure and utilities within adjacent streets that serve the project site are provided by the master developer, FOCIL-MB, LLC, as part of the Mission Bay South Infrastructure Plan.

Off-Site Parking Facilities

As part of the project, the sponsor has acquired 132 existing off-site parking spaces in the 450 South Street parking garage, accessed from South Street and Bridgeview Way directly north of the project site, to provide additional parking to serve the project.

Sustainability

The proposed development would be subject to a number of sustainability requirements, including the California CalGreen Code, City of San Francisco Green Building Code, Design for Development for the Mission Bay South Area, and the 2012 NBA Arena Design Standards – Sustainability Requirements. The project would be designed to Leadership in Energy and Environmental Design (LEED®) Gold standards using a campus approach, whereby each individual proposed structure as well as the overall site would qualify for individual Gold ratings.¹⁰ This would be achieved through incorporation of a variety of design features and implementation of practices during construction and operation to provide energy and water conservation and efficiency, encourage alternative transportation, promote a healthy indoor environment, minimize waste, and maximize recycling opportunities.

South Plan Improvements Planned in the Vicinity of the Project Site: Terry A. François Boulevard Realignment and Public Access Improvements at Bayfront Park

Pursuant to the Mission Bay Plan and not part of the proposed project, development of Blocks 29-32 would trigger the realignment of Terry A. François Boulevard to extend adjacent to the east side of Blocks 29-32, and the construction of public access improvements at Bayfront Park east of this realigned roadway. The realigned Terry A. François Boulevard would contain four travel lanes (two northbound and two southbound) plus two parking lanes; and - on the east side of the roadway – a two-way cycletrack (bike path) separated from the roadway by a raised buffer.

Following realignment of Terry A. François Boulevard, Bayfront Park would be improved and expanded to 5.5 acres, encompassing an area roughly south of Pier 54, north of 16th Street, east of Terry A. François Boulevard, and west of the Bay shoreline. Both the realignment of Terry A. François Boulevard and Bayfront Park public access improvements would be implemented by the master developer, FOCIL-MB, LLC, prior to occupancy of buildings at the project site.

¹⁰ The Leadership in Energy and Environmental Design (LEED®) is a program developed and administered by the U.S. Green Building Council that provides third-party verification of green building projects. LEED® uses a green building rating system designed to reduce the negative environmental impacts of buildings and improve occupant health and well-being. Building projects satisfy prerequisites and earn points to achieve different levels of certification.

Proposed Operations and Employment

Under the project, the event center at Blocks 29-32 would serve as the new venue for the Golden State Warriors home games, and provide a year-round venue for a variety of other uses, including concerts, family shows, other sporting events, cultural events, conferences and conventions. The event center would be used for up to approximately 225 events per year, with events ranging in capacity from approximately 3,000 up to about 18,500. All existing Golden State Warriors operations, including management offices and practice facility, would relocate from their existing facilities in Oakland to the new event center. The proposed office and retail facilities on Blocks 29-32 would operate year-round, independent of the event center operations. The following provides additional information for each of the proposed new operational components at Blocks 29-32.

Event Center Programming

Golden State Warriors Games. Under the project the Golden State Warriors would host two to three preseason basketball games (in mid- to late October) and 41 regular season basketball games (from late October to mid-April) at the event center. If the Golden State Warriors reach the postseason, they would host anywhere from 2 to 16 playoff games (from mid-April to mid-June). The large majority of Golden State Warriors home basketball games would start at 7:30 p.m. and conclude between 10:00 p.m. and 10:30 p.m. The home game schedule at the proposed event center would be similar to the Warriors schedule at Oracle Arena, the team's existing home venue in Oakland.

As described in Table 1, the maximum basketball seating capacity at the event center would be 18,064, less than the maximum basketball seating capacity of approximately 19,600 at Oracle Arena. The average basketball attendance levels at the proposed event center are estimated to be approximately 17,000 during the regular season, with regular season and post-season attendance reaching the maximum capacity of 18,064.

It is estimated that approximately 1,000 day-of-game non-Warriors employees¹¹ would be required on game days at the event center to work in various operations and jobs, including security, ushers, ticket takers, team store, food service, cleaning crew, scoreboard/video operators and other event-related operations. In addition, up to 100 Golden State Warriors' employees (e.g., representatives from Warriors sales, services, marketing and game operations) would work at the games at the event center (please see additional detail of Golden State Warriors employment under *Golden State Warriors Operations*, below).

Non-Golden State Warriors Events at the Event Center. The event center would serve as a venue for a variety of non-Golden State Warriors events throughout the year, including concerts, family shows, other sporting events, and conventions/corporate events. Approximately 160 non-Golden State Warriors game events would occur annually at the event center, that could typically include the following:

¹¹ This event center day-of-game employee estimate does not include Warriors employees that would occupy the management offices in the event center and employees of the proposed retail uses on the project site, both of which are described separately, below.

- *Family Shows:* It is estimated that the event center would host 55 family shows per year. Examples of family shows include Disney on Ice, Disney Live, Harlem Globetrotters, and Sesame Street Live. Family show series would typically occur over a five-day block of time (Wednesday through Sunday) during which time as many as 10 total performances would occur in the daytime and evening periods. Estimated average attendance would be approximately 5,000 patrons, and estimated maximum attendance would be approximately 8,200 patrons.
- *Full Arena Concerts:* It is estimated that the event center would host 30 full arena concerts per year. Concerts would typically occur on Friday and Saturday evenings within a 7:30 p.m. to 10:30 p.m. window. Attendance would vary depending on the artist and stage configuration. Estimated average attendance would be approximately 12,500 patrons with a maximum capacity of about 18,500.¹²
- *Arena Theater Concerts:* It is estimated that the event center would host 15 arena “theater” (cut-down arena) concerts per year. Concerts typically occur on Friday and Saturday evenings within a 7:30 p.m. to 10:30 p.m. window. Attendance would vary depending on the artist and cut-down configuration. Estimated average attendance would be approximately 3,000 patrons.¹³
- *Other Sporting Events:* It is estimated that the event center would host 30 non-Warriors sporting events per year. Examples of non-Warriors sporting events include college basketball, hockey, boxing, figure skating, arena football, gymnastics, lacrosse, tennis, and mixed martial arts. These events could be professional, collegiate, or amateur competitions. Estimated average attendance for other sporting events would be 7,000 patrons per event, and estimated maximum attendance of 18,064 (consistent with maximum seating capacity for Warriors games). These events would be distributed throughout the year and have variable start times.
- *Conventions, Conferences and other Events:* It is estimated that the event center would host 31 events annually related to conventions, conferences, cultural events, civic events, corporate events, and other gatherings, with an estimated average attendance level of 9,000 patrons and maximum attendance of 18,500 patrons. For smaller events the event center would be configured to reduce the perceived bowl volume to create a more intimate experience. These events would be distributed throughout the year and have variable start times; however, the majority of events are expected to occur during day time hours, consistent with typical events at the Moscone Convention Center.

It is estimated that day-of-event employees for non-Golden State Warriors events at the event center would range from 675 to 1,000, depending on the specific event and anticipated attendance levels.

(Please see also *Golden State Warriors Operations* and *Office and Retail Uses*, below, for a description of operations and additional employment associated with the Golden State Warriors, and for office and retail uses.)

¹² The event center design would allow for an end-stage concert configuration that would accommodate up to 14,000 patrons. It is estimated that nearly 90 percent of concerts would use the end stage configuration. Occasionally, concerts would occur in a 360-degree center-stage configuration which would accommodate a maximum attendance of approximately 18,500 patrons. However, no more than four center-stage concerts are expected per year.

¹³ The cut-down arena theater design would allow for a concert with up to 4,000 attendees.

Potential Outdoor Events at the Project Site

The proposed Third Street Plaza would provide opportunities for public gatherings and events, such as spring festivals, Cinco de Mayo celebration, summer film series, fall festival/pumpkin patch, and winter tree lighting ceremony/ice skating rink.

Golden State Warriors Operations

The Golden State Warriors organization currently includes approximately 150 full-time equivalent (FTE) employees, and associated operations are based in Oakland. Under the project, all existing Golden State Warriors employees and operations, including management offices and practice facility, would relocate to the project site at Mission Bay. Furthermore, the Golden State Warriors estimate that up to 105 additional FTE employees would be required for year-round event center and site management, for a total estimated Golden State Warriors employment of 255 FTE employees.

Office and Retail Uses

The proposed office uses on the site would be expected to operate similar to other existing office developments within Mission Bay, and is estimated to generate approximately 2,101 FTE employees.¹⁴ The proposed retail uses, including restaurants and other food and beverage service, would operate seven days a week, year-round, independently of the event center operations. It is estimated that the uses within the retail areas would require approximately 372 FTE employees.¹⁵

Transportation Management Plan

As part of the project, the project sponsor would prepare and implement a Transportation Management Plan (TMP) to manage on- and off-site access for all anticipated travel modes (including vehicles, transit, pedestrians, and bicyclists) during project operation for events and activities at the project site. The TMP would identify a range of transportation control strategies for various operational scenarios at the project site, including strategies for non-event and event days; communication strategies for public outreach and wayfinding measures; transportation demand management strategies; and monitoring methods for TMP strategies to ensure effectiveness.

In addition, the project sponsor would participate in the existing Mission Bay Transportation Management Association (TMA) shuttle service program. Sponsor participation in the TMA shuttle service program would allow for potentially expanded Mission Bay TMA shuttle service, as needed during evenings and weekends.

¹⁴ Based on San Francisco Planning Department's Transportation Impact Analysis Guidelines rate of 350/240/350 (Sit-down/QSR/In-line) gross square feet per FTE employee.

¹⁵ Based on San Francisco Planning Department's Transportation Impact Analysis Guidelines rate of 276 gross square feet per FTE employee.

Pre-Construction Testing

Prior to finalizing the project design, in order to inform design and reduce the risk of construction delays due to the potential presence of archaeological resources, the project sponsor is retaining the services of an archaeologist to develop and implement a program of archaeological testing at Blocks 29-32. The results of the archaeological testing will be used to develop a construction monitoring program to ensure potential effects on subsurface archaeological resources would be avoided or minimized prior to the commencement of ground disturbance activities, foundation excavation and pile driving. In addition, the project sponsor will conduct a pile test program at Blocks 29-32 to determine site-specific pile installation methods and requirements.

Construction

Construction of the proposed project is anticipated to begin in late 2015, and occur over an approximate 26-month period. Construction activities would include, but not be limited to: site demolition, clearing and excavation; dewatering; pile installation and foundation construction; construction of all proposed development, including event center, podium structure, office towers and plazas; installation of associated utilities; interior finishing; and exterior hardscaping and landscaping improvements. The sponsor estimates that the maximum depth of excavation on-site would be approximately 30 feet below San Francisco City Datum; this would require approximately 350,000 cubic yards of soils on-site to be excavated and removed from the site. The sponsor proposes alternative methods to pile driving for installation of piles at the project site (e.g., auger pile installation). The sponsor is also considering multiple approaches to address potential groundwater infiltration to proposed below grade facilities and potential localized flooding, including a waterproofing design and implementation of adaptive management strategies. The sponsor indicates the proposed design would preclude the need to conduct any long-term dewatering of the project site during project operation.

The majority of the construction is proposed to occur Monday through Friday, although some construction activities would occur on nights and weekends. A typical work day shift would be between 7:00 a.m. and 6:00 p.m., and a typical second shift (i.e., for below-grade and interior work within buildings) would be between 4:00 p.m. and 12:30 a.m. There would also be the potential for overnight deliveries of materials and/or equipment. All construction activities are proposed to be conducted within allowable construction requirements permitted by City code. The project would also be subject to the Mission Bay Good Neighbor Policy, which limits extreme noise-generating activities in Mission Bay to Monday to Friday from 8:00 a.m. to 5:00 p.m.¹⁶

¹⁶ The Mission Bay Good Neighbor Policy specifies that pile driving or other noise generating activity (80 dBA at a distance of 100 feet) shall be limited to 8:00 am to 5:00 pm, Monday through Friday. No pile driving or other extreme noise generating activity is permitted on Saturday, Sundays and holidays. Requests for pile driving on Saturdays may be considered on a case by case basis by OCII with approval at the sole discretion of the OCII Executive Director.

B. PROJECT SETTING

B.1 Mission Bay

Before 1998, Mission Bay was characterized by low-intensity industrial development and vacant land. Since adoption of the North and South Plans in 1998, Mission Bay has undergone redevelopment into a mixture of residential, commercial (light industrial, research and development, labs and offices), retail, and educational/institutional uses and open space. As of 2014, 4,067 housing units (including 822 affordable units) of the planned 6,400 housing units within Mission Bay (roughly 64 percent) are complete, with another 900 (including 150 affordable units) under construction. Regarding office and laboratory space, approximately 1.7 million square feet of the 4.4 million square feet in the Mission Bay plan area (approximately 39 percent) is complete. Approximately 60 percent of the approved 2.65 million-square-foot UCSF research campus has been developed, including seven research buildings, a campus community center, and a university housing development. The first phase of the UCSF Mission Bay Medical Center is expected to open in early 2015. Construction of the City's new Public Safety Building at Third and Mission Rock Streets is completed and will be operational in early 2015. More than 15 acres of new non-UCSF parks and open space within Mission Bay have also been completed.

B.2 Project Site and Existing Uses

Figure 5 presents an aerial map of the project site vicinity. The approximate 11-acre project site encompasses Blocks 29, 30, 31, and 32 within the Mission Bay South Redevelopment Plan Area. The project site consists of the majority of Assessor's Block 8722, Lot 001, and all of Assessor's Block 8722, Lot 008. The project site is bounded by South Street on the north, Third Street on the west, 16th Street on the south, and by the future planned realigned Terry A. François Boulevard on the east. The City has designated the Mission Bay South Redevelopment Plan Area as a Priority Development Area (PDA). The project site is also located in the southeast corner of the City's South of Market neighborhood, and just north of the City's Potrero Hill and Dogpatch neighborhoods.

The site is relatively level, with the majority of the ground surface elevations ranging between approximately -1 foot to +3 feet San Francisco City Datum (SFD), roughly equivalent to 6½ to 10½ feet above mean sea level. Paved surface metered parking facilities currently operate in the west and north portions of the site. Lot E, accessed from 16th Street, contains 289 parking spaces; and Lot B, accessed from South Street, contains 316 parking spaces, for a total of 605 parking spaces. These parking facilities contain night lighting. Immediately east of, and adjacent to, Parking Lot B is a depressed area (measuring approximately 320 feet by 280 feet) created by an excavation and backfill associated with a prior environmental cleanup of that portion of the site. A surface swale extends west within this portion of the site to allow for drainage of surface water into the depression.¹⁷ Chain link fencing is installed on the perimeter of the project site, and around Parking Lots B and E within the site.

¹⁷ Langan Treadwall Rollo, *Updated Phase I Environmental Site Assessment, Mission Bay Blocks 29-32, San Francisco, California*, April 11, 2014.

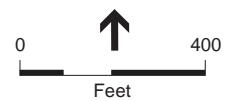


— Mission Bay Redevelopment Plan Area Boundary

- - - Project Site Boundary

▨ MUNI UCSF/Mission Bay Station

▨ MUNI Third and Mariposa Street Station



SOURCE: Google Maps, ESA, 2014

OCII Case No. ER 2014-919-97; Planning Department Case No. 2014.1441E:
Event Center and Mixed-Use Development at Mission Bay Blocks 29-32

Figure 5

Aerial Photograph of Project Site Vicinity

B.3 Surrounding Uses

The University of California at San Francisco (UCSF) Mission Bay campus is located west, northwest, southwest, and partially south of the project site. Fronting on Third Street directly west of the project site is an eight-story UCSF parking structure (Third Street Garage), and new construction of the UCSF Global Health and Clinical Sciences Building (Mission Hall). To the northwest of the project site fronting along Third Street is UCSF Hearst Tower, a 14-story building containing student housing; and to the north of that, the UCSF Helen Diller Family Cancer Research building. To the southwest of the project site fronting along Third Street is new construction of the UCSF Energy Center, Betty Irene Moore Women's Hospital, Bakar Cancer Hospital and Benioff Children's Hospital. Directly south of the project site across 16th Street, between Third Street and Illinois Street, is a vacant lot recently acquired by UCSF. UCSF is currently preparing a new Long Range Development Plan to guide future campus growth and development at its facilities, including the UCSF Mission Bay campus, through 2035.

Directly south of the project site across 16th Street, between Illinois Street and Terry A. François Boulevard, is a recently-constructed six-story office building (409 Illinois Street) housing Fibrogen Life Science and other biotech/high tech companies, and south of that another recently-constructed six-story office building (499 Illinois Street). Directly north of the project site across and fronting on South Street are (from west to east) a vacant lot (recently acquired by Uber Technologies and Alexandria Real Estate Equities), a six-story parking garage (450 South Street), and a six-story office building housing the Old Navy corporate headquarters. Immediately east of the project site and west of Terry A. François Boulevard are City-owned parcels containing covered stockpiled materials. Further east of the project site across Terry A. François Boulevard is the site of the planned Bayfront Park; this area presently includes a paved trail (which constitutes a segment of the Bay Trail), surface parking lot, and unimproved open space.

Third Street, a north-south major arterial roadway defined as a Transit Important Street in the San Francisco General Plan, extends along the west project site boundary providing access to and from downtown San Francisco to the north and the Bayview neighborhood to the south. Third Street contains two vehicular travel lanes in each direction, separated by a paved median and Muni light rail tracks. Muni light rail lines K-Ingleside and T-Third Street operate along The Embarcadero, with the Muni UCSF/Mission Bay Station located at South Street and the Muni Third & Mariposa Street Station located one block south of the project site. Muni bus routes 91 and T-Owl operate along Third Street, with a Muni bus stop located north of the project site on Third Street. Campus Lane, a two-lane east-west local street, terminates at the intersection with Third Street, directly across from and west of the project site.

16th Street extends east of Third Street along a portion of the south project site boundary, terminating just east of Illinois Street. There are two vehicular travel lanes on 16th Street adjacent to the project site, increasing to four lanes west of Third Street. Bollards installed on 16th Street east of Illinois Street prevent through vehicular travel between Third Street and Terry A. François Boulevard. 16th Street is defined as a secondary arterial west of Third Street in the San Francisco General Plan. 16th Street contains a Class III bicycle route between Illinois Street and Third Street, and two Class II bike lanes west of Third Street. Illinois Street, a two-lane north-south local street, terminates at the intersection with 16th Street, directly across from and south of the project site. Illinois Street contains a Class II bicycle lanes between 16th Street and Mariposa Street.

Terry A. François Boulevard roughly follows the Bay shoreline east of the project site. There are currently two vehicular travel lanes and Class II bicycle lanes in each direction. Terry A. François Boulevard is signed as a Tsunami Evacuation Route.

South Street extends along the north boundary of the project site between Third Street and Terry A. François Boulevard. South Street contains two vehicular travel lanes in each direction. Bridgeview Way, a two-lane north-south local street, terminates at the intersection with South Street, directly across from and north of the project site.

Vehicle parking is currently provided along 16th Street and Terry A. François Boulevard adjacent to the project site.

B.4 Approvals Required

Project approvals or permits from the following agencies for construction or long-term operation are anticipated at this time:

- Approval by the OCII Executive Director of secondary use findings of consistency for the proposed event center
- Approval by the OCII Commission of a new Major Phase for Blocks 29-32
- Approval by the OCII Commission of individual Combined Basic Concept and Schematic Designs (Schematic Designs) for the project
- Approval by the OCII Commission (and any other City departments as required under the Mission Bay South Plan, OPA, Interagency Corporation Agreement, and associated documents) of: Amendments to the Mission Bay South Design for Development, and Modifications to the Mission Bay South Signage Master Plan and Mission Bay South Streetscape Plan
- Approval by Mayor, Department of Public Works Executive Director and OCII Executive Director of any non-material changes to Mission Bay South Infrastructure Plan
- Entertainment Commission approval of applicable entertainment permits, including, but not limited to, a Place of Entertainment permit
- Planning Commission approval of office building Schematic Designs related to Proposition M allocation
- Port of San Francisco staff approval of changes to waterfront infrastructure, including roadway striping
- San Francisco MTA/Department of Public Works approval for reconfiguration of adjacent streets
- San Francisco Department of Public Works and Board of Supervisors approval of subdivision map
- Governor's approval of project sponsor's Assembly Bill 900 (AB 900) application
- San Francisco Public Utilities Commission approvals for connections to infrastructure systems, including water supply, fire flow, recycled water, stormwater, and wastewater systems

C. COMPATIBILITY WITH EXISTING ZONING AND PLANS

	<i>Applicable</i>	<i>Not Applicable</i>
Discuss any variances, special authorizations, or changes proposed to the Planning Code or Zoning Map, if applicable.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Discuss any conflicts with any adopted plans and goals of the City or Region, if applicable.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Discuss any approvals and/or permits from City departments other than the Planning Department or the Department of Building Inspection, or from Regional, State, or Federal Agencies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The SEIR will discuss the project's compatibility with existing zoning and plans.

D. SUMMARY OF ENVIRONMENTAL EFFECTS AND APPROACH TO ANALYSIS

D.1 Summary of Environmental Effects

The proposed project could potentially result in either new significant environmental effects or substantially more severe impacts than were previously identified in the Mission Bay FSEIR, as noted by the environmental factor(s) checked below. The resource areas checked below indicate topic areas to be discussed in detail in the SEIR, but all resource areas are addressed in this Initial Study. This section describes the approach to analysis for this Initial Study, and Section E, presents a more detailed checklist and discussion of each environmental factor and the associated impact assessment.

<input type="checkbox"/> Land Use	<input checked="" type="checkbox"/> Air Quality	<input type="checkbox"/> Biological Resources
<input type="checkbox"/> Aesthetics	<input checked="" type="checkbox"/> Greenhouse Gas Emissions	<input type="checkbox"/> Geology and Soils
<input type="checkbox"/> Population and Housing	<input checked="" type="checkbox"/> Wind and Shadow	<input checked="" type="checkbox"/> Hydrology and Water Quality
<input type="checkbox"/> Cultural and Paleo. Resources	<input type="checkbox"/> Recreation	<input type="checkbox"/> Hazards/Hazardous Materials
<input checked="" type="checkbox"/> Transportation and Circulation	<input checked="" type="checkbox"/> Utilities and Service Systems	<input type="checkbox"/> Mineral/Energy Resources
<input checked="" type="checkbox"/> Noise	<input checked="" type="checkbox"/> Public Services	<input type="checkbox"/> Agricultural and Forest Resources

D.2 Approach to Analysis

The following approach to analysis is used in this Initial Study to determine which topics require no additional environmental analysis beyond what is presented in the Mission Bay FSEIR and this Initial Study and which topics require more detailed analysis in the SEIR. With the exception of Aesthetics and parking, the evaluation of environmental impacts is based on potential effects of the proposed project compared to existing (2014) conditions using the significance criteria listed in the San Francisco Planning Department's Initial Study Checklist. Significance criteria that do not apply to the proposed project, if any, are first identified, and neither the Initial Study nor the SEIR provide further discussion of those criteria; for example, since the project is not located within an airport land use plan, none of those criteria apply to this project. Environmental review of Aesthetics and parking impacts are considered pursuant to CEQA Section 21099(d) as discussed in the Aesthetics and Transportation sections of this Initial Study.

Project Impacts

For those topics determined in this Initial Study to be focused out from further analysis in the SEIR, this analysis first summarizes how these topics were addressed in the Mission Bay FSEIR as it related to Blocks 29-32, including identifying any applicable mitigation measures from the Mission Bay FSEIR and conclusions reached regarding significance of effects. Second, the Initial Study analyzes the impacts of the proposed project to determine: (1) if the proposed project, circumstances under which the project is undertaken, or new information(which could not have been ascertained at the time of the preparation of the Mission Bay FSEIR) would lead to new or more severe significant environmental effects from what was identified in the Mission Bay FSEIR; (2) if newly feasible or different mitigation measures or alternatives are available that would substantially reduce one or more significant effects of the project; and (3) if the mitigation measures identified in the Mission Bay FSEIR and/or newly added mitigation measures would reduce impacts to a less-than-significant level. The impact evaluation presents the significance determination for each impact and includes the detailed description of all mitigation measures applicable to the proposed project, whether it is the same as that specified in the Mission Bay FSEIR or an updated mitigation measure.

For those topics to be analyzed in detail in the SEIR, this Initial Study provides the checklist response identifying the potential for new significant impacts or substantially more severe impacts than those identified in the Mission Bay FSEIR. However, the summary of the Mission Bay FSEIR and the detailed analysis of the proposed project are deferred for discussion in the SEIR.

For the purposes of this Initial Study, the checklist questions in Appendix G have been modified to reflect the fact that the proposed project is a subsequent activity under the Mission Bay South Redevelopment program and that this analysis is being tiered from the certified Mission Bay FSEIR as a program EIR, consistent with CEQA Guidelines 15168(c). The four revised checklist questions used in this Initial Study are described below.

1. *Would the project result in potentially significant effects not identified in the prior EIR?* This question examines whether or not the proposed project would result in new significant or potentially significant environmental effects that were not identified in the Mission Bay FSEIR. This could include significant effects that are due to:
 - Project-specific features of the proposed event center and mixed-use development.
 - Substantial changes with respect to the circumstances under which the project would be undertaken, such as real estate development trends in the surrounding area or major projects that were previously unanticipated.
 - New information of substantial importance which was not known and could not have been known at the time the Mission Bay FSEIR was certified, such as newly available information related to climate change or sea level rise.

If the analysis identifies a new significant or potentially significant impact, this Initial Study then determines if either previously identified mitigation measures or newly identified mitigation measures would reduce the impact to less than significant. In this event, the mitigation measures are presented in this Initial Study and no further analysis is required. On the other hand, if a new significant or potentially significant impact is identified and/or further analysis is necessary to

determine if mitigation measures are available to reduce the impacts to less than significant, then this issue will be addressed in further detail in the SEIR.

2. *Would the project result in a potentially substantial increase in severity of a significant impact identified in the prior EIR?* This question examines whether or not the proposed project would result in substantially more severe environmental effects than what was identified in the Mission Bay FSEIR. This increase in severity of a significant effect could be due to:
 - Project-specific features of the proposed event center and mixed-use development.
 - Substantial changes with respect to the circumstances under which the project would be undertaken, such as real estate development trends in the surrounding area or major projects that were previously unanticipated.
 - New information of substantial importance which was not known and could not have been known at the time the Mission Bay FSEIR was certified, such as newly available information related to climate change or sea level rise.

If the project would result in an increase in severity of a previously identified significant impact, this Initial Study then determines if either previously identified mitigation measures or newly identified mitigation measures would reduce the more severe impact to less than significant. In this event, the mitigation measures are presented in this Initial Study and no further analysis is required. On the other hand, if a more severe significant impact is identified and/or further analysis is necessary to determine if mitigation measures are available to reduce the impacts to less than significant, then this issue will be addressed in further detail in the SEIR.

3. *Does the project sponsor decline to adopt a feasible mitigation measure or alternative?* This question addresses the case in which the Initial Study identifies a new significant impact or a substantial increase in severity of a significant impact but the project sponsor has declined to adopt a feasible mitigation measure or alternative. In the event of such cases, if any, the issue will be addressed in further detail in the SEIR.
4. *Would the project result in no new or more severe significant effects?* This question addresses several possible scenarios for certain topics which the Initial Study provides the complete analysis and no further analysis is necessary in the SEIR. These scenarios include the following:
 - The Mission Bay FSEIR identified a significant impact, and the proposed project would result in the same significant impact. In addition, the same mitigation measure identified in the Mission Bay FSEIR would reduce the impact to a less-than-significant level. In this case, the previous mitigation measure as applicable to the proposed project is presented in this Initial Study.
 - The Mission Bay FSEIR identified a significant impact and the proposed project would result in the same significant impact. However, a new or revised mitigation measure is recommended to reduce the impact to a less-than-significant level, and this new measure would replace the previously identified mitigation measure. In this case, only the new mitigation measure is presented in this Initial Study, and the reader is referred to the Mission Bay FSEIR for the original mitigation measure.
 - The Mission Bay FSEIR identified a significant impact and the proposed project would result in the same impact. However, under the current approach to analysis, the impact would be considered less-than-significant due to implementation of actions required to comply with applicable regulations (e.g., hazardous materials regulations). In this case, the revised analysis would supersede the analysis in the Mission Bay FSEIR, and with

compliance with applicable regulations, no mitigation measures are required and none are presented in this Initial Study. The reader is referred to the Mission Bay FSEIR for the original mitigation measure(s).

- The Mission Bay FSEIR identified either no impact or a less-than-significant impact, and the proposed project would also result in no impact or a less-than-significant impact. In this case, no mitigation measures are required and none are presented either in the FSEIR or this Initial Study.
- The Mission Bay FSEIR did not address an environmental topic under the Planning Department's current CEQA Initial Study checklist, and the proposed project would result in a significant impact that could be reduced to less than significant with implementation of a feasible mitigation measure. In this case, the new mitigation measure is presented in this Initial Study.
- The Mission Bay FSEIR did not address an environmental topic under the current Planning Department CEQA Initial Study checklist, but the proposed project would result in either no impact or a less than significant impact. In this case, no mitigation measures are required and none are presented.
- In a few instances, the discussion of why the project is not expected to result in any new or more significant effects is deferred to the SEIR, either as part of a larger discussion (such as Transportation) or for public disclosure.

Cumulative Impacts

Similar to the project impacts, cumulative impacts are analyzed by responding to the same four revised checklist questions but with regard to the potential for the proposed project to contribute to *new* significant cumulative impacts or substantially *more severe* cumulative impacts than those identified in the Mission Bay FSEIR. The Mission Bay FSEIR used the year 2015 for the analysis of the full buildout of the Mission Bay plan as well as for the cumulative impacts analysis, and cumulative impacts were assessed on the basis of regional population and employment projections for the year 2015 as determined by the Association of Bay Area Governments.

A cumulative impact is determined to be significant if the project in combination with other planned, proposed, or probable future conditions in the project vicinity would result in environmental effects that exceed the significance criteria listed in the San Francisco Planning Department's Initial Study Checklist when compared to existing conditions. In addition, the analysis must indicate that the project's incremental effect would be a "cumulatively considerable" contribution to the significant impact. In this Initial Study, the cumulative impact analysis identifies if the proposed project would contribute to a new significant cumulative impact or if a previously-identified cumulative impact would be substantially more severe under the proposed project.

Cumulative impacts for each resource area are analyzed with respect to the appropriate geographic scope for that topic and either (1) a list of past, present, and probable future projects that in combination with the proposed project could contribute to cumulative impacts, or (2) a summary of projections contained in general plan or related planning document (CEQA Guidelines Section 15130(b)(1)). Which of the two methods used varies from topic to topic.

For topics using the list approach, in addition to those projects considered in the Mission Bay FSEIR cumulative analysis, the projects/programs listed below were not anticipated in the Mission Bay FSEIR and are considered in the cumulative impact analysis.

- **University of California at San Francisco (UCSF), 2014 Long Range Development Plan (LRDP), Mission Bay Campus.** UCSF is updating its LRDP to guide future campus growth and development over the next 20 years. The 2014 LRDP updates information that was assumed in the Mission Bay FSEIR. The existing 60.2-acre UCSF Mission Bay campus site is located adjacent to Blocks 29-32, generally bounded by Mission Bay Boulevard South to the north, Owens Street to the west, Mariposa Street to the south, and Illinois and Third Streets to the east. Under the 2014 LRDP, the development capacity for the North Campus is proposed to increase from 2,650,000 to 3,641,800 gsf. The 2014 LRDP proposes to increase the square footage of the North Campus by 1,450,300 gsf, which includes 458,500 gsf of existing remaining entitlement from the 1996 LRDP, plus 991,800 gsf of new entitlement. On the South Campus, construction of a 124,500-gsf cancer outpatient building is anticipated prior to 2035, which will complete Phase 1 of the UCSF Medical Center at Mission Bay. This will bring the total space for Phase 1 to 993,500 gsf. Phase 2 facilities will be located on the west side of the South Campus, across the Fourth Street Public Plaza. Phase 2 Medical Center at Mission Bay is planned for after 2035 as a 261-bed hospital with additional outpatient space, totaling 793,500 gsf. Development of the East Campus would accommodate 500,000 gsf. As a result, the total anticipated development through 2035 with the proposed expansion of the Mission Bay campus site (North, South, and East campuses) would be 5,135,200 gsf.
- **Eastern Neighborhoods Program.** The Eastern Neighborhoods Program included changes in zoning controls and General Plan amendments for an approximately 2,200-acre area on the eastern side of the City. It is intended to encourage new housing while preserving sufficient land for light industrial and service industry (referred to collectively as “Production, Distribution, and Repair,” or “PDR,” uses) in four neighborhoods: the Mission, Showplace Square/Potrero Hill, the Central Waterfront, and the eastern portion of the South of Market (“East SoMa”). In conjunction with the rezoning, the General Plan was amended to include Area Plans for the neighborhoods (including revisions to the existing Central Waterfront and South of Market Area Plans). A key goal of the rezoning process was to encourage the creation of cohesive neighborhoods, particularly where new housing is being encouraged. The plans also propose public benefits and other implementation programs, particularly the creation of affordable housing. The program introduced new zoning districts, including districts that permit at least some PDR uses in combination with commercial uses, districts mixing residential and commercial uses, and areas where only PDR uses would be permitted, with residential use prohibited to alleviate development pressure on PDR uses. The Showplace Square/Potrero Hill Area Plan is located immediately to the west of the Mission Bay Plan (across Interstate 280), the Central Waterfront Area Plan is located immediately to the south of the Mission Bay plan area (south of Mariposa Street), and the East SoMa Area Plan is located immediately to the north (across China Basin and east of Fourth Street). Projects pursuant to the Eastern Neighborhoods Program are currently under construction, including several residential and mixed-used developments south of Mariposa Street.
- **Seawall Lot 337 and Pier 48 Mixed-Use Project (Mission Rock).** This possible future project is located about one-third mile north of Blocks 29-32 on the northeast side of the Mission Bay South Plan area. The project would include a mixed-use, multi-phase waterfront development on Seawall Lot 337, rehabilitation and reuse of Pier 48, and construction of approximately 5.4 acres of net new open space, for a total of 8 acres of open space on the site. Overall, the project would

involve construction of up to approximately 3.7 million gsf of residential, commercial, and retail uses, and a public parking garage on the Project Site. Both Seawall Lot 337 and Pier 48 are owned by the Port of San Francisco. The project is currently in the environmental review phase.

- Pier 70 Mixed-Use Development:** This possible future project is located just under one-half mile south of Blocks 29-32, on 35 acres located south of 20th Street and east of Illinois Street. This project proposes up to approximately 3,040,000 gsf (excluding parking) of above-grade construction in new buildings, and improvements to historic buildings. The project allows for a flexible land use program, including a maximum residential-use and maximum commercial-use scenarios for the Pier 70 Special Use District. Option 1 - maximum residential scenario, would consist of approximately 2,000 dwelling units within 1,605,000 gsf, including up to 904,000 gsf of commercial and office space, plus up to 365,700 gsf of manufacturing, local retail, creative uses and arts which is designated as an "Innovative Industries Zone." Option 2 - maximum office scenario, would consist of approximately 1,052 dwelling units within approximately 903,616 gsf, including up to approximately 1,810,000 gsf of commercial and office space, plus up to 327,700 gsf of manufacturing, local retail, creative uses and arts which is designated as an "Innovative Industries Zone."

E. EVALUATION OF ENVIRONMENTAL EFFECTS

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
1. LAND USE AND LAND USE PLANNING— Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial impact upon the existing character of the vicinity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Summary of Land Use Impacts in Mission Bay FSEIR

The land use significance criteria were addressed in the Mission Bay FSEIR in the Land Use section; the Plans, Policies, and Permits section; and the Initial Study Land Use section. Relevant information from these sections is summarized below.

The Mission Bay FSEIR Land Use setting section characterized existing land uses present within and near the Mission Bay plan area at that time. The Mission Bay FSEIR indicated the land uses within Blocks 29-32 at the time of preparation of the FSEIR consisted of industrial and commercial uses, parking facilities and vacant land (see Hazards and Hazardous Materials, below, for a discussion of known historical land uses within Blocks 29-32, and additional detail on specific land uses that existed at the time of preparation of the Mission Bay FSEIR).

While the Mission Bay FSEIR provided CEQA environmental analysis for the entire Mission Bay program, it divided the plan area into subareas to facilitate the analysis. Block 29-32 was located within the East Subarea (the area bounded by existing Terry François Blvd, Mariposa Street, Third Street, and Mission Bay Boulevard South). Development of this subarea was assumed to include commercial industrial and office; entertainment-oriented, neighborhood- and City-serving retail; and public open space land uses. Buildings in the subarea would be allowable up to 90 feet in height, with 7 percent of the developable area allowable up to 160 feet high (along Third Street). Buildings along the future realigned Terry A. François Boulevard would be restricted to 90 feet in height.

The Mission Bay FSEIR Initial Study Land Use section determined that the Mission Bay plan area was a largely underutilized industrial area with no established residential community; this was the basis for the Mission Bay FSEIR finding that the Mission Bay plan would not physically disrupt or divide an established community.

The Mission Bay FSEIR Plans, Policies and Permits section compared the Mission Bay plan and its implementing plans to other City plans, policies and regulations. The Mission Bay FSEIR indicated that the Mission Bay Redevelopment Plans and Design for Development documents would constitute the regulatory land use framework for the Mission Bay plan area, and would supersede the City's Planning Code (except where indicated in those implementing documents), and furthermore, the Redevelopment Plans would be required to be found consistent with the City General Plan prior to adoption. The Mission Bay FSEIR also acknowledged that certain development activities proposed within the Mission Bay plan area would be subject to applicable regional, State and/or federal permitting authority. The Mission Bay FSEIR analyzed the physical environmental impacts of potential policy conflicts for specific environmental topics, such as transportation and noise, in the respective sections of the FSEIR.

The Mission Bay FSEIR Land Use impacts section indicated that the Mission Bay project would result in a substantial change in the type and intensification in land uses in the Mission Bay plan area, involving demolition of most existing buildings and displacement of existing uses within the Mission Bay plan area, and development of the proposed mixed-use land use program over the build-out period. The Mission Bay FSEIR reported that the Mission Bay plan would continue the trend that was occurring in other nearby areas of the City (e.g., South of Market) of redeveloping former industrial areas into residential and commercial neighborhoods. The Mission Bay FSEIR reported that the commercial industrial/retail uses proposed within the East Subarea of the Mission Bay plan area, which includes Blocks 29-32, would be compatible with the medical research and instructional uses proposed within the adjacent proposed UCSF campus subarea (located west of the Blocks 29-32 across Third Street).

The Mission Bay FSEIR also acknowledged that construction activities associated with development of the proposed uses within the Mission Bay plan area would create construction-related effects (e.g., dust, noise, traffic) that may be noticeable and annoying to new residents within the Mission Bay plan area, however, with implementation of mitigation measures identified in the respective sections of the Mission Bay FSEIR, those effects would be mitigated to a less-than-significant level. These factors provided the basis for the Mission Bay FSEIR finding that the Mission Bay plan would not have a significant impact upon the existing character of the vicinity.

In summary, the Mission Bay FSEIR identified no significant impacts on land use from the Mission Bay plan, and accordingly, did not require any mitigation measures related to land use effects.

Impact Evaluation

Physical Division of an Established Community

Impact LU-1: The proposed project would not physically divide an established community. (Less than Significant)

Surface metered parking facilities currently operate in the west and north portions of the site, and a chain-link fence restricts access to the remainder of the site. During construction of the proposed project, the existing surface parking lot uses at the project site would be removed. Although the specific construction details have not yet been determined, the project may require temporary closure of lane(s) along Third Street, South Street, 16th Street and/or Terry A. François Boulevard during construction. Since these closures would be temporary, and alternate routes would be provided as needed, project construction would not physically divide the surrounding established community.

The proposed project would result in the construction and operation of an event center, office and retail uses, parking facilities and open space areas within Blocks 29–32. The proposed project would be incorporated within the established street plan, including realignment of Terry A. François Boulevard, and would not create an impediment to the passage of persons or vehicles. The proposed project design does not include any physical barriers or obstacles to circulation that would restrict existing patterns of movement between the project site and the surrounding neighborhood. To the contrary, the project would include a number of features designed to encourage and promote public access and circulation. For example, the project would include a 20-foot setback along the 16th Street frontage that would serve as a connector to the Bayfront Park, as shown in the Mission Bay South Design for Development document.

During events, particularly at the end of basketball games or other events when the peak flow of patrons would exit the project site, the project would involve implementation of transportation management measures. These measures could result in periodic disruption or division of the physical arrangements of existing surrounding rights-of-way through event-related street or lane closures, sidewalk restrictions, or transit reallocation. These impacts would be limited to a few hours before and/or after events, and they would be intended to most efficiently facilitate the flow of people and vehicles away from the project site, thereby enhancing connections as opposed to increasing divisions.

Given that the proposed project and uses would occur within the boundaries of the existing lot lines and no physical barriers to movement through the community would be involved, the construction and operation of the proposed uses would not result in any new impacts, or increase the severity of previously-identified impacts, related to physical division of an established community.

At the time of preparation of the Mission Bay FSEIR, several buildings and facilities were located and operating on the project site. These buildings and structures were subsequently removed, and the project site has been subject to grading, some excavation, and construction of paved surface parking lots, fencing and associated utilities. This change in conditions on the project site has not altered the fact that the site is within the established street plan.

As discussed above, the Mission Bay FSEIR did not identify a significant impact related to physical division of an established community because the surrounding community contained no residential uses.

As discussed above under Section B.3, Surrounding Uses, the area surrounding the project site has been partially developed since preparation of the FSEIR. The UCSF Mission Bay campus is located west, northwest, southwest, and partially south of the project site, including the UCSF Hearst Tower, a 14-story building containing student housing located northwest of the project site. Office buildings are also located north and south of the project site. In addition, as described above under "Approach to Analysis," the updated UCSF LRDP indicates plans for further development of about 1.46 million gsf of new space at the Mission Bay campus.

These changes in land uses surrounding the project site would not affect the determination whether the proposed event center and mixed-use development within the project site would physically divide an established community. As stated above, development would be undertaken within the existing property lines, and the project would facilitate pedestrian movement through the project site. The proposed project would be adjacent to the UCSF Mission Bay campus but would not physically divide the campus. Therefore, there have been no substantial changes with respect to circumstances under which the project is undertaken nor has any new information become available that will result in new or more severe impacts associated with the proposed project.

As discussed above, the Mission Bay FSEIR did not identify any significant impacts related to physical division of an established community, and accordingly, did not require any mitigation measures. Furthermore, the Mission Bay FSEIR did not identify any alternatives to reduce impacts related to physical division. Consequently, no new or different mitigation measures or alternatives to reduce project impacts related to physical division of an established community are identified or required with respect to the currently proposed project.

On the basis of the factors discussed above, the project would not have any new or substantially more severe effects than those identified in the Mission Bay FSEIR related to physical division of an established community.

Land Use Plan or Policies

Impact LU-2: The proposed project would not conflict with any applicable land use plans, policies or regulations of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect. (Less than Significant)

As stated above, the Mission Bay FSEIR indicated that the Mission Bay Redevelopment Plans and Design for Development documents would constitute the regulatory land use framework for the Mission Bay plan area. The Mission Bay FSEIR analyzed the physical environmental impacts of potential policy conflicts for specific environmental topics, such as transportation and noise, in the respective sections of the FSEIR.

The proposed project would not obviously conflict with applicable land use plans or policies, including the San Francisco General Plan, with San Francisco Planning Code provisions that apply to the project, or with the Mission Bay South Redevelopment Plan, under which the proposed office and retail uses are considered primary uses, and the proposed event center is considered a secondary use. In addition, the proposed project would be generally consistent with the major development standards of the Design for Development for the Mission Bay South Project Area. However, due to the unique nature of the event

center component of the project, the sponsor intends to seek OCII approval of variations or amendments to some of these standards (see above, Section B.4, Approvals Required).

The project would not substantially conflict with regional plans or policies, including *Plan Bay Area*, the 2010 Clean Air Plan, *San Francisco Bay Plan*, and the *San Francisco Basin Plan*. Aside from land use effects, the physical environmental impacts of potential policy conflicts are addressed in the applicable sections of this Initial Study, including biological resources; the SEIR will provide detailed analysis of the physical environmental impacts of potential policy conflicts for the remaining resource areas, such as transportation and noise.

As part of the project approval process, OCII, the San Francisco Planning Commission, and other relevant regulatory agencies would determine whether the proposed project is consistent with their respective plans as applicable to the proposed project. Thus, the proposed project would have a less-than-significant impact with regard to conflicts with land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect.

Since publication of the Mission Bay FSEIR, there have been three notable changes related to the applicable land use plans or policies associated with the project site: revisions to the South Design for Development; change in jurisdictional agency; and the update to the UCSF LRDP. As discussed in Section A.2, Background, above, the Redevelopment Agency/OCII has prepared nine addenda to the Mission Bay FSEIR, between 2000 and 2013. Only the 2004 addendum addressed changes to land use plans or policies applicable to the project site at Blocks 29-32. That addendum analyzed revisions to the South Design for Development regarding towers, tower separation, and setbacks. The unique nature of the proposed event center would require the sponsor to receive OCII approval of variations or amendments to some of these standards, which would occur as part of the project approval process.

As stated in the Project Description, in accordance with California Community Redevelopment Law, when the Board of Supervisors approved the South Plan in 1998, land use and zoning approvals within Mission Bay came under the jurisdiction of the Redevelopment Agency. However, with dissolution of redevelopment agencies statewide, and subsequent state and local legislation creating the Successor Agency, OCII now has jurisdiction and approval authority over the land use and zoning of the project site. This change in jurisdiction would not result in new or more severe impacts related to conflict with land use plans.

As stated above, under Section D, Approach to Analysis, under the UCSF 2014 LRDP 1,450,300 million gsf of new space is proposed on the North Campus (north of 16th Street) which includes 458,500 gsf of existing remaining entitlement from the 1996 LRDP, plus 991,800 gsf of new entitlement. On the North Campus, the 2014 LRDP calls for the same mix of research, support, parking, and open space uses as was analyzed in the Mission Bay FSEIR, but with some land use changes to undeveloped parcels. In particular, the 2014 LRDP calls for new housing on Mission Bay Boulevard South, at Sixth Street. On the South Campus, construction of a 124,500-gsf cancer outpatient building is anticipated prior to 2035, which will complete Phase 1 of the UCSF Medical Center at Mission Bay. This will bring the total space for Phase 1 to 993,500 gsf. On the South Campus, the Mission Bay FSEIR analyzed development of the blocks south of 16th Street with commercial-industrial and retail uses. The development of these blocks with UCSF clinical uses was previously analyzed in the 2008 addendum, as stated in the Project Description.

The clinical land uses called for in the 2014 LRDP would be consistent with the uses analyzed in 2008. Development of the East Campus would accommodate 500,000 gsf, plus 500 parking spaces, and pursuant to the LRDP the site would be functionally zoned for research and parking use. The site is intended to serve as a consolidation location for UCSF, for both owned and leased properties, to reduce costs and improve efficiencies. In the Mission Bay FSEIR, this site is analyzed for development of Commercial Industrial uses to facilitate the development of research and development, biotechnical, semi-conductor research, telecommunications, business or multimedia services, and related light industrial uses. The proposed UCSF uses would be consistent with that land use designation as either primary or secondary use.

None of the changes in land use proposed in the 2014 LRDP would change the regulatory controls on the Blocks 29–32 project site. Moreover, the changes in land use would be limited to specific parcels (notably, the new housing site at Sixth Street, as well as a future research site on Owens Street) that—due to their relative distance from the Blocks 29–32 project site—would not present land use conflicts with the proposed project. Implementation of the 2014 LRDP would intensify research, clinical, housing, and medical office uses east and southeast of the Blocks 29–32 project site, but this intensification would not result in new or more severe land use impacts than those analyzed in the Mission Bay FSEIR.

Therefore, there have been no substantial changes with respect to circumstances under which the project is undertaken nor has any new information become available that would result in new or more severe impacts associated with the proposed project.

As discussed above, the Mission Bay FSEIR did not identify any significant impacts related to a conflict with land use plans or policies adopted for the purpose of avoiding or mitigating an environmental effect, and accordingly, did not require any mitigation measures. Furthermore, the Mission Bay FSEIR did not identify any alternatives to reduce conflict with land use plans or policies. Consequently, no new or different mitigation measures or alternatives to reduced project impacts related to conflict with land use plans or policies are identified or required with respect to the currently proposed project.

On the basis of the factors discussed above, the project would not have any new or substantially more severe effects than those identified in the Mission Bay FSEIR related to conflict with land use plans or policies adopted for the purpose of avoiding or mitigation an environmental effect.

Existing Character of the Vicinity

Impact LU-3: The proposed project would not have a substantial impact upon the existing character of the vicinity. (Less than Significant)

As discussed above, the Mission Bay FSEIR indicated that the commercial industrial/retail uses proposed within the east subarea of the Mission Bay plan area (which includes Blocks 29–32) would be compatible with the medical research and instructional uses proposed within the adjacent proposed UCSF campus subarea (located west of the Blocks 29–32 across Third Street).

Examples of potential Mission Bay plan research/light industrial/office land uses for the project site can include research and development, biotechnical or semiconductor research, telecommunications, business services, multimedia services, related light industrial uses, and commercial offices. Potential retail uses

for the site can include city-serving retail uses, and neighborhood-serving retail within ground-floor spaces. Secondary uses could include institutions and assembly and entertainment (nighttime entertainment and recreation building).

The proposed project would result in the construction and operation of an event center, office and retail uses, parking facilities and open space areas within the project site. The retail and office uses would be generally consistent with the previously proposed uses for the site, such that no new or more severe conflicts with land use character would occur.

The proposed event center uses are considered “nighttime entertainment uses” and would be similar to the secondary “nighttime entertainment” uses previously analyzed in the Mission Bay FSEIR. On event days, the project’s event component would attract spectators/attendees, as well as additional visitors to the other restaurant and retail uses. Although this entertainment use was addressed in the FSEIR, the size and intensity of the event center use was not previously analyzed.

Once completed, the proposed project would function as a destination site, with an intensification of use during events. Attendance at these events would alter the overall land use character of the project site from that analyzed in the FSEIR. As discussed in the Project Description, Golden State Warriors basketball games, large concerts, other sporting events and conventions would have average attendance ranging between approximately 7,000 and 18,000 people. Basketball games and concerts would typically occur during the evening hours, and conventions would generally occur during daytime hours. The facility would also host family shows, and smaller concerts with attendance ranging between 3,000 and 8,200 people during the daytime and evening hours. The outdoor plaza would be used for occasional outdoor gatherings and events.

The presence of event spectators/attendees on streets and sidewalks in the vicinity of existing uses would be noticeable compared to existing conditions. Events would also attract people to local restaurant, retail, and open space uses of the wider neighborhood. Similar to operation of such uses in proximity to AT&T Park during a Giants game, local restaurants, retail businesses, and open spaces would be more heavily patronized than under existing conditions, but they would continue to operate as intended.

Although the presence of these attendees on streets and sidewalks in the vicinity of medical research, clinic, and office uses in the surrounding Mission Bay neighborhood would be noticeable compared to existing conditions, these additional people would not impede the operation of those existing uses such that adverse land use impacts would occur. Each use would continue to function as intended. The effects of event center operation on the local transportation network, noise, and air emissions on the surrounding neighborhood will be addressed in the SEIR.

Basketball games and other planned events such as concerts would occur generally after commercial and medical office hours of nearby uses. Although the UCSF Medical Center would be a 24-hour use, hospital uses are generally more intensive during standard medical office hours. Moreover, there is nothing about the event center that would preclude operation of those uses. Therefore, although event center operations are expected to result in an incremental increase in localized traffic, noise, and air pollutant emissions, the uses in the project site vicinity would continue to function as intended.

On the basis of the factors discussed above, the project would not have any new or substantially more severe effects than those identified in the Mission Bay FSEIR related to conflict with existing land use character.

At the time of preparation of the Mission Bay FSEIR, the project site vicinity was occupied by a mix of warehouses used for light industrial, commercial, and office uses, as well as truck terminals, truck yards, gravel processing facilities, and expanses of undeveloped land. On the nearby waterfront were the Port's Maintenance Operations Facilities at Pier 50, the public boat launch ramp between Piers 52 and 54, yacht and boat clubs at Piers 50½, 52, and 54, and Agua Vista Park north of 16th Street.

Since preparation of the Mission Bay FSEIR, large portions of the Mission Bay plan area have been built out. The UCSF Mission Bay campus is located west, northwest, southwest, and partially south of the project site, and it currently includes a mix of parking structures, office buildings, research buildings, student housing, and hospital buildings. Other office buildings and vacant lots are located north and south of the site, and immediately east of the site are City-owned parcels containing covered stockpiled materials. The area of the proposed Bayfront Park currently includes a paved trail, surface parking lot, and unimproved open space.

These changes in conditions in land use character surrounding the project site would not result in new or more severe impacts on the existing character of the vicinity. Operation of the proposed office, entertainment, and retail uses would not conflict with the changed land use character. To the contrary, as stated above, the proposed project would be compatible with the existing character of the medical campus, office, and research-and-development uses in the project site vicinity. Therefore, there have been no substantial changes with respect to circumstances under which the project is undertaken nor has any new information become available that will result in new or more severe land use impacts associated with the proposed project.

As discussed above, the Mission Bay FSEIR did not identify any significant impacts upon the existing character of the vicinity, and accordingly, did not require any mitigation measures. Furthermore, the Mission Bay FSEIR did not identify any alternatives to reduce impacts upon the existing character of the vicinity. Consequently, no new or different mitigation measures or alternatives to reduced project impacts to land use character are identified or required with respect to the currently proposed project.

On the basis of the factors discussed above, the project would not have any new or substantially more severe impacts upon the existing character of the vicinity.

Cumulative Impacts

Impact C-LU-1: The proposed project, in combination with past, present, and reasonably foreseeable future projects, would not result in significant cumulative impacts to land use. (Less than Significant)

The geographic scope for potential cumulative impacts related to land use generally includes the South Mission Bay Plan Area, as well as the immediately adjacent Eastern Neighborhoods Plan areas (i.e., the Central Waterfront and Showplace Square/Potrero Hill Area Plans), Seawall Lot 337/Pier 48 Mixed-Use project, and Pier 70 project (as discussed above under Section D, Approach to Analysis). Other reasonably foreseeable projects within the project vicinity with the potential to contribute to cumulative, land use

impacts would be required to undergo separate environmental review, as necessary, and to identify mitigation measures for any significant impacts. Cumulative impacts on land use could result if the proposed project, in combination with other reasonably foreseeable projects in the vicinity, would collectively increase the potential for significant impacts.

Other projects within the Mission Bay South Plan Area would be built consistent with the Mission Bay South Plan and Mission Bay South Design for Development within the lot lines of existing streets, within an area of the City with a low residential population, and therefore would not be expected to physically divide an established community. Projects built pursuant to the Eastern Neighborhoods Area Plans would generally be constructed in areas with a mix of uses and higher residential population than the Mission Bay South Plan Area, but these projects would also be constructed within the existing street grid, and their operation would not physically divide an established community. The Pier 70 project, which is encompassed within the boundaries of the Eastern Neighborhoods Central Waterfront Area Plan, would be built entirely east of Illinois Street, as well as primarily south of 20th Street. The project would result in the construction of new streets and the extension of existing streets, as well as new parks and open space for pedestrian and cyclist access. Similarly, the Seawall Lot 337 and Pier 48 Mixed-Use Project would be built within existing lot lines east of Third Street, and create new access routes through the site. These projects would not physically divide an established community.

Cumulative developments in the Mission Bay South Plan Area would be required to generally conform to the Mission Bay South Plan land use designations and Mission Bay South Design for Development height, bulk, and developable area standards. Similarly, cumulative developments in the Showplace Square / Potrero Hill and Central Waterfront Plan Areas (including the Pier 70 project), would be required to conform to the land use controls of the Eastern Neighborhoods Rezoning and Area Plans. The Seawall Lot 337 and Pier 48 Mixed-Use Project would be subject to the Port of San Francisco land use controls, including the Waterfront Land Use Plan, and the Bay Conservation and Development Commission's San Francisco Bay Plan.

The Seawall Lot 337 and Pier 48 Mixed-Use Project is located about one-half mile north of Blocks 29-32 on the northeast side of the Mission Bay South Plan area. The project would include a mixed-use, multi-phase waterfront development on Seawall Lot 337, rehabilitation and reuse of Pier 48, and construction of approximately 5.4 acres of net new open space, for a total of 8 acres of open space on the site. Overall, the project would involve construction of up to approximately 3.7 million gsf of residential, commercial, and retail uses, and a public parking garage on the Project Site. Both Seawall Lot 337 and Pier 48 are owned by the Port of San Francisco. The project is currently in the environmental review phase. Therefore, in combination, these projects would not be anticipated to substantially conflict with land use plans and policies adopted for the purpose of avoiding an environmental effect.

Build-out of the remainder of the Mission Bay South Plan Area, the Eastern Neighborhoods Area Plans, the Seawall Lot 337 and Pier 48 Mixed-Use Project, and the Pier 70 project would result in an overall intensification and diversification of land uses in this area of the City. In particular, the Mission Bay South area and its surroundings is currently partially developed and partially occupied by vacant or underutilized parcels. New higher-density residential, commercial office, research-and-development, and medical uses in the Mission Bay South Plan Area, as well as in parcels south of the plan area, would complement the commercial office, research-and-development, and medical office developments completed to date. The

land use impacts of buildout of the Mission Bay South Plan Area were included in the cumulative impacts analysis of the Eastern Neighborhoods EIR. Regarding projects in the Eastern Neighborhoods plan areas, introduction of more residential, commercial, and mixed-use buildings in the Central Waterfront and Showplace Square / Potrero Hill plan areas, would alter the land use character of these areas. The effects of these land use changes have been analyzed and disclosed in the Eastern Neighborhoods EIR. The Pier 70 project and Seawall Lot 337 and Pier 48 Mixed-Use Project would introduce new commercial office, residential, and retail spaces, as well as recreational open spaces. The land use impacts of these projects will be analyzed in each project's environmental review, currently under way.

These projects would combine with the proposed commercial office, retail, entertainment, and open space uses at Block 29–32 to create a wider mix of uses than currently exists in this portion of the City. Although this would represent a change in land use character, the combined effect would not be adverse. Each use would still function as intended, and many of the uses would be complementary. Thus, the proposed project in combination with existing and planned future developments in the vicinity would not combine to result in significant adverse cumulative effects to land use character.

Therefore, cumulative land use impacts would be less than significant.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
2. AESTHETICS—Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Senate Bill 743 and CEQA Public Resources Code Section 21099

On September 27, 2013, Governor Brown signed Senate Bill (SB) 743 (Chapter 386 of the 2013 California Legislation Session), which became effective on January 1, 2014.¹⁸ Among other provision, SB 743 amends the California Environmental Quality Act (CEQA) by adding Public Resources Code Section 21099 regarding analysis of aesthetics (and parking) impacts for urban infill projects.

¹⁸ SB 743 can be found on-line at: http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB743.

Aesthetics (and Parking) Analysis

Public Resources Code Section 21099(d), effective January 1, 2014, provides that, “aesthetics and parking impacts of a residential, mixed- use residential, or employment center project on an infill site located within a transit priority area shall not be considered significant impacts on the environment.” Accordingly, aesthetics and parking are no longer to be considered in determining if a project has the potential to result in significant environmental effects for projects that meet the following three criteria:

- The project is in a transit priority area;¹⁹ and
- The project is on an infill site;²⁰ and
- The project is residential, mixed-use residential, or an employment center.²¹

The proposed project meets each of the above three criteria because it (1) is located in proximity to several transit routes; (2) is located on an infill site that has previously been developed with industrial and commercial uses and is surrounded by areas of either recently completed or planned urban development; and (3) would be an employment center supporting a range of commercial uses, located in proximity to several transit routes, and in an urban area on a site already developed and zoned for commercial uses with a floor area ratio (FAR) greater than 0.75.²² Thus, this Initial Study and the SEIR do not consider aesthetics (or parking) in determining the significance of project impacts under CEQA.

Nevertheless, Public Resources Code Section 21099(d)(2)(A) states: “This subdivision does not affect, change, or modify the authority of a lead agency to consider aesthetic impacts pursuant to local design review ordinances or other discretionary powers provided by other laws or policies.” Consequently, all applicable City urban design standards and guidelines governing the project site and proposed project, including the Mission Bay South Redevelopment Plan, Mission Bay South Design for Development, and Mission Bay South Signage Plan would apply to the proposed project. Furthermore, the project would be subject to all applicable design review approvals, including Major Phase approval by OCII, and Schematic Designs for each building and private open spaces, which would consider relevant design and aesthetic issues.

Public Resources Code Section 21099(d)(2)(B) states: “For the purposes of this subdivision, aesthetic impacts do not include impacts on historical or cultural resources.” Please refer to Cultural Resources, below, for an assessment of potential project impacts on historic and cultural resources. Environmental effects of lighting on birds are addressed under Biological Resources.

¹⁹ Public Resources Code Section 21099(a) defines a “transit priority area” as an area within one-half mile of an existing or planned major transit stop. A “major transit stop” is defined in Section 21064.3 of the California Public Resources Code as a rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

²⁰ Public Resources Code Section 21099(a) defines an “infill site” as a lot located within an urban area that has been previously developed, or a vacant site where at least 75 percent of the perimeter of the site adjoins, or is separated only by an improved public right-of-way from, parcels that are developed with qualified urban uses.

²¹ Public Resources Code Section 21099(a) defines an “employment center” as a project located on property zoned for commercial uses with a floor area ratio of no less than 0.75 and located within a transit priority area.

²² San Francisco Planning Department, Transit-oriented Infill Project Eligibility Checklist, November 10, 2014.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
3. POPULATION AND HOUSING— Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Displace substantial numbers of existing housing units or create demand for additional housing, necessitating the construction of replacement housing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Summary of Population and Housing Impacts in Mission Bay FSEIR

The Mission Bay FSEIR Business Activity, Employment, Housing and Population setting section characterized existing business and employment conditions that were present within the Mission Bay plan area, nearby areas, the City as a whole, and the region at that time. The Mission Bay FSEIR indicated there were approximately 95 existing establishments within the Mission Bay plan area providing jobs for an estimated 1,670 workers at the time of preparation of the Mission Bay FSEIR. There were no residential units or permanent residents within the Mission Bay plan area at that time.

The Mission Bay FSEIR Business Activity, Employment, Housing and Population impacts section estimated employment by land use within the Mission Bay plan area at build-out. The Mission Bay FSEIR projected that total employment associated with the Mission Bay plan would generate approximately 30,000 jobs at build-out. Of that, uses proposed under the UCSF Long Range Development Plan were estimated to account for 30 percent of the future employment within the Mission Bay plan area; office uses would account for 29 percent; research and development would account for 22 percent; retail would account for 14 percent; and hotel, public facilities, housing and other miscellaneous uses would account for the remaining 6 percent. The Mission Bay FSEIR also indicated construction related to the Mission Bay plan would be a source of construction jobs for many years, estimated at an average of approximately 1,000 full-time construction jobs per year.

The Mission Bay FSEIR determined that development proposed under the Mission Bay plan could displace certain existing businesses. However, it noted that virtually all remaining existing businesses operating within Mission Bay plan area at that time were either on short-term leases or on a long-term lease that would expire soon. Furthermore, the Mission Bay FSEIR determined that most of those businesses would be able to relocate to alternative locations either elsewhere in or outside the City.

The Mission Bay FSEIR estimated that the Mission Bay plan would create approximately 6,100 housing units and 5,900 households and increase population by 10,900 (no housing was proposed within Blocks 29-32), and create approximately 6,900 employed residents within the Mission Bay plan area at build-out. The Mission Bay FSEIR estimated that the housing demand created by the planned employment growth of the Mission Bay plan would exceed the housing supply proposed within the Mission Bay plan area by

approximately 3,700 units. The Mission Bay FSEIR estimated this offset would be accommodated by housing elsewhere in and outside the City. The Mission Bay FSEIR addressed the potential for the plan's jobs/housing imbalance to result in environmental impacts (e.g., transportation and air quality effects from longer commute distances), to be addressed in the corresponding sections in the FSEIR.

In summary, the Mission Bay FSEIR identified no significant impacts to business activity, employment, housing and population from the Mission Bay plan, and accordingly, did not require any mitigation measures related to plan effects on population and housing.

Impact Evaluation

Construction Impacts

Impact PH-1: Construction of the proposed project would not induce substantial growth in the area, either directly (for example, by constructing new homes or businesses) or indirectly (for example, through extension of roads or other infrastructure. (Less than Significant)

Project construction is estimated to last approximately 26 months. Several hundred construction workers would be required to construct the entire project, although the number of construction workers present on-site daily would range considerably, depending on the specific construction activities being performed and overlap between construction phases.

San Francisco and the five-county subregion of San Francisco, Alameda, Contra Costa, Marin and San Mateo Counties experienced persistently high unemployment in recent years. The construction sector was particularly affected by the 2007-2008 mortgage crisis and subsequent recession. Between 2007 and 2010, construction jobs in the five-county region declined by nearly 38,000 jobs, or about a third, over this period. However, the trend for the five counties as a whole began to reverse in 2011, with a net increase of about 520 construction jobs in the five-county region that year. Construction job growth has continued, and between 2010 and July 2014, more than 22,700 construction jobs were added in the five-county region. Therefore, as of July 2014, the net loss in construction employment in the five-county region since 2007 stands at about 15,000 jobs.²³

Given the continuing population of unemployed construction workers, as well as the project being subject to OCII's workforce development program (which includes goals to hire local workers for construction), nearly all project construction labor needs would readily be met by current residents of San Francisco and the rest of the five-county region. Therefore, the project would not result in any new significant construction-related impacts, or increase the severity of previously-identified construction impacts, to population growth. Furthermore, there have been no substantial changes with respect to circumstances under which the project is undertaken nor has any new information become available that will result in new or more severe construction-related impacts to population growth associated with the proposed project.

²³ California Employment Development Department, Labor Market Information, California Regional Economies Employment Series (CREE), 2014.

The Mission Bay FEIR and FSEIR did not specifically address potential indirect impacts to population growth related to extension of roads or other infrastructure. However, the project would not involve the extension of roads or other infrastructure except to the project site itself, at a location already well served by roads and other infrastructure, including previously approved improvements to roads and infrastructure associated with overall Mission Bay plan development. Consequently, the construction-related indirect impacts on population growth associated with the proposed project would be less than significant.

The Mission Bay FSEIR did not identify any significant construction-related impacts to population growth, and accordingly, did not require any mitigation measures for this impact. Furthermore, the Mission Bay FSEIR did not identify any alternatives to reduce construction-related impacts to population growth. Consequently, no new or different mitigation measures or alternatives to reduce project construction impacts to population growth are identified or required with respect to the currently proposed project.

Impact PH-2: Construction of the proposed project would not displace existing housing units or create substantial demand for additional housing. (Less than Significant)

No housing existed on Blocks 29-32 at the time the Mission Bay FSEIR was prepared, and no housing was planned for the project site under the Mission Bay plan. Consequently, implementation of the Mission Bay plan did not displace any existing housing units on the project site, and the proposed project on Blocks 29-32 would not change that condition. Furthermore, there are no circumstances under which the project would be undertaken that would change that condition, and the project's impacts on displacement of housing units or creation of substantial demand for additional housing would be less than significant.

The Mission Bay FSEIR did not identify any significant construction-related impacts to housing demand, and accordingly, did not require any mitigation measures for this impact. Furthermore, the Mission Bay FSEIR did not identify any alternatives to reduce construction-related impacts to displacement of housing. Consequently, no new or different mitigation measures or alternatives to reduce project construction impacts to housing demand are identified or required with respect to the currently proposed project.

Impact PH-3: Construction of the proposed project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. (Less than Significant)

As was anticipated by the Mission Bay FSEIR, all commercial and industrial uses that existed on the project site at the time of preparation of the Mission Bay FSEIR have since been removed, and their associated businesses displaced and/or relocated to other locations. Presently, the only business operating on the project site are two metered parking lots (Lots B and E) that were developed subsequent to the removal of the prior land uses. These parking facilities use fully-automated pay stations, so no workers are required for daily lot operations (other than potential daily pass-bys that may occur from employees servicing the pay stations). Consequently, the project is not expected to displace any on-site workers, or necessarily result in any reduction of employment for the parking company that owns and operates the parking lots, and impacts would be less than significant.

Therefore, project construction would not result in any new significant impacts, or increase the severity of previously-identified construction impacts, to displacement of people or need for replacement housing. Furthermore, there have been no substantial changes with respect to circumstances under which the project is undertaken nor has any new information become available that will result in new or more severe construction-related impacts to displacement of people or need for replacement housing associated with the proposed project.

The Mission Bay FSEIR did not identify any significant construction-related impacts to displacement or people or need for replacement housing, and accordingly, did not require any mitigation measures. Furthermore, the Mission Bay FSEIR did not identify any alternatives to reduce construction-related impacts to displacement or people or need for replacement housing. Consequently, no new or different mitigation measures or alternatives to reduce project construction impacts to displacement or people or need for replacement housing are identified or required with respect to the currently proposed project.

Operational Impacts

Impact PH-4: Operation of the proposed project would not induce substantial population growth in the area, either directly (for example, by constructing new homes or businesses) or indirectly (for example, through extension of roads or other infrastructure). (Less than Significant)

Table 2 summarizes the estimated permanent jobs that would result from project implementation. The Golden State Warriors, and office and retail development would employ an estimated 2,728 FTE workers at the project site. Of these, approximately 150 FTE employees would be existing Warriors staff who are currently employed in the Bay Area (Oakland); their jobs would therefore not be considered new Bay Area employment generated by the project. Thus, about 2,578 FTE workers would be employed at new jobs attributable to the project. In addition, the jobs for day-of-game/event staff at the event center are conservatively assumed to be all new.²⁴ Depending on the type of game/event at the event center, between 675 and 1,000 non-Warriors workers would be needed to staff the event center. Thus, the project would create a total of up to approximately 3,578 new jobs.

The estimated total 3,578 new jobs created by the project would incrementally further increase the jobs/housing imbalance that was described for the Mission Bay plan area in the Mission Bay FSEIR. However, similar to that discussed in the Mission Bay FSEIR, the estimated slight increase in this offset created by the project would be accommodated by housing elsewhere in and outside the City.

It should be noted there were 27,900 unemployed workers living in San Francisco in 2013 and 154,700 unemployed workers in the five-county region, out of a total labor force of about 487,000 and 2.35 million, respectively. The approximately 3,578 total new jobs generated by the project would represent about 0.7 percent of San Francisco's current labor force and 0.2 percent of the labor force in the five-county region.

²⁴ It is noted that a certain percentage of the day-of-game/event jobs would be expected to be relocate from existing employment at the Oracle Arena in Oakland to the proposed event center. However, because Oracle Arena would continue to serve as an event venue, and furthermore, that simultaneous events would occur at Oracle Arena and the proposed new event center, there would be a net increase in event-day employment. For purposes of a conservative analysis, all day-of-game/event jobs at the proposed event center are considered net new.

TABLE 2
PROJECT EMPLOYMENT POPULATION

Project Component	Existing FTE ^a	New FTE ^a	Day-of-Game/Event Workers	Total
Golden State Warriors Staff	150	105	-- ^b	255
Event Center Non-Warriors Day-of-Game Staff	--	--	1,000 ^c	1,000
Office Staff	--	2,101	--	2,101
Retail Staff	--	372	--	372
Subtotal FTE Employees	150	2,578		2,728 FTE Employees
Subtotal Day-of-Game Staff			1,000	1,000 Day-of Game Staff
Total	150	2,578	1,000	3,728 Total Workers (3,578 New Workers)

NOTES:

^a FTE = full-time equivalent

^b Approximately 100 Golden State Warriors employees would work at Warriors games, however, they are accounted for in the estimate of Golden State Warriors FTE staff.

^c Non-Warriors event center staffing level for a Golden State Warriors game is assumed in this analysis; lower non-Warriors staffing levels (675 – 775 workers) at the event center are anticipated for events such as concerts, family shows, other sporting events and other rentals.

^d See text for assumptions regarding day-of-game/event workers.

SOURCE: Golden State Warriors, 2014

The new jobs would represent about 12.8 percent of the unemployed labor force in San Francisco and about 2.3 percent of unemployed workers in the five-county region. These new jobs would also represent about 1.9 percent of the new jobs that are projected by ABAG to be added in San Francisco by 2040.

Considering current unemployment levels in the City and region, and that the great majority of new jobs would not involve specialized skills, knowledge, or experience that could not be provided by individuals within the local or regional labor force, employment demand generated by project implementation is expected to be readily met by the local work force currently living in San Francisco or the five-county region.

Given that population or employment growth that would result from operation of the proposed project is substantially less than the population and employment growth forecasted to occur in the City, and because employment generated by the project could be met by the local and regional labor force, the project impact related to direct growth inducement would be less than significant.

Based on all these factors, project operation would not result in any new significant operational-related impacts, or substantially increase the severity of previously-identified operational impacts, to population growth. Furthermore, there have been no substantial changes with respect to circumstances under which the project is undertaken nor has any new information become available that will result in new or more severe operational-related impacts to population growth associated with the proposed project.

As discussed under Impact PH-1 regarding project construction, project operation would not involve the extension of roads or other infrastructure except to the project site itself, at a location already well served by roads and other infrastructure, including previously approved improvements to roads and

infrastructure associated with overall Mission Bay plan development. Therefore the indirect impacts on population growth of project operation would be less than significant.

The Mission Bay FSEIR did not identify any significant operational-related impacts to population growth, and accordingly, did not require any mitigation measures for this impact. Furthermore, the Mission Bay FSEIR did not identify any alternatives to reduce operational-related impacts to population growth. Consequently, no new or different mitigation measures or alternatives to reduce project operational impacts to population growth are identified or required with respect to the currently proposed project.

Impact PH-5: Operation of the proposed project would not displace existing housing units or create substantial demand for additional housing. (Less than Significant)

As discussed above under Impact PH-2, no existing housing is located at the project site, and consequently, the project would not displace any existing housing units. As discussed under Impact PH-4, it is expected that employment needs for project operations would be met by residents already living in San Francisco or the rest of the five-county region. Therefore, project implementation would not create substantial demand for additional housing, and the impact would be less than significant.

Impact PH-6: Operation of the proposed project would not displace substantial numbers of people, necessitating the construction of replacement housing elsewhere. (No Impact)

As described under Impact PH-3, the construction of the project would not result in a displacement of population. Given that no impact would occur, project operations would similarly have no impact related to the displacement of people.

Cumulative Impacts

Impact C-PH-1: The proposed project, in combination with other past, present, and reasonably foreseeable future projects, would not result in significant adverse cumulative impacts on population and housing. (Less than Significant)

The geographic context for analysis of potential cumulative population and housing impacts is San Francisco. Forecasts of reasonably foreseeable future development are based on the City and County of San Francisco's most recent Pipeline Report.²⁵ The Pipeline Report describes the development projects that would add residential units or commercial space, applications for which have been formally submitted to the Planning Department or the Department of Building Inspection. Pipeline projects encompass various stages of proposed development, from applications filed to entitlements secured, building permits issued to projects under construction.²⁶ In addition, the UCSF 2014 LRDP anticipates the addition of approximately 1.46 million gsf of new space on UCSF's North Campus (north of 16th Street), as well as approximately 918,000 gsf on the South Campus (south of 16th Street). (UCSF projects are not included in the City's Pipeline Report because the university is not under City jurisdiction.)

²⁵ San Francisco Planning Department, *San Francisco Pipeline Report Quarter 2, 2014*, September 2014.

²⁶ However, the Pipeline Report does not include projects undergoing preliminary Planning Department review or projections based on area plan analysis.

Project Construction

As discussed under Impact PH-1, project construction is expected to generate several hundred construction jobs phased over a duration of approximately 26 months. Because construction employment is temporary, it would not combine with past or future construction projects to contribute to a cumulative impact related to construction employment. Project construction could be occurring concurrently with a considerable amount of other construction activity within San Francisco, however. The City's current Pipeline Report indicates that development proposals for a total of 18,482,800 square feet of commercial development and residential development totaling 50,700 units have been filed with the City, are under review, or are under construction. Some of these projects, potentially also including development pursuant to the UCSF 2014 LRDP, would be under construction at the same time as the proposed project. Despite the current robust level of construction activity in the City, however, considering the substantial job losses in the region experienced by the construction industry until recently, the construction labor force in San Francisco and the surrounding region is expected to accommodate demand for construction labor. Therefore, the cumulative impact of project construction in combination with other concurrent construction projects within the City would be less than significant.

Project Operation

Operation of the proposed project at Blocks 29-32 would add a total of up to 3,578 new jobs at the project site, as discussed under Impact PH-4. The project would not create a residential population, and consequently would not contribute to cumulative population and related housing impacts.

ABAG provides longer-term population, housing, and employment projections for San Francisco. The current projections were prepared, with MTC, in conjunction with development of Plan Bay Area.²⁷ Employment in San Francisco is expected to increase by 190,780 jobs between 2010 and 2040. The anticipated new commercial development discussed in the City's pipeline report would generate approximately 43,500 net new jobs (based on an average City employee density estimates for the proposed land uses). If this development were fully built out, combined with the project's estimated 3,578 new jobs, the cumulative employment increase would be 47,078 jobs. This would represent approximately 25 percent of employment growth estimated to occur in the City by 2040. Additional employment would be attributed to development pursuant to the UCSF 2014 LRDP—about 11,430 new jobs across all UCSF campuses. The same ABAG projections forecast that San Francisco will gain approximately 101,000 households by 2040, an increase of approximately 35 percent from the 2010 total. Given that the combined new employment would not exceed San Francisco's currently projected employment and housing growth for 2040, the cumulative increase in employment associated with the project in combination with other foreseeable nonresidential development would not result in a significant cumulative impact on the City's population and housing resources, and the impact would be less than significant.

²⁷ ABAG and MTC, Plan Bay Area: Final Forecast of Jobs, Population and Housing, July 2013.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
4. CULTURAL AND PALEONTOLOGICAL RESOURCES—Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco <i>Planning Code</i> ?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Summary of Cultural Resource Impacts in Mission Bay FSEIR

The cultural resources significance criteria were addressed in the Mission Bay FSEIR in the Visual Quality and Urban Design section and the Initial Study Cultural Resources section. Relevant information from these sections is summarized below.

Summary of Historic Architectural Resources in Mission Bay FSEIR

The Mission Bay FSEIR Visual Quality and Urban Design section summarized information from the 1990 Mission Bay FEIR on historic architectural resources present within or adjacent to the Mission Bay plan area. The Mission Bay FSEIR reported that former Fire Station 30, located at Third Street and Mission Rock Street within the Mission Bay plan area, was potentially eligible for the National Register of Historic Places (NRHP); and the Lefty O'Doul and Peter Maloney Bridges, located at China Basin Channel adjacent to but outside of the Mission Bay plan area, were determined to be eligible for listing on the NRHP.²⁸ These historic architectural resources are not located within, or in proximity to, the Blocks 29 to 32 site.

The Mission Bay FSEIR Visual Quality and Urban Design Impacts section determined that the proposed demolition of former Fire Station 30 would be a significant impact to this historic architectural resource, however, with implementation of Mitigation Measures D.2 identified in the Mission Bay FSEIR, this impact would be reduced to a less than significant level. The Mission Bay FSEIR further determined that since the Lefty O'Doul and Peter Maloney Bridges were located outside the Mission Bay plan area, and those structures and their setting would not be modified under the Mission Bay plan, impacts to those historic architectural resources would be less than significant.

In summary, the Mission Bay FSEIR determined the Mission Bay plan would result in a significant impact to historic architectural resources, and identified mitigation measures to reduce the impact to a less than

²⁸ In 1989, the Lefty O'Doul Bridge was designated City Landmark No. 194.

significant level. However, this impact and associated mitigation measures are not applicable to the Blocks 29-32 site.

Historic and Prehistoric Archaeological Resources in Mission Bay FSEIR

The Mission Bay FSEIR Initial Study Cultural Resources section summarized information from the 1990 Mission Bay FEIR on historic and prehistoric resources within the Mission Bay plan area, including information from a Cultural Resources Evaluation conducted in 1987 by David Chavez & Associates, and supplemented with an archaeological resources review conducted in 1997 also by David Chavez & Associates. The Mission Bay FSEIR Initial Study indicated that in 1997 the overall potential for prehistoric Native American sites within the Mission Bay plan area was considered to be low. However, there was potential for historic-period archaeological resources to be present within the Mission Bay plan area associated with the use of the area for industrial purposes and as a City landfill in the 19th and early 20th centuries. The Mission Bay FSEIR Initial Study presented mapping of areas within the Mission Bay plan area that had the most notable potential for subsurface historic and prehistoric cultural resources; this included the portion of the Mission Bay plan area south of and including 16th Street, which is located immediately south of and adjacent to the project site at Blocks 29-32.²⁹ No substantial potential for archeological resources was identified in most areas composed of filled land in the former Mission Bay, including the project site, with the exception of the opposite (north) margin of Mission Bay, which was used as the City dump in the late 19th century. At the time of publication of the FSEIR, no substantial potential for archeological resources was identified in most areas composed of filled land in the former Mission Bay, including the project site, with the exception of the opposite (north) margin of Mission Bay, which was used as the City dump in the late 19th century.

The Mission Bay FSEIR Initial Study concluded that development and associated construction under the Mission Bay plan could disturb potentially significant subsurface historic resources in six historic resource areas within the overall plan area and that the entire Mission Bay plan area has some sensitivity for the presence of unknown historic or prehistoric archaeological resources. However, with implementation of Mitigation Measures D.3, D.4, D.5, and D.6 identified in the Mission Bay FSEIR, these impacts would be reduced to a less-than-significant level.

In summary, the Mission Bay FSEIR determined that the Mission Bay plan would result in potentially significant impacts to subsurface prehistoric or historic archaeological resources within the Mission Bay plan area, including potential impacts within the vicinity of Blocks 29-32, and identified mitigation measures to reduce those impacts to a less-than-significant level.

²⁹ Potential historic-period resources in this area were identified as being associated with 19th century shipbuilding activities at Potrero Point (Point San Quentin), which extended northward into the southeast corner of Mission Bay nearly to 16th Street, and with a nearby glass factory.

Impact Evaluation

Historic Architectural Resources

Impact CP-1: The project would not cause a substantial adverse change in the significance of a historical resource as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the San Francisco Planning Code. (Less than Significant)

The proposed project would result in the construction and operation of an event center, retail uses, office buildings, parking facilities and open space areas within the project site. However, as discussed above, the Mission Bay FSEIR did not identify any historic architectural resources within or in proximity of the project site, and correspondingly, did not identify any significant impacts to historic architectural resources within the project site. Given the absence of historic architectural resources within or in proximity to the project site, the construction and operation of the proposed uses would not result in any new impacts, or increase the severity of previously-identified impacts, to historic architectural resources.

At the time of preparation of the Mission Bay FSEIR, several buildings and facilities were located and operating on the project site. These buildings and structures were subsequently removed, and the project site has been subject to grading, some excavation, and construction of paved surface parking lots, fencing and associated utilities on portions of the site. This change in conditions on the project site has not altered the fact that the site contains no historic architectural resources, as those facilities that were removed from the project site did not have any historic architectural status or importance, nor would it alter the effects of the project with respect to impacts on historic architectural resources.

Pursuant to mitigation identified in the Mission Bay FSEIR, the sole historic architectural resource located within the Mission Bay plan area (former Fire Station 30) was evaluated and determined to be eligible for the NRHP.³⁰ This change in conditions for this resource, however, has no effect on conditions regarding the absence of historic architectural resources at or in the vicinity of the project site. There are no other new historic architectural resources, including City Landmarks and/or historic districts, which have been identified within the Mission Bay plan area, beyond those previously addressed in the Mission Bay FSEIR. Therefore, there have been no substantial changes with respect to circumstances under which the project is undertaken nor has any new information become available that will result in new or more severe impacts associated with the proposed project.

As discussed above, the Mission Bay FSEIR did not identify any significant impacts to historic architectural resources within the project site, and accordingly, did not require any mitigation measures for historic architectural resources that were applicable to the project site. Furthermore, the Mission Bay FSEIR did not identify any alternatives to reduce impacts to historic architectural resources within the project site. Consequently, no new or different mitigation measures or alternatives to reduce project impacts to historic architectural resources at the project site are identified or required with respect to the currently proposed project.

³⁰ Former Fire Station 30 has since been rehabilitated consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*, converted to provide a community meeting room and house the Arson Task Force, and integrated with the newly-constructed Public Safety Building.

On the basis of the factors discussed above, the project would not have any new or substantially more severe effects than those identified in the Mission Bay FSEIR on historical resources as defined in §15064.5, including those resources listed in Article 10 or Article 11 of the *Planning Code*.

Archaeological Resources

Impact CP-2: The project could cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5. (Less than Significant with Mitigation)

As discussed above, the Mission Bay FSEIR determined in 1998 that the Mission Bay plan would result in potentially significant impacts to subsurface prehistoric- or historic-era archaeological resources within the Mission Bay plan area, and identified mitigation measures to reduce those impacts, including within Blocks 29 to 32, to a less-than-significant level.

The proposed project would result in the construction and operation of an event center, retail uses, office buildings, parking facilities and open space areas within the project site. Construction activities would require foundation excavation to about 30 feet below San Francisco datum, pile driving to depths below that, and grading all of the site, which could disturb potentially significant subsurface historic and prehistoric archaeological resources, should such resources be present. These types of subsurface construction activities were anticipated and analyzed in the Mission Bay FSEIR, and there is nothing specific to the proposed subsurface construction activities at the project site that would result in new significant impacts or substantially increase the severity of previously-identified significant impacts to archaeological resources. Thus, impacts of the proposed project on archaeological resources would be potentially significant, but impacts could be reduced to less than significant with identified mitigation measures.

The FSEIR presented detailed mitigation measures for archaeological resources testing, monitoring, and exploration for identified historic resource areas within the Mission Bay plan area (see Mission Bay FSEIR Mitigation Measures D.3 and D.4). These historic resource areas were identified based on historic land uses in the area, such as early shipbuilding activities in the 1860s to 1880s, and pre-construction archaeological testing and construction monitoring is recommended to reduce potential impacts to less than significant. In addition, the FSEIR identified Mitigation Measure D.6 to mitigate for accidental discovery of archaeological resources anywhere in the plan area.

The FSEIR indicated that Blocks 29-32 is not located within any of the identified historic resource areas, which would imply that Mitigation Measures D.3 and D.4 are not specifically applicable to the project site, although one of the identified historic resource areas is located directly south of the Blocks 29-32 project site. FSEIR Mitigation Measure D.5 applies specifically to the area bordered by Berry, Fifth, and Seventh Streets (location of the 19th century), and does not apply to the project site. FSEIR Mitigation Measure D.6 is applicable to the project site, as discussed further below.

As described in the Project Description, the project sponsor has indicated that in order to minimize the risk of construction delays due to the potential presence of archaeological resources, the project sponsor would retain the services of an archaeologist to develop and implement a program of archaeological testing as part of the preliminary site evaluation and planning program for the proposed development at Blocks 29-32. This program would be similar to Mitigation Measures D.3 and D.4 previously identified in

the FSEIR, and the results would be used to inform the construction activities, with the intent to avoid or minimize effects on subsurface archaeological resources prior to the commencement of foundation excavation and pile driving. The project sponsor would use the results of the archaeological testing to develop a construction monitoring program for protection of archaeological resources during construction while still achieving the Warriors' scheduling objectives. Nevertheless, while this component of the proposed project would provide additional protection for potentially present archaeological resources, due to the as yet unknown details of the proposed testing program, there remains the potential for project construction activities to adversely affect archaeological resources, if encountered, and the impact would be potentially significant.

Implementation of Mitigation Measures M-CP-2a (Archaeological Testing, Monitoring and/or Data Recovery Program) and M-CP-2b (Accidental Discovery of Archaeological Resources) would reduce this impact to less than significant. Mitigation Measures M-CP-2a would formalize the project sponsor's commitment to conduct archaeological testing and monitoring (as well as data recovery, if warranted), and would require that the project sponsor's archaeological testing and monitoring program be consistent with the City's standard protocols; this measure would in effect implement the requirements of FSEIR Mitigation Measures D.3 and D.4.

Mitigation Measure M-CP-2b replaces and implements FSEIR Mitigation Measure D.6. This replacement does not infer that there would be a new more severe significant impact or an impact of greater severity than was analyzed and disclosed in the FSEIR. Consistent with the conclusions of the FSEIR, FSEIR Mitigation Measure D.6, as implemented through Mitigation Measure M-CP-2b, would reduce the proposed project's impact to a less-than-significant level. As such, the proposed project would not result in any new or substantially more severe impacts on archaeological resources than were analyzed and disclosed in the FSEIR.

The Mission Bay FSEIR identified feasible mitigation measures to reduce potentially significant impacts to subsurface prehistoric or historic archaeological resources within the Mission Bay plan area, including the project site, to a less than significant level. The Mission Bay FSEIR did not identify any alternatives to reduce archaeological resources at the project site. While there are no new or different mitigation measures or alternatives required to reduce project impacts to archaeological resources beyond those previously identified in the Mission Bay FSEIR, the City has since updated its standard mitigation measures for accidental discovery of archaeological resources, which would augment and replace the FSEIR Mitigation D.6, as specified below.

As discussed under Historic Architectural Resources, above, since preparation of the Mission Bay FSEIR, the project site has been subject to subsurface disturbance from grading, some excavation activities, and construction of paved surface parking lots. In addition, geotechnical investigations at the project site have indicated the top of the Colma Formation geologic unit underlying the site was at depths ranging from 19 to 70 feet below ground surface.³¹ This geologic unit is known to be associated with the presence of archaeological resources. This information is corroborated by other geotechnical reports for development in

³¹ Langan Treadwell Rollo, 2014. Preliminary Geotechnical Evaluation, Block 29-32 Mission Bay, San Francisco, California, Project No. 731617202. March 28, 2014.

the Mission Bay area that has occurred since publication of the Mission Bay FSEIR. No new historic or prehistoric archaeological resources have been identified at Blocks 29-32 since publication of the Mission Bay FSEIR.³² However, this change in conditions on the project site and additional information would not create the potential for the project to result in new or more severe impacts to potentially significant subsurface historic and prehistoric archaeological resources that may be present on the site.

Thus, with implementation of Mitigation Measures M-CP-2a (Archaeological Testing, Monitoring and/or Data Recovery Program) and M-CP-2b (Accidental Discovery of Archaeological Resources), the proposed project would not result in any new or more severe significant effects on archaeological resources than were previously identified in the FSEIR.

Mitigation Measure M-CP-2a: Archaeological Testing, Monitoring and/or Data Recovery Program

Based on a reasonable presumption that archaeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archaeological consultant approved by OCII or its designated representative such as those from the rotational Department Qualified Archaeological Consultants List (QACL) maintained by the Planning Department archaeologist. The project sponsor shall contact the Department archaeologist to obtain the names and contact information for the next three archaeological consultants on the QACL. The archaeological consultant shall undertake an archaeological testing program as specified herein. In addition, the consultant shall be available to conduct an archaeological monitoring and/or data recovery program if required pursuant to this measure. The archaeological consultant's work shall be conducted in accordance with this measure at the direction of OCII or its designated representative. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to OCII or its designated representative for review and comment, and shall be considered draft reports subject to revision until final approval by OCII or its designated representative. Archaeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the OCII or its designated representative, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less than significant level potential effects on a significant archaeological resource as defined in CEQA Guidelines Sect. 15064.5 (a)(c).

Consultation with Descendant Communities: On discovery of an archaeological site³³ associated with descendant Native Americans, the Overseas Chinese, or other descendant group an appropriate representative³⁴ of the descendant group and OCII or its designated representative shall be contacted. The representative of the descendant group shall be given the opportunity to

³² The "Prehistoric Native American Shell Middens on Mission Bay, San Francisco" archaeological district, recently determined eligible for the National Register, is located in the South of Market neighborhood (in the vicinity of the original northern shoreline of the Mission Bay), and consequently, is not located in proximity to the project site, and moreover, is completely outside the Mission Bay plan area.

³³ By the term "archaeological site" is intended here to minimally include any archaeological deposit, feature, burial, or evidence of burial.

³⁴ An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the Department archaeologist.

monitor archaeological field investigations of the site and to consult with OCII or its designated representative regarding appropriate archaeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the Final Archaeological Resources Report shall be provided to the representative of the descendant group.

Archaeological Testing Program. The archaeological consultant shall prepare and submit to OCII or its designated representative for review and approval an archaeological testing plan (ATP). The archaeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archaeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archaeological testing program will be to determine to the extent possible the presence or absence of archaeological resources and to identify and to evaluate whether any archaeological resource encountered on the site constitutes an historical resource under CEQA.

At the completion of the archaeological testing program, the archaeological consultant shall submit a written report of the findings to OCII or its designated representative. If based on the archaeological testing program the archaeological consultant finds that significant archaeological resources may be present, OCII or its designated representative in consultation with the archaeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archaeological testing, archaeological monitoring, and/or an archaeological data recovery program. No archaeological data recovery shall be undertaken without the prior approval of OCII or its designated representative. If OCII or its designated representative determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor either:

- A. The proposed project shall be re-designed so as to avoid any adverse effect on the significant archaeological resource; or
- B. A data recovery program shall be implemented, unless OCII or its designated representative determines that the archaeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archaeological Monitoring Program. If OCII or its designated representative in consultation with the archaeological consultant determines that an archaeological monitoring program shall be implemented the archaeological monitoring program shall minimally include the following provisions:

- The archaeological consultant, project sponsor, and OCII or its designated representative shall meet and consult on the scope of the AMP reasonably prior to any project-related soils disturbing activities commencing. OCII or its designated representative in consultation with the archaeological consultant shall determine what project activities shall be archaeologically monitored. In most cases, any soils- disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archaeological monitoring because of the risk these activities pose to potential archaeological resources and to their depositional context;
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected

resource(s), and of the appropriate protocol in the event of apparent discovery of an archaeological resource;

- The archaeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archaeological consultant and OCII or its designated representative until OCII or its designated representative has, in consultation with project archaeological consultant, determined that project construction activities could have no effects on significant archaeological deposits;
- The archaeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis;
- If an intact archaeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archaeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/ construction activities and equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring, etc.), the archaeological monitor has cause to believe that the pile driving activity may affect an archaeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with OCII or its designated representative. The archaeological consultant shall immediately notify the OCII or its designated representative of the encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit, and present the findings of this assessment to OCII or its designated representative.

Whether or not significant archaeological resources are encountered, the archaeological consultant shall submit a written report of the findings of the monitoring program to the OCII or its designated representative.

Archaeological Data Recovery Program. The archaeological data recovery program shall be conducted in accord with an archaeological data recovery plan (ADRP). The archaeological consultant, project sponsor, and OCII or its designated representative shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archaeological consultant shall submit a draft ADRP to OCII or its designated representative. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archaeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- *Field Methods and Procedures.* Descriptions of proposed field strategies, procedures, and operations.
- *Cataloguing and Laboratory Analysis.* Description of selected cataloguing system and artifact analysis procedures.
- *Discard and Deaccession Policy.* Description of and rationale for field and post-field discard and deaccession policies.

- *Interpretive Program.* Consideration of an on-site/off-site public interpretive program during the course of the archaeological data recovery program.
- *Security Measures.* Recommended security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities.
- *Final Report.* Description of proposed report format and distribution of results.
- *Curation.* Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Human Remains and Associated or Unassociated Funerary Objects. The treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable State and Federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The archaeological consultant, project sponsor, OCII or its designated representative, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.

Final Archaeological Resources Report. The archeological consultant shall submit a Draft Final Archaeological Resources Report (FARR) to OCII or its designated representative that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archaeological resource shall be provided in a separate removable insert within the final report.

Once approved by OCII or its designated representative, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and OCII or its designated representative shall receive a copy of the transmittal of the FARR to the NWIC. As requested by OCII, the Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, OCII or its designated representative may require a different final report content, format, and distribution than that presented above.

Mitigation Measure M-CP-2b: Accidental Discovery of Archaeological Resources (Implementing FSEIR Mitigation D.6)

The following mitigation measure is required to avoid any potential adverse effect from the proposed project on accidentally discovered buried or submerged historical resources as defined in CEQA Guidelines Section 15064.5(a)(c). The project sponsor shall distribute the Planning Department archaeological resource "ALERT" sheet to the project prime contractor; to any project subcontractor

(including demolition, excavation, grading, foundation, pile driving, etc. firms); or utilities firm involved in soils disturbing activities within the project site. Prior to any soils disturbing activities being undertaken each contractor is responsible for ensuring that the "ALERT" sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, supervisory personnel, etc. The project sponsor shall provide OCII officer or its designated representative with a signed affidavit from the responsible parties (prime contractor, subcontractor(s), and utilities firm) confirming that all field personnel have received copies of the Alert Sheet.

Should any indication of an archaeological resource be encountered during any soils disturbing activity of the project, the project Head Foreman and/or project sponsor shall immediately notify OCII officer or its designated representative and shall immediately suspend any soils disturbing activities in the vicinity of the discovery until OCII officer or its designated representative has determined what additional measures should be undertaken.

If OCII officer or its designated representative determines that an archaeological resource may be present within the project site, the project sponsor shall retain the services of an archaeological consultant from the pool of qualified archaeological consultants maintained by the Planning Department archaeologist. The archaeological consultant shall advise OCII officer or its designated representative as to whether the discovery is an archaeological resource, retains sufficient integrity, and is of potential scientific/historical/cultural significance. If an archaeological resource is present, the archaeological consultant shall identify and evaluate the archaeological resource. The archaeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, OCII officer or its designated representative may require, if warranted, specific additional measures to be implemented by the project sponsor.

Measures might include: preservation in situ of the archaeological resource; an archaeological monitoring program; or an archaeological testing program. If an archaeological monitoring program or archaeological testing program is required, it shall be consistent with the Environmental Planning (EP) division guidelines for such programs. OCII officer or its designated representative may also require that the project sponsor immediately implement a site security program if the archaeological resource is at risk from vandalism, looting, or other damaging actions.

The project archaeological consultant shall submit a Final Archaeological Resources Report (FARR) to OCII officer or its designated representative that evaluates the historical significance of any discovered archaeological resource and describing the archaeological and historical research methods employed in the archaeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archaeological resource shall be provided in a separate removable insert within the final report.

Copies of the Draft FARR shall be sent to OCII officer or its designated representative for review and approval. Once approved by OCII officer or its designated representative, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and OCII officer or its designated representative shall receive a copy of the transmittal of the FARR to the NWIC. OCII and the Environmental Planning division of the Planning Department shall each receive one bound copy, one unbound copy and one unlocked, searchable PDF copy on CD three copies of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest or interpretive value, OCII officer or its designated representative may require a different final report content, format, and distribution than that presented above.

Paleontological Resources

Impact CP-3: The project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. (Topic Not Previously Analyzed; Less than Significant)

Paleontological resources, or fossils, are the remains, imprints, or traces of once-living organisms preserved in rocks and sediments. Paleontological resources are lithologically dependent; that is, deposition and preservation of paleontological resources are related to the lithologic unit in which they occur. If the rock types representing a deposition environment conducive to deposition and preservation of fossils are not favorable, fossils will not be present. Rock types that may contain fossils include sedimentary and volcanic formations.

The Mission Bay FEIR and FSEIR did not specifically address potential impacts on paleontological resources within the Mission Bay Plan area, including the project site. However, excavation for the project would encounter only artificial fill and Holocene-aged Bay Mud, and there are no unique geologic features within the site.

The artificial fill is not naturally occurring and therefore does not likely contain significant fossil remains. There have been no vertebrate or invertebrate fossils identified in Holocene-aged sediments throughout the Bay Area, and the only plant fossils found in sediments of this age have been at Mount Lake in the Presidio.³⁵ While Bay Mud contains some invertebrate remains such as gastropods and bivalves, these are typically not yet fossilized, not yet extinct, and are likely to occur throughout similar deposits around the bay. Such remains are therefore not considered a significant paleontological resource, and these materials are considered to have a low paleontological potential per the Society of Vertebrate Paleontology criteria.³⁶

Proposed project construction activities would require pile driving activities, which were assumed in the Mission Bay FSEIR to occur in the Mission Bay plan area, including within the project site. There is nothing specific to the proposed subsurface construction activities at the project site that would be substantially different from those analyzed in the Mission Bay FSEIR.

The proposed installation of piles at the project site would involve limited disruption of the underlying geologic units. As noted above, excavation at the project site would encounter only artificial fill and Bay Mud. In addition, the project would not involve excavation of exposed rock outcrops that would destroy

³⁵ University of California Museum of Paleontology Specimens, UCMP Specimen Search, <http://ucmpdb.berkeley.edu/>. Accessed on September 8, 2014.

³⁶ The SVP has established guidelines for the identification, assessment, and mitigation of adverse impacts on nonrenewable paleontological resources. Many federal, state, county, and city agencies have either formally or informally adopted the SVP's standard guidelines for the mitigation of adverse construction-related impacts on paleontological resources. The SVP has helped define the value of paleontological resources and, in particular, indicates that geologic units of high paleontological potential are those from which vertebrate or significant invertebrate or significant suites of plant fossils have been recovered in the past (i.e., are represented in institutional collections). Areas that contain potentially datable organic remains older than the Recent era, including deposits associated with nests or middens, and areas that may contain new vertebrate deposits, traces, or trackways, are also classified as significant. Geologic units of low paleontological potential are those that are not known to have produced a substantial body of significant paleontological material. As such, the sensitivity of an area with respect to paleontological resources hinges on its geologic setting and whether significant fossils have been discovered in the area or in similar geologic units. Society of Vertebrate Paleontology (SVP), *Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources: Standard Guidelines*, <http://vertpaleo.org/The-Society/Governance-Documents/Conformable-Impact-Mitigation-Guidelines-Committee.aspx>. Accessed on September 8, 2014.

a unique geologic feature. Therefore, because there is a low potential to encounter paleontological resources during construction, impacts related to paleontological resources and geologic features would be less than significant, and no mitigation is required.

Human Remains

Impact CP-4: The proposed project would not disturb any human remains, including those interred outside of formal cemeteries. (Topic Not Previously Analyzed; Less than Significant)

The Mission Bay FEIR and FSEIR did not specifically address impacts associated with potential disturbance of human remains within the Mission Bay Plan area, including the project site. However, to date, no known human burial locations have been identified within the project site, though the possibility of such a discovery cannot be entirely discounted. Project construction could result in direct impacts to previously undiscovered human remains during earthmoving activities.

Under State law, human remains and associated burial items may be significant resources in two ways: they may be significant to descendant communities for patrimonial, cultural, lineage, and religious reasons; and human remains may also be important to the scientific community, such as prehistorians, epidemiologists, and physical anthropologists. The specific stake of some descendant groups in ancestral burials is a matter of law for some groups, such as Native Americans (CEQA Guidelines Section 15064.5 (d), Public Resources Code Section 5097.98). In other cases, the concerns of the associated descendent group regarding appropriate treatment and disposition of discovered human burials may become known only through outreach. Beliefs concerning appropriate treatment, study, and disposition of human remains and associated burial items may be inconsistent and even conflict among descendent and scientific communities.

If encountered, the treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable State and Federal Laws, including immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98).

The project sponsor would be required to retain a qualified archaeological consultant, who in conjunction with the project sponsor, OCII (or its designated representative), and the MLD, shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines. Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects.

These requirements are consistent with provisions listed in Mitigation Measure M-CP-2a, Archaeological Testing, Monitoring and/or Data Recovery Program.

Therefore, because the project would be required to comply with the regulations described above and to implement the measures specified under those regulations, impacts related to disturbance of human remains would be less than significant.

Cumulative Impacts

Impact C-CP-1: The proposed project, in combination with past, present, and reasonably foreseeable projects, could result in significant impacts to cultural resources. (Less than Significant with Mitigation)

The geographic scope for potential cumulative impacts related to cultural resources generally includes the Mission Bay area. Other reasonably foreseeable projects within the project vicinity with the potential to contribute to cumulative, cultural resources impacts would be required to undergo separate environmental review, as necessary, and to identify mitigation measures for any significant impacts. Cumulative impacts on cultural resources could result if the proposed project, in combination with other reasonably foreseeable projects in the vicinity, would collectively increase the potential for significant impacts, even with implementation of project-specific mitigations.

As the proposed project would have no impacts to historic architectural resources, it therefore would not contribute to any such cumulative impact. Similarly, as the proposed project would have less than significant impacts on paleontological resources as described in Impact CP-3, other projects in the vicinity would also be expected to have a less than significant impact on these resources because they are all located on similar underlying geologic units (i.e., artificial fill and Bay Mud) that have low potential for presence of paleontological resources. Therefore, the cumulative impact would also be considered less than significant.

Similar to the proposed project as described under Impacts CP-2 and CP-4, the cumulative projects in the Mission Bay area could have a significant impact on both recorded and unrecorded archaeological resources, including human remains interred outside of formal cemeteries, given the substantial amount of construction-related ground disturbance that could occur. The potential impacts of the proposed project when considered together with similar impacts from other reasonably foreseeable projects in the project vicinity could contribute to a significant cumulative impact to buried archaeological resources. However, implementation of measures required by regulation to address human remains and of Mitigation Measures M-CP-2a and M-CP-2b, as standard City-required mitigation, would also apply to cumulative projects based on each project's potential to affect archaeological resources. These measures would require implementation of legally-required appropriate treatment of human remains as well as archaeological testing, monitoring and/or data recovery programs, which would reduce cumulative impacts to archaeological resources to a less-than-significant level. Therefore, with implementation of Mitigation Measures M-CP-2a and M-CP-2b, the proposed project's contribution to cumulative impacts would be less than significant with mitigation.

Mitigation Measure M-CP-2a: Archaeological Testing, Monitoring and/or Data Recovery Program (see Impact CP-2 above)

Mitigation Measure M-CP-2b: Accidental Discovery of Archaeological Resources (see Impact CP-2 above)

<i>Topics:</i>	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
5. TRANSPORTATION AND CIRCULATION— Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The SEIR will provide a summary of the transportation impacts from the Mission Bay FSEIR relevant to the project site. It will also include an updated, detailed analysis of transportation impacts associated with the proposed project, including explanation of the checklist items indicated above. The SEIR will include a complete description of the existing transportation setting, impact evaluation of project and cumulative impacts relative to existing conditions, and current mitigation measures, as appropriate.

With regard to the analysis of parking impacts of the proposed project, see discussion above under Aesthetics regarding Public Resources Code Section 21099. As stated above, parking is no longer to be considered in determining if a project has the potential to result in significant environmental effects for projects that meet all of the identified criteria. However, because parking conditions may be of interest to the public and the decision makers, the SEIR will present a parking demand analysis for informational purposes and will consider any secondary physical impacts associated with constrained supply (e.g., queuing by drivers waiting for scarce onsite parking spaces that affects the public right-of-way) as applicable in the transportation analysis.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
6. NOISE—Would the project:				
a) Result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Be substantially affected by existing noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The proposed project is not located within an airport land use plan area, within two miles of a public airport, or within the vicinity of a private airstrip. Therefore, criteria E.6(e) and 6(f) are not applicable to the proposed project and are not discussed further in this Initial Study or in the SEIR. The proposed event center, and office and retail land uses would not be considered noise sensitive receptors, similar to the commercial industrial/retail land uses that were envisioned for Blocks 29-32 under the Mission Bay FSEIR. Consequently, the proposed project would not be substantially affected by existing noises levels, and criterion E.6(g) is therefore not discussed further in this Initial Study or in the SEIR.

The SEIR will provide a summary of the noise impacts from the Mission Bay FSEIR relevant to the project site. It will also include an updated, detailed analysis of noise impacts associated with the proposed project, including explanation of the checklist items indicated above related to a potentially substantial increase in severity of significant impacts identified in the Mission Bay FSEIR. The SEIR will include a complete description of the existing noise setting (2014), impact evaluation of project and cumulative impacts relative to existing conditions, and current mitigation measures, as appropriate.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
7. AIR QUALITY—Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal, state, or regional ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Mission Bay FSEIR did not address odor impacts associated with development of the Mission Bay plan. However, the proposed project would result in the construction and operation of urban land uses at the project site, similar to the types of uses completed or planned in the Mission Bay redevelopment area, and none of these uses would create or generate objectionable odors. Therefore, the proposed project would not result in any new or significant odor impacts, and significance criterion E.7(e) is not discussed further in this Initial Study or in the SEIR.

The SEIR will provide a summary of the air quality impacts from the Mission Bay FSEIR. It will also include an updated, detailed analysis of air quality impacts associated with the proposed project, including explanation of the checklist items indicated above related to a potentially substantial increase in severity of significant impacts identified in the Mission Bay FSEIR. The SEIR will include a complete description of the existing air quality setting (2014), impact evaluation of project and cumulative impacts relative to existing conditions, and current mitigation measures, as appropriate.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
8. GREENHOUSE GAS EMISSIONS—Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The Mission Bay FSEIR did not address greenhouse gas (GHG) emissions as a distinct environmental topic. The SEIR will include an updated, detailed analysis of GHG impacts associated with the proposed project, including explanation of the checklist items indicated above. The SEIR will include a complete description of the existing GHG setting (2014), impact evaluation of cumulative GHG impacts, and current mitigation measures, as appropriate.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
9. WIND AND SHADOW—Would the project:				
a) Alter wind in a manner that substantially affects public areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The SEIR will provide a summary of the wind and shadow impacts from the Mission Bay FSEIR relevant to the project site. It will also include an updated, detailed analysis of wind and shadow impacts associated with the proposed project, including explanation of the checklist items indicated above related to a potentially substantial increase in severity of significant impacts identified in the Mission Bay FSEIR. The SEIR will include a complete description of the existing wind and shadow setting (2014), impact evaluation of project and cumulative impacts relative to existing conditions, and current mitigation measures, as appropriate.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
10. RECREATION—Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Physically degrade existing recreational resources?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Summary of Recreation Impacts in Mission Bay FSEIR

The Mission Bay FSEIR Community Services and Utilities setting section summarized information on existing recreational uses that were present within the Mission Bay plan area at that time. The Mission Bay FSEIR identified the nearest existing public recreational facility to Blocks 29-32 as Agua Vista Park (a small landscaped area and fishing pier), located southeast of the project site across Terry A. François Boulevard.

The Mission Bay FSEIR Community Services and Utilities impacts section reported that residential and commercial development proposed within the Mission Bay plan area would generate a residential and employee demand, respectively, for parks. The Mission Bay FSEIR indicated 47 acres of open space was proposed within the Mission Bay plan area, of which more than 15 acres of new, non-UCSF parks and open space have been completed. Within the Mission Bay east subarea, this included an approximate 6-acre park to be developed as a bayfront linear park east of a realigned Terry A. François Boulevard (across from Blocks 30 and 32) from 16th Street north to Mission Rock Street; and a neighborhood park located along the west side of Terry A. François Boulevard south of 16th Street. In addition, the Mission Bay plan proposed a number of bicycle and pedestrian paths to connect parks and open spaces within the Mission Bay plan area, including a 20-foot wide setback to accommodate a pedestrian path along 16th Street (adjacent to Blocks 31 and 32) between Terry A. François Boulevard and Owens Street. The FSEIR noted that in addition to the proposed public open space, private open space would be developed within the Mission Bay plan area.

The Mission Bay FSEIR determined that the proposed areas of commercial development within the Mission Bay plan area would be located within a recommended 900 feet distance of open space. The Mission Bay FSEIR also determined that all proposed residential development within the Mission Bay plan area would be located within the recommended one-quarter mile distance of neighborhood parks for passive recreation, and would be generally within that distance for active recreation uses. The Mission Bay FSEIR added that the open space would be constructed with each phase of Mission Bay development, in the amount of at least 0.46 acres of open space for each 1.0 acre of developable area until all open space is developed. The Mission Bay FSEIR concluded that given the open space proposed near the development in each phase, that the provision of open space over the course of the Mission Bay plan area development build-out would be adequate.

In summary, the Mission Bay FSEIR identified no significant impacts to recreation from the Mission Bay plan, and accordingly, did not require any mitigation measures related to recreation.

Impact Evaluation

Existing Recreational Resources and Facilities

Impact RE-1: The proposed project would not increase the use of existing parks and recreational facilities such that substantial physical deterioration of the facilities would occur or otherwise result in physical degradation of existing recreational resources. (Less than Significant)

The San Francisco General Plan Recreation and Open Space Element (ROSE) indicates that a half mile is commonly accepted as the distance that can be comfortably walked in 10 minutes, and this distance is what most people are willing to walk to access community uses, including recreational facilities. However a 5-minute walk is more appropriate for activities that involve small children. The ROSE identifies “high needs areas” where the City should prioritize acquisition and renovation of recreational facilities based on walking distance. According to the ROSE, all of Mission Bay is within half-a-mile of passive recreational uses, and a portion of the neighborhood is within half-a-mile of active recreational uses, such as sports fields. However, much of Mission Bay is not within a quarter mile of a playground. The ROSE indicates that the planned open spaces in Mission Bay would shorten these walking distances.

The ROSE also identified high needs areas, based on population density, concentration children and senior citizens, household income, and areas of potential growth. Most of the Mission Bay neighborhood, including the project site, is generally identified as having a “lesser need.” Areas along the waterfront east and northeast of the project site are identified as having a lesser need or a moderate need.

The proposed project would result in the construction and operation of an event center, office and retail uses, parking facilities, as well as 3.2 acres of open space areas within the approximate 11-acre project site. The increase in demand for recreational facilities generated by the project would generally be consistent with that described in the Mission Bay FSEIR for the entire Plan area and would be readily met by planned parks and open space areas developed as part of the Mission Bay Plan, as well as by existing facilities in the project vicinity. In particular, in addition to the 3.2-acres of open space to be constructed as part of the project, future employees and visitors to the project site would have convenient access to the planned 6-acre Bayfront Park east of a realigned Terry A. François Boulevard (across from the project site) and a neighborhood park located along the west side of Terry A. François Boulevard south of 16th Street. Moreover, the 3.2 acres proposed as part of the project would provide some of the planned open space in the Mission Bay area that allowed it to be classified as an area of “lesser need” in the first place. The commercial uses proposed under the project would be located within the recommended 900-foot distance of open space, pursuant to the Mission Bay Plan. Furthermore, the project would not impede residential developments under the Plan from meeting the recommended quarter-mile distance from a neighborhood-serving park.

Therefore, the project would not substantially increase the use of existing parks and recreational facilities and would not lead to physical deterioration of existing recreational resources. Project impacts on recreational resources would be less than significant, and the project would not result in any new or substantially more severe impacts than those previously identified in the FSEIR.

As described in the Mission Bay FSEIR, proposed development within the Plan area would be located within recommended distances to open space and recreational facilities, and that open space areas within the Plan area would be constructed commensurate with each phase of Mission Bay development. Since publication of the FSEIR, in general, development has evolved in the Mission Bay area consistent with this approach and no substantial changes or conditions have occurred at the project site and vicinity that would result in new or more severe impacts than those described in the FSEIR.

Therefore, impacts on existing parks and recreational facilities would be less than significant.

Construction or Expansion of Recreational Facilities

Impact RE-2: The proposed project would not require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment. (Less than Significant)

As described above, the proposed project would include 3.2-acres of open space, which would directly serve the project demand for recreational facilities, and would be located in proximity to planned future parks under the Mission Bay plan area. Consequently, the project would not require the construction or expansion of recreational facilities beyond that already included under the project and under the Mission Bay plan, and the project’s effect on new or expanded recreational facilities that might have an adverse effect on the environment would be less than significant. There have been no changes in conditions or

new information available since publication of the Mission Bay FSEIR that would result in new or more severe impacts than those disclosed in the FSEIR.

Cumulative Impacts

Impact C-RE-1: The project, in combination with other past, present, and reasonably foreseeable future projects, would not result in significant adverse cumulative recreation impacts. (Less than Significant)

The geographic scope of potential cumulative impacts on recreational resources encompasses the recreational facilities in the Mission Bay Plan area. Based upon the analysis provided above, the proposed project would have a less than significant impact regarding substantial physical deterioration or degradation of existing recreational resources. The project could have a significant cumulative impact if the project in combination with past, present, and future projects in this area would increase the use of existing parks and recreational facilities such that substantial physical deterioration of the facilities would occur or otherwise result in physical degradation of existing recreational resources. However, as a program EIR, the Mission Bay FSEIR has addressed the cumulative impacts of overall development of the Mission Bay plan area on recreational resources, and the FSEIR identified no significant impacts to recreation from the Mission Bay plan, given that the plan includes substantial public open space that has been, and will continue to be constructed in phases in tandem with development of other uses called for in the plan. Thus, based on the analysis in the FSEIR, there would be no significant adverse cumulative effects on recreational resources.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
11. UTILITIES AND SERVICE SYSTEMS— Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supply available to serve the project from existing entitlements and resources, or require new or expanded water supply resources or entitlements?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Result in a determination by the wastewater treatment provider that would serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Summary of Utilities and Service System Impacts in Mission Bay FSEIR

Water Supply

The Mission Bay FSEIR Community Services and Utilities setting section discussed water supply service to the Mission Bay plan area that existed at the time of preparation of the Mission Bay FSEIR. This Mission Bay FSEIR indicated the San Francisco Water Department (which has now been incorporated as part of the San Francisco Public Utilities Commission [SFPUC]) supplied water to the Mission Bay plan area, and existing water consumption in the Mission Bay plan area at that time was approximately 0.097 million gallons per day (mgd). The Mission Bay FSEIR mapped water mains that existed within the Mission Bay plan area at that time, including low pressure water lines within Third Street and 16th Street adjacent to Blocks 29-32, and bisecting Blocks 29-32 from west to east. The Mission Bay FSEIR also described the City's Auxiliary Water Supply System (AWSS) used for firefighting, and mapped an AWSS high pressure line within Third Street adjacent to Blocks 29-32.

The Mission Bay FSEIR Community Services and Utilities impacts section estimated the Mission Bay plan would require approximately 2.9 mgd of water at build-out. The Mission Bay FSEIR also described proposed water line improvements within the Mission Bay plan area proposed as part of the Mission Bay plan, including new low pressure water lines within South Street and Terry A. François Boulevard adjacent to the project site; and recycled water (referred to in the FSEIR as "reclaimed water") lines within Third Street, South Street, Terry A. François Boulevard and 16th Street adjacent to Blocks 29-32. The Mission Bay FSEIR determined that there was adequate water supply to serve the Mission Bay plan water demand, and that with the proposed water system improvements and implementation of water conservation measures proposed as part of the plan and included as Mitigation Measures M.2a through M.02g, the plan effects on water supply would be less than significant.

The Mission Bay FSEIR also determined that with implementation of Mitigation Measure M.3, which would improve and extend the high pressure auxiliary water supply system (AWSS) within the plan area, that plan effects on emergency water supply would be less than significant.

Wastewater/Stormwater Collection and Treatment

The Mission Bay FSEIR Community Services and Utilities setting section described existing wastewater collection and treatment services serving the Mission Bay plan area at that time. The Mission Bay FSEIR reported the existing sewage generation from the Mission Bay plan area (based on the 1990 FEIR) was approximately 0.072 mgd. The Mission Bay FSEIR also mapped sewer lines that existed within the Mission Bay plan area at that time. The Blocks 29-32 site was mapped as having an existing sanitary sewer line extending south and connecting to an existing combined sewer line; existing combined sewer lines were also mapped in Third Street and 16th Street adjacent to Blocks 29-32. (see Section E.15, Hydrology and Water Quality, below, for additional information on the City's combined sewer system and treatment plant capacity).

Mission Bay Plan Impacts at Buildout. The Mission Bay FSEIR Community Services and Utilities impacts section estimated that the Mission Bay plan would generate approximately 2.5 million mgd of wastewater at build-out (average dry weather flow). The Mission Bay FSEIR also described major sewer upgrades that were proposed as part of the Mission Bay plan within the Mission Bay plan area. The Mission Bay FSEIR indicated that the northern portion of the Blocks 29-32 (as part of the proposed Central/Bay sub-basin) would be served by proposed separate sanitary-sewer-only and storm drainage-only lines. The southern portion of Blocks 29-32 (as part of the proposed reconfigured Mariposa sub-basin) would continue to be served by the existing combined sewer system, but augmented with additional new sewer extensions (including within 16th Street east of Illinois Street adjacent to Blocks 31 and 32). (See Hydrology and Water Quality section, below, for additional detail on the proposed Mission Bay plan sewer system improvements.) The Mission Bay FSEIR determined that with the sewer system improvements proposed as part of the plan, the Mission Bay plan would accommodate the projected increases in wastewater generation and stormwater flows, and Mission Bay plan effects on wastewater and stormwater collection and treatment facilities would be less than significant.

Mission Bay Plan Interim Impacts during Phased Development. The Mission Bay FSEIR Community Services and Utilities Impacts section reported that infrastructure development of the proposed separated sewer system for the Central/Bay Basin would occur with each phase, but would not necessarily be immediately operational. The Mission Bay FSEIR indicated that as part of the Mission Bay plan and included as Mitigation Measure M.5, all stormwater runoff from newly developed areas in the Bay Basin would be conveyed to the combined sewer system prior to completion of the initial-flow diversion system, to ensure potential impacts to water quality during this interim period would remain less than significant.

Solid Waste

The Mission Bay FSEIR Community Services and Utilities setting section estimated that at the time of preparation of the FSEIR, the Mission Bay plan area generated approximately 2,700 tons of solid waste annually at that time. The Mission Bay FSEIR Community Services and Utilities impacts section estimated the Mission Bay plan would generate approximately 19,000 tons annually, of which between 12,000 and 9,700 tons annually would be disposed annually at Altamont Landfill assuming diversion rates of between 35 percent (1996 levels) and 50 percent (AB 939-required diversion rate for Year 2000), respectively). The Mission Bay FSEIR reported that the solid waste generation estimates for the Mission Bay plan were included in the landfill capacity projections for the Altamont Landfill, and concluded that the Mission Bay plan would not substantially affect the lifespan of the landfill.

Impact Evaluation

Water Supply

Impact UT-1: The City's water service provider would have sufficient water supply available to serve the project from existing entitlements and resources, and would not require new or expanded water supply resources or entitlements. (Less than Significant)

A water demand memorandum prepared by the sponsor for the proposed project indicates that estimated water demand for the currently proposed development at Blocks 29-32 would be 0.100 mgd as adjusted for water conservation measures as required under the Green Building Requirements in Chapter

13C of the 2010 San Francisco Building Code.³⁷ For outdoor water use, the project would be required to comply with further water conservation measures under the San Francisco Water Efficient Irrigation Ordinance. These requirements specify water efficiency and conservation measures for indoor and outdoor use, including establishing standards for low flow plumbing fixtures and water efficiency standards for landscape irrigation.

The project's estimated demand of 0.100 mgd is conservatively estimated to be entirely for potable water demand, although the project proposes to use recycled water for select non-potable water uses. The project sponsor has indicated that the project would have about 0.094 mgd in non-potable water demands (such as for toilets/urinals, irrigation, cooling tower, or commercial laundry).³⁸ In the future, when recycled becomes available, some of the estimated water demand could be met with recycled water for non-potable uses, which could reduce the project's potable water demand to less than 0.100 mgd.

On July 9, 2013, the SFPUC approved and adopted the Water Supply Assessment for the proposed Event Center and Mixed-Use Development Project at Piers 30-32 and Seawall Lot 330.³⁹ This Water Supply Assessment was conducted for an earlier design of the proposed project at another location in San Francisco about 1.5 miles north of the current project site. The Water Supply Assessment concluded that there are adequate water supplies in the regional water system to serve an estimated 0.109 mgd of water demand for the project and cumulative demands during normal years, single dry years, and multiple dry years from 2015 through 2035. The Water Supply Assessment also indicated that the demand of this project is encompassed within the overall San Francisco retail water demands being used for current water supply planning. Since the estimated water demand for the proposed project of 0.100 mgd is less than the 0.109 mgd identified in the Water Supply Assessment, the water demands of the project would not require new or expanded water supply resources or entitlements.

Therefore, as confirmed by the SFPUC, existing water supplies serving the City would be sufficient to meet the projected water demand of the proposed project, and the project would not trigger the need for new or expanded water supply resources or entitlements. Impacts on water supply would be less than significant, and no mitigation is necessary.

This impact determination is similar to the analysis in the Mission Bay FSEIR, which concluded that at build-out, the entire Mission Bay plan would require approximately 2.9 mgd of water supply from the SFPUC's regional water system. The SFPUC (referred to as the San Francisco Water Department in the FSEIR) determined at the time that there were adequate water supply resources to serve the Mission Bay plan area, provided that Mission Bay water users utilize reasonable water-conserving measures, as listed in FSEIR Mitigation Measure M.2. However, currently, compliance with the Green Building Requirements in Chapter 13C of the San Francisco Building Code would override and supersede FSEIR

³⁷ BKF Engineers, 2014. *Mission Bay Blocks 29-32—Water Demand Memorandum*. Technical Memorandum to Clarke Miller, Strada Investment Group from Sravan Paladugu, P.E. and Jacob Nguyen, P.E. BKF No. 20136004-20, November 14, 2014.

³⁸ BKF, 2014. *Golden State Warriors, Mission Bay Blocks 29-32, On-site Alternate Water Sources*. Technical Memorandum to Clarke Miller, Strada Investment Group, from Jacob Nguyen, P.E. BKF No. 20136004, October 22, 2014.

³⁹ SFPUC, 2013. *Water Supply Assessment for the Event Center and Mixed-Use Development Project at Piers 30-32 and Seawall Lot 330*. July 1, 2013.

Mitigation Measure M.2 with respect to required water efficiency and conservation measures, and therefore FSEIR Mitigation Measure M.2 no longer applies to the proposed project.

Thus, the proposed project would not result in new or more severe impacts on water supply than previously identified in the FSEIR.

Since publication of the Mission Bay FSEIR, no substantial changes have occurred or new information has become available that would result in new or more severe impacts on water supply. However, it should be noted that the SFPUC has revised its assessment of water supply reliability since 1998, as required and documented in an urban water management plan (UWMP), which is updated every 5 years in compliance with the Urban Water Management Planning Act. The UWMP describes the SFPUC's long-term plan for its water supplies to meet the existing and future demands of its customers during normal, dry, and multiple dry years. The SFPUC's current 2010 UWMP was issued in 2011,⁴⁰ and the 2015 UWMP will be issued in 2016. During this interim period, the SFPUC developed a 2013 Water Availability Study⁴¹ to document the SFPUC's current and projected retail water supplies⁴² when compared to projected retail water demands. Future water supply sources include one recycled water project on the eastside of San Francisco, which in contrast to the assumption in the FSEIR that recycled water would be available to the plan area by 2011, is still in the planning stages, but is projected to eventually serve non-potable uses such as irrigation and toilet flushing for portions of the eastside of the City including the project site.

Impact UT-2: The proposed project would not require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects. (Less than Significant)

As discussed in Impact UT-1, the proposed project would not result in new or more severe impacts on water supply than previously identified in the Mission Bay FSEIR. Furthermore, the SFPUC has determined in the Water Supply Assessment, that the estimated water demand for the proposed project is already encompassed within the overall San Francisco retail water demands, for which the associated regional water treatment and transmission facilities have been established.

As described above in the Section A.2, Background, the Mission Bay master developer, FOCIL-MB, LLC, is required to provide the infrastructure serving the South Plan Area. Water delivery infrastructure has been completed on the north and west sides of the project site and there are existing water mains located along Third and South Streets. In addition, there are several existing service laterals extending from the utility mains along South Street that can presumably be used to service the project site. The master developer would be required to install new water mains along 16th Street and Terry A. François Boulevard, for both domestic water and recycled water, during the major phase development associated with the proposed project, and additional service laterals extending from the utility mains along South

⁴⁰ SFPUC, 2011. *2010 Urban Water Management Plan for the City and County of San Francisco*, June 2011.

⁴¹ SFPUC, 2013. *Water Availability Study for the City and County of San Francisco*, May 2013.

⁴² The SFPUC provides water supply services to both wholesale and retail customers. The City and County of San Francisco, including the Mission Bay area, is part of SFPUC's retail customers.

Street that can presumably be used to service the project site. Additional service laterals are proposed along 16th Street and the future Terry A. François Boulevard frontage.

As part of the standard permit review process, the Mission Bay master developer, in coordination with the project sponsor, would be required to request a hydraulic analysis of the SFPUC water distribution system to confirm that the existing and planned water distribution system is adequate to meet the project's water distribution demands, including fire suppression system pressure and flow demands. If the water distribution system as approved under the Mission Bay Infrastructure Plan is inadequate to meet the project's demand, the project sponsor would be responsible for funding the construction of required new water mains and appurtenances. The construction of the new water mains and appurtenances would require excavation, trenching, soil movement, and other activities typical of construction of development projects in San Francisco, and similar to those activities analyzed in the Mission Bay FSEIR for the various infrastructure improvements. Activities required to install new water mains, if determined to be required, would be similar to those associated with construction of the project, and these activities would not result in new or more severe environmental impacts than those previously disclosed in the Mission Bay FSEIR.

This impact determination is similar to the analysis in the Mission Bay FSEIR, although the FSEIR also included Mitigation Measure M.3 recommending that the AWSS be extended into the project area as determined by the San Francisco Fire Department and Department of Public Works. However, since publication of the FSEIR, the SFPUC's City Distribution Division currently owns and operates the AWSS (not the San Francisco Fire Department), and a number of infrastructure improvements needed to serve the project site have already been completed, including a high pressure water main along Third Street, bordering the project site. As described above, the Mission Bay master developer, in coordination with the project sponsor would be required to request a hydraulic analysis of the SFPUC water distribution system to confirm that the water distribution system as approved under the Mission Bay Infrastructure Plan is adequate to meet the project's fire suppression system pressure and flow demands; and if the analysis determines the system to be inadequate, the project sponsor would be responsible for the costs of construction of required new water mains and appurtenances. Thus, FSEIR Mitigation Measure M.3 has been superseded by the completion of the high pressure water main in Third Street and does not apply to the proposed project.

Therefore, the proposed project would not require or result in the construction of new or expanded water mains that would cause significant environmental effects, and this impact would be less than significant. The proposed project would not result in new or more severe impacts associated with construction of new water facilities or pipelines than previously identified in the FSEIR.

Solid Waste

Impact UT-3: The proposed project would be served by landfills with sufficient permitted capacity to accommodate the project's solid waste disposal needs. (Less than Significant)

Under the proposed project, as shown in **Table 3**, the proposed project would generate approximately 2,211 tons of solid waste per year.

TABLE 3
ESTIMATED ANNUAL PROJECT-GENERATED SOLID WASTE

Proposed Use ¹	Square Footage	Solid Waste Generation Rate ²	Solid Waste Generation (tons/yr)
Event Center	750,000	1.29 tons/1000 sf-yr	968
Retail	125,000	2.0 lb/100 sf-d	456
Office	605,000	1 lb/100 sf-d	787
Total			2,211

NOTES:

¹ See Table 1 of this Initial Study.

² Solid waste generation factor for the event center based on rates used in the Sacramento Entertainment and Sports Center & Related Development EIR, 2013. Generation rates for retail and office based on rates used in the Mission Bay FSEIR, Table L.2. Retail assumed to operate 365 days a year; Office uses assumed to operate 260 days a year.

Since publication of the Mission Bay FSEIR, a number of changes have occurred with respect to solid waste disposal in the City, as described below, all of which would serve to reduce the total volume of solid waste to be disposed of in a landfill.

In 2002, the City adopted a Zero Waste Goal, which included a 75 percent landfill diversion goal citywide by 2010 and the goal of achieving zero waste to landfill by 2020, such that all discarded materials be diverted from landfills through recycling, composting or other means. The City achieved its 75 percent landfill diversion goal by 2008 through implementation of numerous programs and efforts. In 2006, the City adopted the Construction and Demolition Waste Ordinance mandating the recycling of construction and demolition debris. Effective since 2007, the City's Food Service Waste Reduction Ordinance prohibits any establishment that serves food prepared in San Francisco from using polystyrene foam containers, and requires any containers to be either recyclable or compostable. In 2009, the City adopted a Mandatory Recycling and Composting Ordinance, which requires all San Francisco residents and commercial landlords to separate their refuse into recyclables, compostables, and trash, thereby minimizing solid waste disposal and maximizing recycling. In addition, Chapter 13B of the San Francisco Building Code requires that all construction and demolition debris in amounts of one cubic yard or greater must be managed by a registered facility for recovery of the materials.

The Mission Bay FSEIR estimated that total solid waste generated by development under the Mission Bay plan at buildout would be approximately 19,000 tons per year for the entire plan area. However, compliance with all of the above changes in requirements for solid waste disposal since publication of the FSEIR would reduce the volume of solid waste requiring disposal in a landfill. Thus, given these changes, it would be expected that the current annual volume of solid waste would be less than what was projected in the FSEIR, thereby *reducing* the severity of the impact described in the FSEIR.

In addition, the Mission Bay FSEIR indicated that solid waste generated by development under the Mission Bay plan at buildout could be accommodated by the Altamont Landfill. However, the City's contract with the Altamont Landfill, which is based on volume of material disposed of, is anticipated to expire in 2015.

The City is currently conducting solid waste planning efforts and participating in the environmental review process for a potential future landfill contract to a Recology subsidiary for shipment of solid waste by truck and rail to the Recology Ostrom Road Landfill in Yuba County. This facility currently can accept 3,000 tons per day. It has an expected closure date of 2066 with a total design capacity of more than 41 million cubic yards. The City is also conducting environmental review of a short-range plan to haul solid waste to the Recology Hay Road Landfill in Solano County. The Recology Hay Road Landfill is permitted to accept up to 2,400 tons per day of solid waste and has capacity to accommodate solid waste until approximately 2050.

Despite these change in circumstances relative to disposal of solid waste generated by the Mission Bay plan at buildout, the proposed project would not result in new or substantially more severe impacts than those identified in the Mission Bay FSEIR. Compliance with the multiple City ordinances requiring reduction in solid waste for landfill disposal as well as the ongoing commitment of the City to secure a long-term landfill contract at an alternate location from the Altamont Landfill would ensure that the project would be served by landfills with sufficient permitted capacity to accommodate the project's solid waste disposal needs. Furthermore, the project would be designed to achieve a LEED Gold certification, which may be achieved through commitment to specific waste-reduction measures. These actions would reduce the volume of long-term waste generated by the proposed project. Therefore, this impact would be less than significant and no mitigation would be required.

Impact UT-4: The proposed project would comply with federal, state, and local statutes and regulations related to solid waste. (Less than Significant)

The Mission Bay FSEIR did not specifically address compliance with solid waste regulations. However, as discussed below, potential impacts associated with this issue would be less than significant.

The California Integrated Waste Management Act of 1989 required municipalities to adopt an integrated waste management plan to divert 75 percent of waste by 2010. The City of San Francisco achieved a 77-percent landfill diversion rate for 2008, exceeding the plan's goal by two years. Under Senate Bill 1016, the City's per resident disposal target rate is 6.6 pounds per person per day (PPD), and its per employee disposal target rate is 10.6 PPD. Both of these targeted disposal rates were met, with San Francisco generating about 2.9 pounds/resident/day and about 4.4 pounds/per employee/per day.

San Francisco Ordinance No. 27-06 requires a minimum of 65 percent of all construction and demolition debris to be recycled and diverted from landfills, and Chapter 13B of the San Francisco Building Code requires that all construction and demolition debris in amounts of one cubic yard or greater must be managed by a registered facility for recovery of the materials. Furthermore, the project would be required to comply with City Ordinance 100-09, the Mandatory Recycling and Composting Ordinance, which requires everyone in San Francisco to separate their refuse into recyclables, compostables, and trash. The Altamont and Recology Ostrom and Hay Road Landfills are required to meet federal, state and local solid waste regulations. The proposed project would be required to adhere to these regulations. Implementation of the proposed project would not impede the City from meeting solid waste regulations, and the impact would be less than significant.

Cumulative Impacts

Impact C-UT-1: The project, in combination with other past, present, and reasonably foreseeable future projects, would not result in significant adverse cumulative utilities and service systems impacts. (Less than Significant)

The geographic contexts for impacts to utilities and service systems are the service areas for the applicable service providers. The proposed project, when combined with past, present, and reasonably foreseeable future development, would increase demand for water and solid waste disposal services of these providers.

Water Supply. As described in Impact UT-1, the SFPUC has adopted a Urban Water Management Plan (2010) that addresses the future water supply needs of its entire service area, as well as a 2013 Water Availability Study that addresses the future water supply for its retail customers, primarily the City and County of San Francisco. As stated above, the SFPUC has indicated that the water supply service to the proposed development at the site has already been incorporated into its water supply planning when considering the existing and future water demands for its entire service area. Therefore, the project would not contribute to a cumulative impact on water supply.

Solid Waste. As stated above, the City and County of San Francisco intends to achieve zero waste to landfill by 2020. Increased waste generation from the project and cumulative development would be partially offset by existing San Francisco ordinances and policies regarding waste reduction. Therefore, the increased generation of solid waste from these developments would not exceed permitted landfill capacity.

As such, the proposed project would not contribute to significant cumulative impacts on water supply and solid waste utilities and service systems.

Issues to be analyzed in the SEIR

The impact evaluation above explains why the proposed project would not result in new significant impacts or substantially increase the severity of impacts on water supply and solid waste utilities and service systems—with respect to criteria E.11 (b), (d), (f), and (g), and no further analysis is required on these subjects. However, with respect to criteria E.11(a), (b), (c), and (e) as they pertain to wastewater facilities, additional evaluation of the proposed project is necessary for both project and cumulative impacts related to wastewater and stormwater collection and treatment. In concert with the further analysis of hydrology and water quality issues, the SEIR will include a detailed analysis of:

- The potential for wastewater and/or stormwater generated by the project to result in exceedances of wastewater treatment requirements of the RWQCB
- The potential for wastewater and/or stormwater generated by the project to require the construction of new or expanded wastewater treatment or stormwater drainage facilities, the construction of which could cause environmental effects. This analysis will also discuss the applicability of FSEIR Mitigation Measure M.5 regarding stormwater management.
- The potential for the project to result in a determination by the SFPUC that it has inadequate capacity to serve the project demand for wastewater treatment.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
12. PUBLIC SERVICES— Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any public services such as schools, parks, or other services?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any public services such as fire protection or police protection?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Issues related to parks, which is referred to in criterion E.12 (a), are addressed above in Section E.10, Recreation.

Summary of Public Services Impacts in Mission Bay FSEIR

Fire and Police Protection

The Mission Bay FSEIR Community Services and Utilities setting section characterized existing fire and police protection services serving the Mission Bay plan area and surrounding area at that time. The Mission Bay FSEIR noted that there were no San Francisco Fire Department (SFFD) fire stations operating within the Mission Bay plan area at that time, however, the plan area was served by up to six surrounding fire stations. The Mission Bay FSEIR also reported that the Mission Bay South area was located within the San Francisco Police Department's Bayview District, whose police station was located over 2½ miles south of the plan area.

The Mission Bay FSEIR Community Services and Utilities impacts section determined that the Mission Bay plan would potentially significantly increase demand for fire protection services in the Mission Bay plan area, and that a new fire station and additional fire department personnel and equipment, including a Hazardous Materials Unit, would be required in the Mission Bay South plan area at build-out in order to facilitate access in the event of a major emergency, and maintain adequate levels of service. The FSEIR also indicated the Mission Bay plan would increase demand for a new police station and additional police protection personnel.

The Mission Bay plan included the provision of land at the corner of Third Street and Mission Rock Street in the Mission Bay plan area for a new police/fire station. The Mission Bay FSEIR determined that with implementation of Mitigation Measures M.6a (Construct New Fire Station) and M.6b (Provide New Engine Company) to ensure funding for additional fire protection personnel, equipment and fire station, impacts to

fire protection services would be less than significant. Furthermore, the Mission Bay FSEIR determined that the new police station proposed under the Mission Bay plan would increase community involvement and lower crime rates in the Mission Bay plan area and ensure impacts to police protection services would be less than significant. Potential impacts associated with the construction and operation of the new police/fire station itself were included in the overall analysis of the Mission Bay plan in the FSEIR.

Public Schools

The Mission Bay FSEIR Community Services and Utilities setting section described existing San Francisco Unified School District (SFUSD) school services, and noted that there were no public schools operating in the Mission Bay plan area at the time of preparation of the Mission Bay FSEIR.

The Mission Bay FSEIR Community Services and Utilities impacts section indicated the Mission Bay plan residential population would increase the demand on the San Francisco Unified School District (SFUSD). The Mission Bay FSEIR estimated that at full build-out, the Mission Bay plan residential uses would create approximately 1,615 school-age children residing in the Mission Bay plan area, including approximately 730 students of elementary school age, and approximately 75 percent of these students would be expected to attend public schools.

The Mission Bay plan included the transfer of land within the plan area for a new 500-student elementary school to the SFUSD prior to issuance of building permits for the Mission Bay plan residential units. On this basis, the Mission Bay FSEIR concluded that Mission Bay plan impacts to public schools would be less than significant. Potential impacts associated with the construction and operation of the new school were included in the overall analysis of the Mission Bay plan in the Mission Bay FSEIR.

The Mission Bay FSEIR also determined the proposed school site within the Mission Bay plan area would not be large enough to house a middle school or high school, or all of the potential new elementary school students, and consequently, that additional classroom space would need to be developed by SFUSD outside of the Mission Bay plan area, most likely for all grade levels. The Mission Bay FSEIR concluded it was too speculative to identify impacts from construction of additional school facilities, although any new facilities that would be proposed by SFUSD would be subject to appropriate environmental review for site-specific physical environmental impacts.

Other Public Services

The Mission Bay FSEIR Community Services and Utilities section and Initial Study determined that Mission Bay plan effect on public health services, childcare services, library services, street maintenance services, and emergency medical services would be less than significant, and consequently, the Mission Bay FSEIR did not require any mitigation measures for these topics.

Impact Evaluation

Schools and Other Services

Impact PS-1: The proposed project would not result in substantial adverse physical impacts associated with the provision of or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for schools or other services. (Less than Significant)

The proposed project does not include any residential uses, and therefore would not increase the demand for schools. Thus, the project would have no effect on public schools. Similarly, because the project does not include any residential uses, the project's effect on demand on other services (such as public health, childcare, library, street maintenance, and emergency medical) would be within the assumptions analyzed in the Mission Bay FSEIR for the entire plan area. The project would not result in any new or substantially more severe impacts on schools or other services than those previously identified in the FSEIR. Further, no substantial changes or conditions have occurred at the project site and vicinity that would result in new or more severe impacts than those described in the FSEIR.

Cumulative Impacts

Impact C-PS-1: The project, in combination with other past, present, and reasonably foreseeable future projects, would not result in significant adverse cumulative impacts on schools or other services. (Less than Significant)

The geographic scope of potential cumulative impacts on schools and other services encompasses the Mission Bay plan area. As a program EIR, the Mission Bay FSEIR has addressed the cumulative impacts of overall development of the Mission Bay plan area on schools and other services, and the FSEIR identified no significant impacts from the Mission Bay plan. Thus, based on the analysis in the FSEIR, there would be no significant adverse cumulative effects on schools and other services.

Issues to be Addressed in the SEIR

Further discussion of potential impacts on law enforcement and fire protection services associated with construction and operation of the event center and associated development at the project site will be included in the SEIR, including the applicability of FSEIR Mitigation Measures M.6a (Construct New Fire Station) and M.6b (Provide New Engine Company). Although construction of the new Public Safety Building at Third and Mission Rock Streets is completed and will be operational in early 2015, and satisfies the requirements of these mitigation measures, the SEIR will provide a project-specific analysis of the impacts on law enforcement and fire protection services and adequacy of these mitigation measures to reduce project impacts to less than significant.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
13. BIOLOGICAL RESOURCES— Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

There are no applicable adopted habitat conservation plans, natural community conservation plans, or other approved habitat conservation plans that apply to the project site. Therefore, criterion E.13(f) does not apply to the proposed project, and this topic is not discussed further in this Initial Study or in the SEIR.

Summary of Biological Resource Impacts in Mission Bay FSEIR

The biological resources significance criteria were addressed in the Mission Bay FSEIR in the Initial Study Biology section and the China Basin Channel Vegetation and Wildlife section. Relevant information from these sections is summarized below.

The Mission Bay FSEIR Initial Study Biology section evaluated biological resource conditions present in the Mission Bay plan area at that time. The Mission Bay FSEIR Initial Study reported that the upland portion of Mission Bay South was mostly disturbed and sparsely vegetated, and did not contain substantial numbers of mature or scenic trees. Vegetative mapping of the Mission Bay plan area included in the Mission Bay FSEIR indicates Blocks 29-32 did not contain any notable vegetative habitat. The Mission Bay FSEIR Initial Study determined no state-listed threatened, endangered or rare plants, or rare, threatened or endangered animal species were known to occur in the upland portion of the Mission Bay

plan area, as confirmed by biological field surveys. Consequently, the Mission Bay FSEIR identified no significant project impacts to upland plant and wildlife in the Mission Bay plan area, and accordingly, did not require any mitigation measures related to these resources.

Although not within the Blocks 29-32 vicinity, the Mission Bay FSEIR also analyzed potential impacts to aquatic and wetland habitats of China Basin Channel. The Mission Bay FSEIR China Basin Channel Vegetation and Wildlife section determined that significant impacts resulting from disturbance and removal of salt marsh wetland habitat resulting from installation of rip-rap and utilities in the Channel would be mitigated to a less than significant level through preparation and implementation of a salt marsh habitat mitigation plan in accordance with the Section 404 permit process of the U.S. Army Corps of Engineers. In addition, the Mission Bay FSEIR determined that significant impacts to herring reproduction from turbidity in the water of the Channel or Bay would be mitigated to a less than significant level by avoiding construction activities affecting turbidity during the herring spawning season, and, at other times, use of shallow-draft tugboats and barges with enforced speed limits and implementing a plan for minimizing turbidity during removal of existing piles.

Please see also, Hydrology and Water Quality, below, for discussion of potential Mission Bay plan effects on aquatic biota from treated wastewater and stormwater discharge, and sediment; and Hazards and Hazardous Materials, for a discussion of potential Mission Bay plan effects on aquatic biota from the presence of chemicals in construction dust.

Impact Evaluation

Special Status Species

Impact BI-1: The proposed project would not have a substantial adverse effect, either directly or through habitat modification, on any special status species. (Less than Significant)

A qualified biologist conducted a site reconnaissance on August 28, 2014. The reconnaissance visit consisted of a pedestrian survey within the project site's boundary and visual observations of the adjacent environments to identify suitable habitat or supportive communities for special-status⁴³ plant and wildlife species. General habitat conditions were noted and incidental species observations were recorded. Prior to the reconnaissance survey, a review of database queries was conducted for special-status species occurrences documented in the regional project vicinity (i.e. San Francisco County, San Francisco North and San Francisco South 7.5-minute U.S. Geological Survey quadrangles) including the California Department of Fish and Wildlife's (CDFW⁴⁴) California Natural Diversity Database (CNDDB), U.S. Fish and Wildlife Service (USFWS), and California Native Plant Society (CNPS). Lists compiled of sensitive plant and animal species from these databases document 34 sensitive plant species

⁴³ The term "special-status" species includes those species that are listed and receive specific protection defined in federal or state endangered species legislation, as well as species not formally listed as Threatened or Endangered, but designated as "Rare" or "Sensitive" on the basis of adopted policies and expertise of state resource agencies or organizations, or local agencies such as counties, cities, and special districts. A principal source for this designation is the California "Special Animals List".

⁴⁴ The California Department of Fish and Game (CDFG) changed its name on January 1, 2013 to the California Department of Fish and Wildlife (CDFW). In this document, references to literature published by CDFW prior to Jan. 1, 2013 are cited as 'CDFG, [year]'. The agency is otherwise referred to by its new name, CDFW."

and 41 animal species within the regional vicinity of the project site. Of these 75 special-status species, none were determined to have a moderate or high potential to occur on the proposed project site due to the lack of suitable habitat or supportive vegetation communities which these species require for sustained use (see Appendix A of this Initial Study).

The project site is located in a dense urban setting and currently does not contain desirable habitat that could support sensitive species. The project site currently contains two paved parking lots in the north and west portions of the site, and the remainder of the site consists of an undeveloped ruderal lot largely covered in gravel and surrounded by chain link fencing. Vegetation within the ruderal lot is sparse and dominated by non-native annual grasses and opportunistic weedy species which thrive in such ruderal environments and include, foxtail brome (*Bromus madritensis*), riggut brome (*Bromus diandrus*), soft brome (*Bromus hordeaceus*), Italian rye grass (*Festuca perennis*), rattail sixweeks grass (*Festuca myuros*), Bermuda grass (*Cynodon dactylon*), fennel (*Foeniculum vulgare*), pampas grass (*Cortaderia jubata*), bristly ox tongue (*Helminthotheca echinoides*), black mustard (*Brassica nigra*), stinkwort (*Dittrichia graveolens*), white sweetclover (*Melilotus albus*), cut leaf plantain (*Plantago coronopus*), and cheeseweed (*Malva parviflora*). Native prostate coyote bush (*Baccharis pilularis*) was also prevalent throughout the site. Birds commonly found in such areas with limited habitat value are seed-eating and include non-native species such as English sparrow (*Passer domesticus*) and European starling (*Sturnus vulgaris*) as well as birds native to the area, including house finch (*Haemorhous mexicanus*), lesser goldfinch (*Spinus psaltria*), Brewer's blackbird (*Euphagus cyanocephalus*), and rock pigeon (*Columba livia*). Evidence of Canada goose (*Branta canadensis*) is present on the site.

As discussed in the Section A, Project Description, on the project site, immediately east of, and adjacent to, Parking Lot B, is a depression (measuring approximately 320 feet by 280 feet) created by excavation and backfill associated with prior environmental cleanup of that portion of the site. Site reconnaissance revealed the deepest part of the excavation within this area contains standing water with a mixture of ruderal vegetation described above, and wetland plants, including alkali bullrush (*Bolboschoenus maritimus*), brass buttons (*Cotula coronopifolia*), fat-hen (*Atriplex prostrata*), and saltgrass (*Distichlis spicata*), present around its perimeter. The standing water supports common wildlife as evidenced by a snowy egret (*Egretta thula*) hunting at the water's edge and a black phoebe (*Sayornis nigricans*) sallying insects from a vegetative perch. These features are discussed in further detail under Impact BI-3.

Based on the data above and similar to the conclusions of the Mission Bay FSEIR for the entire plan area, the proposed project would not have a substantial adverse effect on special status species due to the lack of suitable habitat, as summarized in Appendix A. This impact would be less than significant, and no mitigation is required. Thus, the project would not result in any new impacts, or increase the severity of previously-identified impacts, to special-status species.

At the time of preparation of the Mission Bay FSEIR, the project site contained several buildings and facilities and was noted as lacking any notable vegetative habitat, with no state-listed threatened, endangered or rare plants, or rare, threatened or endangered animal species known to occur in the upland portion of the Mission Bay plan area, including the project site. Subsequent to that time, the project site has been subject to building removal, grading, excavation, and construction of paved surface parking lots, fencing and utilities on portions of the site. Other than the creation of the depression as a result of remediation actions, no other changes in the site since the preparation of the FSEIR have altered

the characteristics of the site in relation to biological habitat. These changes in conditions on the project site have not altered the fact that the site provides no suitable habitat for any sensitive or special-status species due to the sparse and ruderal nature of onsite vegetation, as well as the site's location in a densely urbanized environment, as confirmed through the reconnaissance survey and database review of special-status species occurrences within the vicinity of the project site. In addition, there have been no substantial changes with respect to the circumstances under which the project would be undertaken, nor has any new information become available that demonstrates new or more severe impacts associated with the proposed project.

On the basis of the factors discussed above, the project would not have any new or substantially more severe effects than those identified in the Mission Bay FSEIR on special status species. Furthermore, the Mission Bay FSEIR did not identify any alternatives to reduce impacts to special-status species. Consequently, no new or different mitigation measures or alternatives to reduce project impacts to special-status species are identified or required with respect to the currently proposed project.

Sensitive Natural Communities

Impact BI-2: The proposed project would not have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations. (No Impact)

As described in Impact BI-1, above, the project site currently does not contain riparian habitat or other sensitive natural community, which is consistent with the description in the Mission Bay FSEIR of no notable vegetative habitat in the project area. Thus, the project would have no impact on any riparian or other sensitive natural community. No changes in conditions at the project site or any new information has become available that would result in new or more severe impacts associated with the proposed project with respect to sensitive natural communities.

Wetlands

Impact BI-3: The proposed project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act or navigable waters as defined in Section 10 of the Rivers and Harbors Act through direct removal, filling, hydrological interruption, or other means. (Less than Significant)

As described above in Impact BI-1, the deeper excavation and surrounding shallow depressions within the project site are features that exhibit the hydrology and vegetation characteristics of wetlands. Hydric soil is presumed present due to the year-round inundation and presence of some obligate wetland plants. The deeper excavation is at a sufficient depth to intersect groundwater and a review of aerial imagery reveals water within the deeper excavation year round, while the shallow depressions appear to be seasonally wetted.⁴⁵ Vegetation composition within the deeper excavation differ from the upland, ruderal portions of the site and include several species that commonly occur in wetlands such as alkali bulrush,

⁴⁵ Google aerial imagery, 2007-2014.

brass buttons, and fat-hen. Vegetation within the shallow depressions included a combination of saltgrass and Bermuda grass which can be found in both upland and wetland communities.

The jurisdictional status of the deeper excavation and surrounding shallow depressions has not been determined. This topic was addressed in a technical report prepared by the project sponsor's biological consultant⁴⁶, which discussed the origin of these features and how they conform to criteria for jurisdiction under the federal Clean Water Act. The report concluded that the noted features may be exempt from regulatory jurisdiction under the Clean Water Act due to their creation incidental to construction activities⁴⁷, even if they meet some technical criteria for jurisdictional wetlands. Specifically, the report states that the deeper excavation and shallow depressions within the project site may fall under the following exemption:

*"Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for the purpose of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States."*⁴⁸

Alternatively, because it contains ponded areas and supports wetlands plants, the excavation feature could be determined to be waters of the U.S. and/or waters of the state. Isolated ponded areas, even if artificially created, could also be determined to be waters of the state under the San Francisco RWQCB's Basin Plan as they can provide beneficial cover or foraging habitat for wildlife.⁴⁹

The overall value of Blocks 29-32 to support or sustain wildlife is limited due to the sparse and ruderal nature of onsite vegetation, as well as the site's location in a densely urbanized environment. While several bird species were observed foraging and hunting onsite, these species are common to San Francisco and would continue to be supported by vegetation communities and water features found in the project vicinity. Because the excavation depressions on the site are small, isolated features resulting from recently completed hazardous materials remediation activities and are surrounded by paved areas and urban development, these features do not provide the important biological habitat functions and values that are typically associated with federally protected wetlands. As such, the proposed removal of these features would not constitute a significant adverse impact on wetland habitat resources.

⁴⁶ WRA, 2014. *Construction Related Depressions at Golden State Warriors Mission Bay Site*, San Rafael, CA. Prepared for Golden State Warriors, October 1.

⁴⁷ The report discusses that under Regional Water Quality Control Board (RWQCB) Order R2-2005-0028, a portion of the project site underwent construction activities associated with the remediation of hazardous materials. The report describes that following excavation of the portion of the project site subject to remediation activities in 2005 and 2006, groundwater monitoring was required by the RWQCB between 2007 and 2013 to ensure the affected area met applicable standards for remediation. The report notes that partial backfilling of the excavated area occurred during the period of groundwater monitoring of the project site, however, a proposal to develop an office building with partial basement on the project site (that would have necessitated re-excavation of backfill materials from the excavation area), and unfavorable economic conditions, halted further backfilling of the excavated area. Based on post-remediation groundwater monitoring, RWQCB issued Order No. R2-2014-0022 attaining site closure.

⁴⁸ Preamble to the CWA Regulations (33 CFR Parts 320 through 330), published in the Federal Register on November 13, 1986 (51 Fed. Reg. 41206):

⁴⁹ California Regional Water Quality Control Board (RWQCB), 2013. *Water Quality Control Plan (Basin Plan) for the San Francisco Bay Basin*. Oakland, CA.

In the event that regulatory agencies determine that one or more of these features are jurisdictional, as part of the permitting process they may require mitigation to achieve “no net loss” of the function and values of the features. To achieve this performance standard, the following mitigation options could be implemented as compensation for project-related impacts to jurisdictional waters:

- Purchase of appropriate amount of credits at an approved wetlands mitigation bank;
- Payment into an approved in-lieu fee program to preserve or restore wetlands in the same watershed; or
- Provision of off-site mitigation.

The discussion above is consistent with the conclusions of the Mission Bay FSEIR for the entire plan area. The proposed project would not have a substantial adverse effect on identified federally protected wetlands as defined by Section 404 of the Clean Water Act, or navigable waters as defined in Section 10 of the Rivers and Harbors Act, or beneficial uses of wetlands according to the Basin Plan. This impact would be less than significant, and no mitigation is required. Thus, the project would not result in any new significant impacts, or increase the severity of previously-identified impacts, to wetlands.

Wildlife

Impact BI-4: The proposed project could interfere substantially with the movement of native resident or migratory wildlife species resident or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. (Less than Significant with Mitigation)

The Mission Bay FSEIR did not specifically address the issue of migratory wildlife species. However, as discussed below, potential impacts associated with this issue would be mitigated to less than significant with implementation of standard mitigation measures.

Breeding Birds. Migratory and resident birds which breed locally in San Francisco have the potential to nest in shrub vegetation observed within the project site. While overall habitat is of marginal quality due to its urban context and disturbed soils, the composition of non-native vegetation can be attractive to seed eating birds, and the presence of native coyote bush, alkali bulrush and non-native pampas grass can provide cover and nesting substrate for smaller passerine species. Migratory birds are protected under the Migratory Bird Treaty Act and native resident nongame birds and their nests are protected from take under the California Fish and Game Code. Breeding birds which may nest within the project site could be adversely affected by project construction. Implementation of **Mitigation Measure M-BI-4a, Preconstruction Surveys for Nesting Birds**, would avoid disrupting or destroying active nests which could occur within the proposed project site during bird breeding season, and would reduce this impact to less than significant.

Avian Collisions with Buildings and Night Lighting. The project site is located within the Pacific Flyway along the western shoreline of San Francisco Bay. The waters of the Bay provide valuable stopover habitat for migratory birds. Open space, even in highly urbanized areas, creates potential bird habitat, and open space such as the open Bay in proximity to the proposed new buildings may increase the risk of bird collisions over that posed by existing structures, particularly from large amounts of reflective or artificially lighted surfaces. Many bird collisions are induced by artificial night lighting. The

tendency of birds to move towards lights at night when migrating, and their reluctance to leave the sphere of light influence for hours or days once encountered, has been well documented.⁵⁰ Development of the proposed project would increase the amount of light and glare generated at the project site and vicinity, including from building facades, internal night lighting sources visible through windows of building exteriors, new streetlights and pedestrian lights within and adjacent to the site, nighttime lighting of building exteriors and signs, potential video screens, and headlights from project-generated traffic.

Similar to the conclusion reached for the Bay Bridge Lighting project,⁵¹ due to the surrounding urban setting, the proposed project is not expected to appreciably increase the overall amount of lighting along the San Francisco waterfront as a whole (considering existing nighttime lighting conditions within Mission Bay, at AT&T Park and other shoreline locations). In addition, the project sponsor proposes to incorporate bird-safe measures that would reduce the potential effects of the project on birds. Nevertheless, given the preliminary nature of the project development, it cannot be concluded at this time that the proposed project building and associated lighting design would not have the potential to negatively affect birds.

The San Francisco Planning Department adopted *Standards for Bird-Safe Buildings* in 2011, adding Planning Code Section 139.⁵² These standards guide the use and types of glass and façade treatments, wind generators and grates, and lighting treatments. The standards include requirements for bird-safe glazing and lighting in structures or at sites that represent a hazard to birds. While development within the Mission Bay plan area, including the project site, is not subject to the *Standards for Bird-Safe Buildings* or Planning Code Section 139, given the preliminary nature of the project design, and the remaining potential for the proposed building and/or lighting design to result in potential bird hazards, implementation of bird safe practices consistent with the City's *Standards for Bird-Safe Buildings* and Planning Code Section 139 is included as mitigation for the proposed project (**Mitigation Measure M-BI-4b, Bird Safe Building Practices**).

With implementation **Mitigation Measures M-BI-4a, Preconstruction Surveys for Nesting Birds, and M-BI-4b, Bird Safe Building Practices**, the project would not result in any new or substantially more severe significant impacts on resident or migratory bird species than those identified in the FSEIR.

Mitigation Measure M-BI-4a: Preconstruction Surveys for Nesting Birds

To the extent practicable, vegetation removal and grading of the site in advance of new site construction shall be performed between September 1 and January 31 in order to avoid breeding and nesting season for birds. If these activities cannot be performed during this period, a preconstruction survey of onsite vegetation for nesting birds shall be conducted by a qualified biologist.

⁵⁰ Gauthreaux, S.A., Belser, C.G., 2006, Effects of Artificial Night Lighting on Migrating Birds, In: Rich, C. and Longcore, T., *Ecological Consequences of Night Lighting*, Island Press, Covelo, CA, pp. 67–93.

⁵¹ H.T. Harvey and Associates. 2012. Final Assessment of the Potential Impacts of the Bay Bridge Lighting Project on Birds and Fish (HTH #3305-01). Letter report to Meryka Plumer, David J. Powers & Associates, Inc., 5 April, 2012.

⁵² San Francisco Planning Department, *Standards for Bird-Safe Buildings*, available: http://www.sf-planning.org/ftp/files/publications_reports/bird_safe_bldgs/Standards%20for%20Bird%20Safe%20Buildings%20-%202011-30-11.pdf, 2011.

In coordination with the OCII or its designated representative, pre-construction surveys of onsite vegetation shall be performed during bird breeding season (February 1 – August 31) no more than 14 days prior to vegetation removal, grading, or initiation of construction in order to locate any active passerine nests within 250 feet of the project site and any active raptor nests within 500 feet of the project site. Surveys shall be performed in accessible areas within 500 feet of the project site and include suitable habitat within line of sight as access is available. If active nests are found on either the project site or within the 500-foot survey buffer surrounding the project site, no-work buffer zones shall be established around the nests. Buffer distances will consider physical and visual barriers between the active nest and project activities, existing noise sources and disturbance, as well as sensitivity of the bird species to disturbance. Modification of standard buffer distances, 250 feet for active passerine nests and 500 feet for active raptor nests, will be determined by a qualified biologist in consultation with the California Department of Fish and Wildlife (CDFW). No vegetation removal or ground-disturbing activities including grading or new construction shall occur within a buffer zone until young have fledged or the nest is otherwise abandoned as determined by the qualified biologist.

If construction work during the nesting season stops for 14 days or more and then resumes, then nesting bird surveys shall be repeated, to ensure that no new birds have begun nesting in the area.

Mitigation Measure M-BI-4b: Bird Safe Building Practices

The project sponsor shall design and implement the project consistent with the San Francisco *Standards for Bird-Safe Buildings* and Planning Code Section 139, as approved by OCII. OCII shall consult with the Planning Department and the Zoning Administrator concerning project consistency with Planning Code Section 139.

Biological Resources Policies or Ordinances

Impact BI-5: The proposed project would not conflict with any applicable local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. (Less than Significant)

The Mission Bay FSEIR did not specifically address potential conflicts or compliance with local policies or ordinance protection biological resources. However, as discussed below, potential impacts associated with this issue would be less than significant, and no mitigation is required. Therefore, there would be no new or substantially more severe significant impacts than those identified in the FSEIR.

The City's Urban Forestry Ordinance protects San Francisco's street trees, significant trees and landmark trees regardless of species. There are no mature trees within the project site, including landmark trees, significant trees, or street trees. Although the Mission Bay FSEIR did not specifically address this issue, this impact would be less than significant because no tree removal is proposed as part of the project. Furthermore, the project would not preclude the ability of the City to plant trees in a sidewalk or public right-of-way along the project site perimeter, and the project would not conflict with this ordinance. There are no other applicable local policies or ordinances that apply to this site.

Thus, the project would not conflict with applicable local policies or ordinances protecting biological resources, and this impact would be less than significant.

Cumulative Impacts

Impact C-BI-1: The project, in combination with other past, present, and reasonably foreseeable future projects, would not result in significant adverse cumulative impacts on biological resources. (Less than Significant)

The geographic scope of potential cumulative impacts on biological resources encompasses the species occurrences, habitats, and sensitive natural communities within the regional vicinity of the project site, including the portion of the Pacific Flyway along the City's Bay shoreline. Cumulative impacts are considered in the context of past, present and reasonably foreseeable project in this area—such as those listed above under Approach to Analysis—that could contribute to impacts on biological resources.

As described above in Impacts BI-1, BI-2, BI-3, and BI-4, the project site currently consists of either paved or undeveloped ruderal areas, with one notable depressed area containing some standing water, and overall habitat supportive of sensitive wildlife and plants is of marginal quality. With the exception of birds, the project, like other projects within the City's urbanized waterfront area, would have little or no potential to affect sensitive plants or wildlife, and therefore would not contribute to cumulative impacts on biological resources in the project area.

The proposed project could potentially result in adverse effects on various bird species through disruption of nests, collisions with buildings, or disorientation from night lighting. These impacts, in combination with other projects along the San Francisco waterfront, could potentially result in cumulative impacts to birds. However, other projects in San Francisco would be subject to the same environmental review requirements to provide mitigation for birds protected under the Migratory Bird Treaty Act and California Department of Fish and Game Code. Implementation of **Mitigation Measures M-BI-4a, Preconstruction Surveys for Nesting Birds, and M-BI-4b, Bird Safe Building Practices**, would not only reduce the project's impacts to less than significant, it would also reduce the project's contribution to any cumulative impact to less than significant.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
14. GEOLOGY AND SOILS— Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Change substantially the topography or any unique geologic or physical features of the site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Mission Bay FSEIR did not specifically address having soils capable of supporting the use of septic tanks or alternative waste disposal systems. However, the proposed event center and other proposed developments would connect to the combined sewer system, and would not use septic tanks or other on-site land disposal systems for sanitary sewage. Therefore, criterion E.14(e) is not applicable to the proposed project.

Summary of Geology and Soils Impacts in Mission Bay FSEIR

The geology and soils significance criteria were addressed in the Mission Bay FSEIR in the Seismicity section and the Initial Study Geology/Topography section. Relevant information from these sections is summarized below.

The Mission Bay FSEIR Seismicity setting section characterized existing soil and geologic conditions in the Mission Bay plan area, and discussed existing seismic and geologic hazards. The Mission Bay FSEIR indicated the Mission Bay plan area is underlain by artificial fill, silty clay (Bay Mud), sandy alluvium, and stiff marine Old Bay Clay that overly the Franciscan bedrock located at depth of 30 to 130 feet below sea level. The Mission Bay FSEIR noted the Mission Bay plan area is not located within an Alquist-Priolo Fault Zone, but is within a Seismic Hazards Zone for liquefaction as defined in the City's Community Safety Element.

The Mission Bay FSEIR Seismicity impacts section indicates the Mission Bay plan area is susceptible to earthquake-related groundshaking that would be strong enough to damage buildings and infrastructure, and could cause associated ground failure, such as liquefaction, all of which pose risks of injury or loss of life to people in or near the affected structure. The Mission Bay FSEIR noted that the San Francisco Building Code would require seismically-resistant construction in the Mission Bay plan area to reduce risks to people and structures during earthquakes. The Building Code requires that all new development in the Mission Bay plan area be preceded by special site-specific investigations to determine the type and

degree of hazards present, and include site-specific modeling to accurately estimate seismic forces that could act on a structure. In accordance with the Building Code, the resultant measures must be incorporated into the plans and specifications for a building to ensure an appropriate engineering design that would ameliorate the identified seismic hazards. To address the potential for liquefaction-related damage, the Mission Bay FSEIR noted that the major structures within the Mission Bay plan area would be constructed on foundations supported by piles driven into competent geologic materials such as dense sands, stiff clays, or bedrock. The Mission Bay FSEIR concluded that compliance with the Building Code and construction of pile-supported structures would reduce seismic hazards to an acceptable level.

The Mission Bay FSEIR Seismicity impacts section also notes that concrete piles are commonly used to penetrate the artificial fill and Bay Mud and that a sulfate-resistant mix of cement would be used to protect the concrete and reinforcing steel from the corrosive effects of the fill and young Bay Mud. To ensure compliance with this, the FSEIR includes Mitigation Measure H.7 requiring testing of the soil for sulfate and chloride content.

The Mission Bay FSEIR Initial Study Geology/Topography section reported that there are no known unique geologic features in the Mission Bay plan area. The FSEIR Initial Study estimated that up to 300,000 cubic yards of fill would be added to the Mission Bay plan area over the course of construction; this included the proposed addition of between 1 and 1.5 feet of new fill in low spots east of Third Street. The Mission Bay FSEIR Initial Study determined that this additional fill would cause no substantial change in the largely flat character of the site's topography. Given these factors, the Mission Bay FSEIR concluded the Mission Bay plan's effect on changes in topography and unique geologic features would be less than significant.

The Mission Bay FSEIR Initial Study Geology/Topography section concluded that the potential for settlement when a new structure is constructed is high because of the irregular nature of the artificial fill used to create the underlying land and the compressibility of the underlying Bay Mud. The Mission Bay FSEIR reported the alluvium, Old Bay Clay, and Franciscan Bedrock underlying these units are more competent and suitable for foundation support. The Initial Study concluded that utilizing foundations with piles supported in these materials would ameliorate the effects of settlement once the structure is constructed.

Impact Evaluation

Earthquake and Landslide Hazards

Impact GE-1: The proposed project would not expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, seismic groundshaking, seismically-induced ground failure, or landslides. (Less than Significant)

The preliminary geotechnical evaluation for the project⁵³ identified similar geologic materials to those identified in the Mission Bay FSEIR, including artificial fill, young Bay Mud, dense sands of the Colma Formation, and Old Bay Clay that overly the Franciscan Bedrock encountered at a depth of 32 to 130 feet beneath the project site. As analyzed in the Mission Bay FSEIR, no active faults cross the project site so the

⁵³ Langan Treadwell Rollo, *Preliminary Geotechnical Evaluation, Block 29-32 Mission Bay, San Francisco, California*. March 28, 2014.

potential for fault rupture is low. The structures proposed under the project would be subject to strong groundshaking in the event of an earthquake on one of the regional faults, and the site is also located in a liquefaction potential zone identified by the California Department of Conservation under the Seismic Hazards Mapping Act of 1990. However, as determined in the Mission Bay FSEIR, these impacts would be less than significant with implementation of a site-specific geotechnical investigation and seismic analysis, and incorporation of the recommendations in these studies into the building design as required by the California and San Francisco Building Codes. The proposed structures would be supported on piles driven into competent materials beneath the artificial fill and young Bay Mud.

Potential hazards associated with lateral spreading and seismically-induced settlement in the event of a major earthquake were not specifically addressed in the Mission Bay FSEIR. However, for the proposed project, these effects would also be addressed through implementation of site-specific geotechnical studies and adherence to the California and San Francisco Building Codes. On the basis of the preliminary geotechnical evaluation for the project,⁵⁴ recommended measures for addressing these effects include improving the soil to resist liquefaction and lateral spreading as well as use of flexible utility connections, utility hangers, and hinged slabs to address differential settlement. The Mission Bay FSEIR also did not discuss the potential for earthquake-induced landslides. However, the project site is relatively flat and is not located in a landslide-potential zone identified by the California Department of Conservation under the Seismic Hazards Mapping Act of 1990.⁵⁵ Therefore, there is no project impact related to earthquake-induced landslides.

As indicated by the project-specific geotechnical evaluation, no substantial changes have occurred nor has new information become available that would result in new or more severe project impacts related to seismic hazards including fault rupture, seismic groundshaking, seismically induced ground failures, or landslides. No new or different mitigation measures or alternatives would be required to reduce this impact to a less-than-significant level.

Erosion or Loss of Top Soil

Impact GE-2: The project would not result in substantial erosion or loss of top soil. (Topic Partially Analyzed Previously; Less than Significant)

The Mission Bay FSEIR addressed erosion impacts relevant to the project site but not impacts related to loss of top soil. However, both impacts would be less than significant, as described below.

Erosion

Soil movement for foundation excavation could create the potential for wind- and water-borne soil erosion during construction site. However, the project site is relatively flat; therefore, substantial erosion and loss of soil would not be expected to occur during site preparation and construction.

⁵⁴ Langan Treadwell Rollo, *Preliminary Geotechnical Evaluation, Block 29-32 Mission Bay, San Francisco, California*. March 28, 2014.

⁵⁵ California Department of Conservation, Division of Mines and Geology. *State of California Seismic Hazard Zones, City and County of San Francisco, Official Map*, November 17, 2000.

The Mission Bay FSEIR addressed erosion impacts in the Hydrology and Water Quality section under construction activity pollutants. As discussed below in Section E.15, Hydrology and Water Quality, of this Initial Study (Impact HY-1), project construction would be required to comply with the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ (Construction General Stormwater Permit). This permit, adopted by the State Water Resources Control Board in 2009 subsequent to publication of the FSEIR, requires implementation of erosion and sedimentation controls for construction activities associated with ground disturbance. Once the project is constructed, the entire project site would be covered with structures, paved areas, or landscaping and the potential for erosion would be low. Therefore, impacts related to soil erosion during and after construction would be less than significant.

The project would not result in new or more severe significant impacts than those identified in the Mission Bay FSEIR. No new or different mitigation would be required.

Loss of Top Soil

Top soil is a fertile soil horizon that typically contains a seed base. The Mission Bay FSEIR did not specifically address loss of top soil. However, the project site was previously built out with commercial and industrial uses which have since been removed, and the site has been subject to subsequent grading, some excavation, and construction of paved surface parking lots, fencing and associated utilities. Prior development and other ground disturbance would have involved removal of any top soil on the project site. Therefore, the proposed project would have no impact related to loss of top soil.

Settlement

Impact GE-3: The project would not be located on a geologic unit or soil that is unstable, or that could become unstable as a result of the project. (Topic Partially Analyzed Previously; Less than Significant)

The Mission Bay FSEIR addressed settlement issues related to differential settlement of the underlying geologic materials that are relevant to the project site, but it did not address impacts related to settlement associated with excavation or dewatering. However, these impacts would all be less than significant, as described below.

Differential Settlement

Similar to the analysis in the Mission Bay FSEIR Initial Study Geology/Topography section, the proposed project could result in settlement once the project is constructed due to differential settlement of the artificial fill and compressibility of the Bay Mud. However, as part of the project and similar to the discussion in the Mission Bay FSEIR, the proposed event center and other proposed buildings and structures would be constructed with a foundation using piles supported in dense sands of the Colma Formation or in bedrock of the Franciscan Complex. The project would be designed in accordance with the recommendations of the site-specific geotechnical investigation that would be required under the California and San Francisco Building Codes. Furthermore, no substantial changes have occurred at the project site or new information become available that would result in new or more severe impacts related to settlement. On the basis of the factors discussed above, the project would not have any new or substantially more severe effects than those

identified in the Mission Bay FSEIR related to settlement, and no new mitigation measures or alternatives are required to reduce this impact to a less-than-significant level.

Settlement due to Excavation or Dewatering

Construction of the proposed project could also induce ground settlement as a result of excavation for construction of subsurface parking, construction dewatering, and heave during installation of piles. As discussed in the Project Description, following completion of construction, permanent, long-term dewatering would not be required. The Mission Bay FSEIR did not specifically address settlement as a result of these activities. Therefore, these potential settlement effects are described below, followed by San Francisco Department of Building Inspection (DBI) established procedures which would ensure that unstable conditions do not result from project construction.

Excavation. Construction of proposed subsurface facilities, including but not limited to, below-grade event center features and underground parking, could require excavation to a depths of up to 30 feet below San Francisco datum, and isolated deeper excavation could be required at the building cores. During excavation, artificial fill and Bay Mud would be removed and the surrounding soils could become unstable, potentially causing settlement of adjacent structures, including buildings, sidewalks, streets, and utilities. However, the project would be required to comply with the California and San Francisco Building Codes' specifications for shoring, such as conventional soldier pile and lagging, a deep soil mixed cutoff wall,⁵⁶ or rigid and water-tight internally braced secant walling.⁵⁷ Implementation of these required measures would prevent this soil from becoming unstable.

Further, the DBI would require a monitoring program utilizing an inclinometer to monitor for movement at the face of the excavation. The monitoring program would include a baseline survey and frequent surveying of the excavation as construction progresses to evaluate the effects of construction and ensure that the soil does not become unstable. DBI would review the final building plans and determine if an excavation monitoring plan would be required.

Construction Dewatering. Groundwater at the project site is relatively shallow (encountered at a depth of about 6½ to 7 feet below ground surface). Therefore, the proposed 30-foot excavation depth would extend up to approximately 23 feet beneath the groundwater table, and there is the potential for substantial water inflow into the excavation during construction, which would require dewatering to maintain dry construction conditions. Dewatering could potentially result in settlement of adjacent structures, including buildings, sidewalks, streets, and utilities. Although a water tight shoring system such as a deep soil mixed cutoff wall or secant walling could be used during excavation for structures, dewatering of excavations for installation of utilities and compaction of soil could be required. To address the potential for settlement as a result of excavation dewatering, DBI could require a site-specific dewatering plan to identify necessary

⁵⁶ A deep mixed soil cutoff wall is constructed by advancing augers or a cutting tool and pumping cement through the tips of the auger or cutting tool during drilling. The cement is mixed with the soil in place, forming a solidified column or panel of soil and cement that provides stability to the excavation sidewall and restricts groundwater inflow to the excavation.

⁵⁷ A secant wall, in simplified form, is built by drilling a series of holes and filling them with concrete, resulting in a continuous series of concrete cylinders that form a water-tight barrier that retains soil behind it.

measures to minimize the risk of settlement. DBI would review the final building plans and determine if a dewatering plan would be required.

Discharge of any groundwater removed during construction dewatering would also be subject to requirements of the City's Sewer Use Ordinance (Article 4.1 of the Public Works Code; added by Ordinance No. 19-92, amended by Ordinance No. 116-97), as supplemented by Department of Public Works Order No. 158170, requiring a permit from the Wastewater Enterprise Collection System Division of the SFPUC. A permit may be issued only if an effective pretreatment system is maintained and operated. The permit for discharge would specify water quality standards and may require the project sponsor to install and maintain meters to measure the volume of the discharge to the combined sewer system.

In addition, if the subsequent project-specific geotechnical investigation determines that dewatering wells would likely be needed to draw the groundwater down below the planned depths of excavation, any dewatering wells would be subject to the requirements of the City's Soil Boring and Well Regulation Ordinance (Article 12B of the Health Code; added by Ordinance No. 113-05), requiring a project sponsor to obtain a permit from the Department of Public Health prior to constructing a dewatering well. A permit may be issued only if the project sponsors use construction practices that would prevent the contamination or pollution of groundwater during the construction or modification of the well or soil boring.

Heave as a Result of Pile Driving. The proposed event center and other proposed buildings and structures would be supported by foundations using piles. The piles may be drilled or driven into place, and the appropriate installation method would be determined on the basis of the site-specific geotechnical investigation implemented in accordance with the California and San Francisco Building Codes. In addition, noise and vibration concerns could limit the use of driven piles.

If driven piles are used, pile driving during project construction may cause the ground to heave up to several inches, and the heave could adversely affect adjacent structures. To address this, the DBI may require a preconstruction survey and monitoring during pile driving. DBI would review the final building plans and determine if a preconstruction survey and subsequent monitoring would be required to address the potential for heave.

DBI Requirements. DBI would require a site-specific geotechnical report for the project prior to issuing a building permit, and would review the report to ensure that the potential settlement effects of excavation, pile driving, and dewatering are appropriately addressed in accordance with Section 1704.15 of the San Francisco Building Code. DBI would also require that the report include a determination as to whether a lateral movement and settlement survey should be done to monitor any movement or settlement of surrounding buildings and adjacent streets during construction. If a monitoring survey were recommended, DBI would require that a Special Inspector be retained by the project sponsor to perform this monitoring. Groundwater observation wells could be required to monitor potential settlement and subsidence during dewatering.

If, in the judgment of the Special Inspector, unacceptable movement were to occur during construction, corrective actions would be used to halt this settlement. Groundwater recharge could be used to halt settlement due to dewatering. Further, DBI would review the final building plans and determine if additional site-specific reports would be required.

With implementation of the recommendations provided in project-specific detailed geotechnical study, subject to review and approval by DBI, and monitoring by a DBI Special Inspector (if required), impacts related to the potential for settlement and subsidence due to construction on soil that is unstable, or could become unstable as a result of such construction, would be less than significant.

Problematic Soils

Impact GE-4: The project would not create substantial risks to life or property as a result of location on expansive soils or other problematic soils. (Topic Partially Analyzed Previously; Less than Significant)

The Mission Bay FSEIR addressed issues related to corrosive soils, but it did not address impacts related to expansive soils. However, these impacts would all be less than significant, as described below.

Corrosive Soils

The event center and other proposed buildings and structures would be constructed with foundations supported on concrete piles driven into competent geologic materials beneath the artificial fill and young Bay Mud. As discussed above, the Mission Bay FSEIR stated that a sulfate-resistant mix of cement would be used to protect the concrete and reinforcing steel from the corrosive effects of the fill and young Bay Mud. To ensure compliance with this, the Mission Bay FSEIR includes Mitigation Measure H.7 requiring testing of the soil for sulfate and chloride content.

However, the site-specific geotechnical investigation conducted in accordance with the California and San Francisco Building Codes would address the potential for corrosion of the concrete piles where they are in contact with the artificial fill and young Bay Mud, and would include specifications for the concrete to ensure that the piles would not be adversely affected by corrosion.

Therefore, this impact is adequately addressed by the existing building code and implementation of Mitigation Measure H.7 of the Mission Bay FSEIR is no longer necessary to reduce impacts related to corrosive soil to a less-than-significant level.

Expansive Soils

Expansive soils are typically very fine grained with a high to very high percentage of clay. They are characterized by their ability to undergo significant volume change (i.e., to shrink and swell) due to variations in soil moisture content which typically result from factors such as rainfall, landscape irrigation, utility leakage, and roof drainage. The Mission Bay FSEIR did not specifically address the effects of expansive soil on newly constructed structures. However, the presence of expansive soils is not an issue at the project site because the artificial fill beneath the site is sandy and would not be expansive, and because the young Bay Mud beneath the site is generally below the groundwater table, and thus is permanently saturated. Further, any backfill materials used for the project would have a low expansion potential in accordance with the recommendations of the geotechnical report for the project, completed in accordance with the California and San Francisco Building Codes. Therefore, impacts related to expansive soils would be less than significant.

Topography or Unique Geologic Features

Impact GE-5: The project would not substantially change the topography or any unique geologic or physical feature of the project site. (Less than Significant)

The Mission Bay FSEIR Initial Study reported that there are no unique geologic features in the Mission Bay plan area and that the addition of limited amounts of new fill in low spots east of Third Street would not result in a substantial change in topography. Similarly, the project site is generally flat and there are no unique topographic, geologic, or physical features within the site. Construction of the proposed project would not involve the placement of fill and would not alter the topography of the site. No changes have occurred at the project site or new information has become available that would affect this impact. Therefore, the project would not result in any new impacts or increase the severity of previously identified impacts related to alteration of topography or damage to unique geologic features and this impact would be less than significant.

Cumulative Impacts

Impact C-GE-1: The project, in combination with other past, present, and reasonably foreseeable future projects, would not result in a considerable contribution to cumulative impacts related to geologic hazards. (Less than Significant)

Geologic impacts are usually restricted to the immediate vicinity, and potential geologic impacts resulting from the proposed project that could contribute to a cumulative impact are limited to seismic effects and the potential for creation of an unstable geologic unit. Seismic effects could occur in the project vicinity, including the south of Market area. Therefore, this area is considered the geographic scope for seismic effects. The creation of unstable geologic units is a local effect; therefore, the geographic scope for this cumulative impact is the project area and immediate vicinity. This analysis is based on past, present, and reasonably foreseeable future projects in this area, including those listed above in Section D, Approach to Analysis.

Seismic Safety. Several cumulative projects would contribute to an increase in the number of persons potentially exposed to seismic risks in the south of Market area, which could result in a potential cumulative impact. However, as noted in Impact GE-1, the project site is not subject to fault rupture because there are no known earthquake faults that cross the site or vicinity. The proposed project and any development within the Mission Bay area would be subject to very strong groundshaking and could experience liquefaction effects in the event of an earthquake on a nearby fault. However, the project and any new buildings would be constructed in accordance with the most current building code requirements for seismic safety, providing for increased life-safety protection of residents and workers. These requirements would reduce potential cumulative impacts to a less-than-significant level, and the proposed project's compliance with these requirements would ensure that it would not make a cumulatively considerable contribution to cumulative impacts related to seismic safety.

Unstable Geologic Unit. As discussed in Impact GE-3, implementation of the proposed project could result in ground settlement from excavation for construction of the below-ground parking, construction dewatering, and pile driving. Any nearby project that could contribute to cumulative impacts related to an unstable geologic unit in the immediate vicinity would be required to implement the DBI procedures

described above, including preparation of a detailed geotechnical report and site-specific reports as needed to address the potential settlement and subsidence impacts of excavation and dewatering; implementation of a lateral movement and settlement survey to monitor any movement or settlement of surrounding buildings and adjacent streets during construction and monitoring by a Special Inspector, if needed; conducting a pre-construction survey and monitoring during pile driving; and implementation of corrective actions, as necessary. With implementation of these requirements under the proposed project and under any nearby projects, cumulative impacts related to ground settlement would be less than significant.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
15. HYDROLOGY AND WATER QUALITY— Would the project:				
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion of siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other authoritative flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Mission Bay FSEIR did not specifically address potential impacts of the Mission Bay plan related to placing housing within a 100-year flood hazard area. However, the project would not include any housing or residential uses. Therefore, criterion E.15(g) does not apply to the proposed project. In addition, the project site is not located in the vicinity of a levee or dam, so criterion E.15(i) with respect to failure of a levee or dam is not applicable to this project. Similarly, the project site is not located on or near slopes that could be subject to mudflow, so criterion E.15(j) with respect to mudflow is not applicable to this project. Thus, these topics are not discussed further in this Initial Study or in the SEIR.

Summary of Hydrology and Water Quality Impacts in Mission Bay FSEIR

The Mission Bay FSEIR addressed potential effect on hydrology and water quality in the Hydrology and Water Quality, Community Services and Utilities, Initial Study Water, and Seismicity sections. Relevant information from these sections is summarized below.

The Mission Bay FSEIR Hydrology and Water Quality setting section characterized existing drainage patterns and municipal sewer treatment facilities serving the Mission Bay plan area at that time. The Mission Bay FSEIR reported that the Mission Bay plan area was located in the City's Bayside drainage basin, in which combined stormwater and sanitary sewage was collected, then conveyed to and treated at the Southeast Water Pollution Control Plant (SEWPCP) near Islais Creek. At that time, the Mission Bay plan area was located in four sub-basins, with the project site draining to two of the sub-basins. The north and east portions of the Blocks 29-32 site were located in the Bay sub-basin which drained directly to the Bay, and the balance of Blocks 29-32 site was located within the Mariposa sub-basin portion of the Bayside drainage basin. Stormwater collected in the Mariposa sub-basin was directed to the Mariposa pump station, and from there, to the SEWPCP. Stormwater occurring within the Bay sub-basin at that time drained directly to the Bay, and not the combined sewer system.

As reported in the Mission Bay FSEIR, the annual average dry weather flows at the SEWPCP at that time were estimated at 67 mgd. During wet weather, the SEWPCP could treat up to 150 mgd to a secondary level, and an additional 100 mgd to a primary level.⁵⁸ In addition, up to an additional 150 mgd of wet weather flows received primary treatment at the North Point Water Pollution Control Plant, increasing total wet weather treatment capacity for the Bayside drainage basin to 400 mgd. As also reported in the Mission Bay FSEIR, if rainfall exceeded the total capacity of the SEWPCP, the North Point facility, and storage/transport facilities, then excess flows are directed to sewer discharge structures located along the City's bayside. These flows receive flow-through treatment (similar to primary treatment) and are discharged to the Bay under the City's National Pollutant Discharge Elimination System (NPDES) permit issued by the Regional Water Quality Control Board (RWQCB).

Mission Bay Plan Area Drainage Plan

The Mission Bay FSEIR Hydrology and Water Quality impacts section described the proposed Mission Bay plan's drainage plan, which proposed a new separate storm sewer system for a portion of the Mission Bay plan area. Under the Mission Bay plan, stormwater within the Bay sub-basin (which

⁵⁸ Secondary treatment is the treatment of wastewater or sewage involving removal of organic matter using biological and chemical processes. This is a higher level of treatment than primary treatment, which is removal of floating and settleable solids using physical operations such as screening and sedimentation.

included the eastern portion of Blocks 29-32 under 1998 conditions) would drain into new infrastructure and no longer directly to the Bay. The Mission Bay plan proposed a reconfigured Central/Bay sub-basin (that would include the northern portion of the Blocks 29-32 site) that would be served by separate sewer and storm drain systems. The sanitary-only sewers from the Central/Bay sub-basin would connect to the existing combined sewer system for treatment at the SEWCP. The separate storm drainage system proposed within the Central/Bay sub-basin would divert an initial portion of the stormwater flow (approximately 80 percent of the average annual flow) to the City's combined system for treatment. Stormwater volumes greater than the initial flows and up to a 5-year storm would be discharged directly to four new stormwater outfalls (two to China Basin Channel and two to the Bay). Volumes greater than a 5-year event would pond or flow overland to the Bay. The Mission Bay plan also proposed a reconfigured Mariposa sub-basin (that would include the southern portion Blocks 29-32), and would be served by the City's existing combined sewer system.

Project Operational Effects on Water Quality

The Mission Bay FSEIR indicated that the Mission Bay plan would contribute pollutants to the Bay through 1) the discharge to municipal wastewater effluent from the SEWPCP, 2) the discharge of treated combined sewer overflows (CSOs) (these events are now referred to as combined sewer discharges or CSDs), and 3) the discharge of untreated stormwater, as described below.

Mission Bay Plan Effects of Volume and Quality of Municipal Wastewater Effluent

The Mission Bay FSEIR estimated that the Mission Bay plan would generate municipal wastewater and increase the total effluent from the SEWPCP by about 3 percent, and result in an approximate 3 percent increase in the pollutant loading to the Bay from municipal wastewater effluent. The Mission Bay FSEIR reported that the quality of municipal wastewater from the Mission Bay plan area would not differ substantially from the quality of other City wastewater flowing to the SEWPCP, and would not materially change the concentrations of pollutants in the effluent. The Mission Bay FSEIR determined that the effluent increases would be well within the City's treatment plant capacity, and would not cause a violation of the City's National Pollutant Discharge Elimination System (NPDES) permit requirements regarding its discharge from the SEWPCP. The Mission Bay FSEIR also determined that the plan pollutant concentrations were within water quality screening values, including Water Quality Objectives adopted by the RWQCB. Given these factors, the Mission Bay FSEIR concluded that Mission Bay plan effects of municipal wastewater effluent on water quality would be less than significant.

Mission Bay Plan Effects of Volume and Quality of Combined Sewer Discharges

The Mission Bay FSEIR estimated that the Mission Bay plan would increase the average annual volume of CSDs (formerly referred to as combined sewer overflows, or CSOs) by approximately 0.2 percent, and increase the duration of each overflow event by a few minutes. The Mission Bay FSEIR reported that the Mission Bay plan would not change the concentrations of pollutants in the treated CSDs. In addition, this slight increase in CSD volumes and duration would not cause a violation of the City's NPDES permit requirements for the CSDs, and thus, would not adversely affect existing near-shore aquatic biota or water-contact recreation in the Bay. Given these factors, the Mission Bay FSEIR concluded that Mission Bay plan effects of CSDs on water quality would be less than significant.

Mission Bay Plan Effects of Volume and Quality of Direct Stormwater Discharge

The Mission Bay FSEIR reported that the Mission Bay plan would increase the volume of stormwater directly discharged to the Bay by approximately 2 percent and would also change the concentration of pollutants in the stormwater discharge due to the intensification of land uses proposed in the Mission Bay plan area. However, the FSEIR concluded that any potential increase in pollutants would be very small relative to those associated with municipal wastewater and treated CSDs. The Mission Bay FSEIR determined that this increase in volumes and change in pollutant concentrations would not adversely affect existing aquatic biota in the Bay. Given these factors, the Mission Bay FSEIR concluded that Mission Bay plan effects of direct stormwater discharge on water quality would be less than significant.

Mission Bay Plan Effects of Sediment Quality

The Mission Bay FSEIR reported that the RWQCB identified China Basin Channel and Islais Creek as candidate toxic hot spots for sediment quality. The Mission Bay FSEIR indicated the Mission Bay plan would slightly decrease volumes of CSDs to China Basin Channel, however would increase flows elsewhere, most notably to Islais Creek. The Mission Bay FSEIR indicated that increased volumes of CSDs to Islais Creek with the Mission Bay plan would cause a corresponding increase in sediment deposition at that location. The Mission Bay FSEIR determined that the plan would not, however, measurably change the physical or chemical composition of the sediment layer, nor affect any determination by the RWQCB to designate China Basin Channel or Islais Creek as toxic hot spots. Given these factors, the Mission Bay FSEIR concluded that Mission Bay plan effects on sediment quality in Islais Creek and China Basin Channel would be less than significant.

Mission Bay Plan Contribution to Cumulative Effects

The FSEIR reported that there were no significant cumulative impacts identified from the estimated increased volume and pollutant load of treated municipal wastewater effluent, treated CSDs, and direct stormwater discharges, because there would not be substantial degradation in water quality of the Bay or near-shore waters, no toxic effect on aquatic biota, and no substantial change sediment quality or beneficial uses.

However, the FSEIR determined that due to the lack of conclusive evidence refuting a causal relationship between treated CSDs, stormwater discharges, and sediment quality, the Mission Bay plan could contribute to a potentially significant cumulative impact on near-shore waters of the Bay from multiple sources of CSDs and direct stormwater discharges to China Basin Channel. The FSEIR concluded that the estimated plan contribution (0.2 percent) to the potential cumulative increase (11 percent) in Bayside CSD volumes, and the contribution of plan-related stormwater discharges to possible cumulative impacts would be reduced to less than significant with the implementation of Mitigation Measures K.3 and K.4 regarding CSD volumes and alternative treatment technologies.

Mission Bay Phased Development Effects on Water Quality from Stormwater

The Mission Bay FSEIR discussed U.S. EPA Phase II stormwater regulations that had been proposed but not finalized at the time of preparation of the FSEIR. These proposed regulations would require the City to develop and implement a stormwater management program to reduce the discharge of pollutants to the maximum extent practicable and protect water quality. The Mission Bay FSEIR indicated that the lack

of adopted regulatory requirements for a stormwater management program that addressed Mission Bay stormwater quality, and a failure to implement other BMPs to minimize stormwater pollution, could potentially conflict with the intent of the proposed stormwater permit requirements and result in a significant impact.

Mitigation Measure M.5 in the Mission Bay FSEIR Community Services and Utilities section (see Utilities and Services section in this Initial Study, above) required conveying all stormwater runoff from newly developed areas in the Bay Basin to the combined sewer system prior to completion of the initial-flow diversion system. Mitigation Measure K.5 in the Mission Bay FSEIR Hydrology and Water Quality section identified implementation of an individual stormwater management program that utilizes BMPs for Mission Bay until the Phase II regulations become final and Mission Bay is included in the City's stormwater management program. The FSEIR also identified Mitigation Measure K.2 in the Mission Bay FSEIR Hydrology and Water Quality section that required mandatory participation in the City's existing Water Pollution Prevention Program.

Mission Bay Plan Construction Effects on Water Quality

The Mission Bay FSEIR Hydrology and Water Quality section reported that construction activities would cause ground disturbance that would result in the potential for erosion, and potential for construction sedimentation and other pollutants in China Basin Channel and the Bay. The Mission Bay FSEIR indicated that construction activities proposed under the plan would be required to comply with the NPDES General Construction Activity Storm Water Permit, as administered by the RWQCB, which requires preparation and implementation of a Storm Water Pollution and Prevention Plan (SWPPP). The Mission Bay FSEIR also identified a number of best management practices (BMPs) that should be incorporated into the SWPPP as part of the plan, and included implementation of these BMPs as Mitigation Measures K.1a through K.1i. Regarding discharges of groundwater produced during construction-related dewatering, the FSEIR concluded that water quality effects related to these discharges would not be significant because the discharge would need to comply with the requirements of the City's Industrial Waste Ordinance, adopted in 1992. Based on these factors, the Mission Bay FSEIR concluded that construction-related impacts to water quality would be less than significant.

Mission Bay Plan Effects on Flooding

The Mission Bay FSEIR Initial Study Water section summarized relevant information from the 1990 Mission Bay FEIR regarding the issue of potential flooding. The 1990 Mission Bay FEIR indicated the existing elevation of the Mission Bay plan area ranged from approximately +6.0 to -2.0 feet San Francisco City Datum (SFD).⁵⁹ Groundwater in the Mission Bay plan area was reported at 3.5 to 9 feet below ground surface, and contiguous with the mean sea level in the adjacent Bay. As referenced in the Mission Bay FSEIR Initial Study, the 1990 Mission Bay FEIR determined that proposed structures or roadways in Mission Bay placed at elevations at or below -2.0 feet SFD, after settling on the site, could be subject to tidal flooding during a 100-year flood event, and that if sea level were to rise, groundwater levels in Mission Bay could rise similarly.

⁵⁹ San Francisco City Datum (SFD) establishes the City's zero point for surveying purposes at approximately 8.6 feet above the mean sea level established by 1929 U.S. Geological Survey datum, and approximately 11.3 feet above the current 1988 North American Vertical Datum.

The Mission Bay FSEIR Initial Study included Mitigation Measures K.6a through K.6f, adapted from the 1990 Mission Bay FEIR that required structures in the Mission Bay area to be designed and located in a way to protect low-lying shoreline areas from the dangers of tidal flooding, including consideration of a rise in relative sea level. The mitigation specified that to address effects of sea level rise, specific flood protection and engineering and building analyses must be conducted by a licensed engineer where structures are proposed below an elevation of -1.0 foot SFD. Potential measures identified by the mitigation included setback from the water's edge, installation of seawalls, dikes and/or berms during construction of infrastructure; reducing the amount of excavation for utilities or basements; and use of fill to raise the grade of public open spaces. With implementation of these mitigation measures, the Mission Bay FSEIR determined that plan effects related to flooding and sea level rise would be less than significant.

Mission Bay Plan Effects on Groundwater Depletion and Recharge

The Mission Bay FSEIR Initial Study Water section determined that the Mission Bay plan would have a less than significant impact on depletion of groundwater resources and groundwater recharge, primarily because the plan does not propose to extract groundwater. The FSEIR Initial Study indicated that the Mission Bay plan would supply non-potable water uses by either recycled water, groundwater, or potentially a blend of imported groundwater and recycled water. However, the effects of groundwater extraction for this purpose were analyzed in a separate environmental review document for the recycled water project, which determined that the recycled water project would not adversely affect groundwater resources or groundwater recharge.

The Mission Bay FSEIR Initial Study also determined that groundwater dewatering during construction would be subject to approval either by the City for discharge to the sewer system or at an off-site disposal facility. Therefore, impacts on groundwater depletion and recharge were determined to be less than significant.

Mission Bay Plan Effects Related to Tsunami and Seiche

The Mission Bay FSEIR Seismicity impact section estimated that based on evaluations conducted by the U.S. Army Corps of Engineers, the plan area would be subject to as much as 4.7 feet of wave run-up during the 100-year tsunami event, and 7.8 feet of wave run-up during the 500-year tsunami event. Based on this, the maximum flooding level would be -1 feet SFD for the 100-year event and 2 feet SFD for the 500-year event. The FSEIR stated that the U.S. Army Corps of Engineers model estimated the height of "worst case" flooding during extreme high tide crest conditions, which occur about 30 times each year, and last for less than 2 hours each time and the likelihood of a 100-year tsunami occurring within that window is less than one hundredth of one percent. Thus, even during these rare events, only the lowest portions of the plan area would be inundated as a result of a tsunami. Given the fact that the likelihood of such events is less than one hundredth of one percent, the FSEIR determined that impacts would be less than significant.

Impact Evaluation

Water Quality

Impact HY-1: The project would not violate water quality standards or otherwise substantially degrade water quality with respect to construction activities, including construction dewatering. (Less than Significant)

The project would not result in water quality impacts as a result of construction-related stormwater discharges, including construction-related dewatering because these discharges would be required to be managed in accordance with existing San Francisco regulations, described below.

Water Quality Effects of Construction Activities

During construction, stormwater from the project site would drain to a separate storm drainage system that includes existing storm drain lines located along South Street, Third Street, and 16th Street (which have been built subsequent to the FSEIR consistent with the Mission Bay South Infrastructure Plan). As described above for the Mission Bay FSEIR, stormwater discharges during construction would require NPDES coverage under the General Construction Activity Storm Water Permit, as administered by the RWQCB. At the time the FSEIR was prepared, this general permit required preparation and implementation of a Storm Water Pollution and Prevention Plan (SWPPP), but did not include specific BMPs to be implemented to avoid water quality effects associated with construction-related stormwater discharges. To address this, the Mission Bay FSEIR also identified a number of best management practices (BMPs) that should be incorporated into the SWPPP as part of the plan, and included as Mitigation Measures K.1a through K.1i.

However, the State Water Resources Control Board subsequently adopted the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ (Construction General Stormwater Permit) in 2009 and this permit supersedes the permit in effect at the time of FSEIR publication. Construction activities subject to this permit include ground disturbance such as clearing, grading, and excavating, as well as soil stockpiling. Under the Construction General Stormwater Permit, construction projects are characterized by the level of risk to water quality. This is determined using a combination of the sediment risk of the project and the receiving water quality risk. Projects can be characterized as Level 1, Level 2, or Level 3, and the minimum Best Management Practices (BMPs) and monitoring that must be implemented during construction are based on the risk level. The BMPs are designed to prevent pollutants from coming in contact with stormwater and to keep all products of erosion and stormwater pollutants from moving offsite into receiving waters. They are specified in a SWPPP that must be prepared by a Qualified SWPPP Developer (QSD) and submitted to the San Francisco RWQCB before construction begins.

For construction activities characterized as Level 1, the Construction General Stormwater Permit specifies minimum BMPs to be implemented that address good housekeeping practices (including those for managing hazardous materials used during construction, non-stormwater management, erosion and sediment control, and run-on and runoff control. A qualified professional must inspect the required BMPs weekly when there is no rain and daily during a qualifying rainstorm. For construction activities characterized as Level 2 and 3, the minimum requirements identified for Level 1 apply, as well as some more stringent requirements. For instance, erosion controls must be implemented in conjunction with

sediment controls in active construction areas, and linear sediment controls must be used along slopes. In addition, a QSD must prepare a rain event action plan for Level 2 and 3 construction activities. This plan would identify the designated site stormwater manager, the provider of erosion and sediment controls, and the stormwater sampling agent, as well as the trades active at the site during all construction phases. The plan would include suggested actions for each construction phase.

Compliance with the current General Construction NPDES Permit would ensure that construction-related stormwater discharges would not violate water quality standards or otherwise substantially degrade water quality. Therefore, this impact would be less than significant with implementation of regulatory requirements and FSEIR Mitigation Measures K.1a through K.1i. would be superseded by the specified regulatory requirements. No new mitigation measures are required, and the project would not result in any new significant impacts or substantially more severe impacts on water quality from construction activities than were disclosed in the Mission Bay FSEIR.

Water Quality Effects of Groundwater Dewatering

As noted in the Geology and Soils section of this Initial Study, the groundwater level at the project site is about 6½ to 7 feet below ground surface. Given that the estimated depth of excavation on the site would be up to 30 feet below San Francisco datum deep, construction-related groundwater dewatering would likely be required. However, the sponsor indicates that the project would be designed such that permanent dewatering would not be required.

As discussed above, the Mission Bay FSEIR Initial Study concluded that water quality impacts associated with discharge of groundwater during construction-related dewatering would be less than significant with implementation of the City's Industrial Waste Ordinance, adopted in 1992. This ordinance is found in Article 4.1 of the *Public Works Code*, as supplemented by Order No. 158170, which regulates the quantity and quality of discharges to the combined sewer system. In accordance with Article 4.1 and Order No. 158170, the discharge permit would contain appropriate discharge standards and may require installation of meters to measure the volume of the discharge. Although the groundwater could contain contaminants related to past site activities, as discussed in, the Hazards and Hazardous Materials section of this Initial Study, as well as sediment and suspended solids, the groundwater would be treated as necessary to meet permit requirements prior to discharge.

With discharge to the combined sewer system in accordance with regulatory requirements, water quality impacts related to a violation of water quality standards or degradation of water quality due to discharge of groundwater produced during construction-related dewatering would be less than significant.

The FSEIR did not address water quality impacts associated with discharge of groundwater produced during long-term dewatering once the development projects were constructed. However, the sponsor indicates that no long-term dewatering of the project site is proposed during operation of the project. Therefore, the project would not result in any new significant impacts or substantially more severe impacts on water quality from dewatering activities than previously identified in the FSEIR.

Groundwater

Impact HY-2: The project would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. (Less than Significant)

As discussed above, the Initial Study for the Mission Bay FSEIR stated that non-potable water supply for development projects within the plan area would use recycled water that would potentially be a blend of imported groundwater and recycled water. As stated in the Initial Study for the Mission Bay FSEIR, the effects of groundwater extraction for this purpose were analyzed in a separate environmental review document for the recycled water project which determined that the recycled water project would not adversely affect groundwater resources or groundwater recharge. However, the San Francisco Public Utilities Commission (SFPUC) has not yet constructed the planned recycled water system for the eastside of the City, and currently, does not intend to blend groundwater with recycled water. Although the project would be required to install dual plumbing for use of recycled water in accordance with the Recycled Water Ordinance found in Article 22 of the San Francisco Public Works Code, the project would not use recycled water until it becomes available.

Further, implementation of the project would not result in depletion of groundwater resources because, other than potential pumping of groundwater during construction dewatering, the project would not involve the use or extraction of groundwater. Rather, potable water for the project would be provided by the SFPUC regional water system. If and when a supply of recycled water becomes available through the Eastside Recycled Water Project,⁶⁰ the project would also use recycled water for non-potable uses. Although groundwater dewatering could be required during construction of the project, this dewatering would not deplete groundwater resources because the Downtown San Francisco Groundwater Basin is not used as a drinking water supply and there are no plans for development of this basin for groundwater production.

Project implementation would not interfere with groundwater recharge because although the project would replace the great majority of the currently unpaved portions of the site with impervious surfaces, the new impervious surfaces comprise a negligible portion of the total area of the Downtown Groundwater basin. Impacts related to depletion of groundwater resources and interference with groundwater recharge would be less than significant because the project would not include groundwater pumping other than for dewatering, the Downtown San Francisco Groundwater Basin is not used as a potable water supply, there are no plans for development of the basin for groundwater production, and there would be only a minor increase in impervious surfaces. Therefore, the project's impacts on groundwater supplies and recharge would be less than significant, and the project would not result in any new significant impacts or substantially more severe impacts from those previously identified in the FSEIR.

⁶⁰ The SFPUC plans to provide 2 million gallons per day of high quality recycled water to the customers in the east side of the City through the Eastside Recycled Water Project for non-potable uses such as irrigation and toilet flushing. This project is still in the planning stages, and the implementation date is uncertain.

Drainage Patterns

Impact HY-3: The project would not alter the existing drainage pattern of the area in a manner that would result in substantial erosion, siltation, or flooding on- or off-site, and the project would not substantially increase the rate or amount of surface runoff that would result in flooding on- or off-site. (Less than Significant)

The project site does not include any existing streams or water courses that could be altered or diverted. Therefore, the project would have no impact related to alteration of drainage patterns by altering the course of a stream in a manner that would cause erosion or flooding on or off-site.

At the time of preparation of the Mission Bay FSEIR, drainage at the project site was directed either to the combined sewer system in the Central sub-basin or Mariposa sub-basin or directly to the Bay. Since that time, a separate storm drainage system has been constructed along South Street, Third Street, and 16th Street, as part of implementation of the Mission Bay South Infrastructure Plan, so that portions of the site previously draining directly to the Bay now drain to a separate storm drain system. The remainder of the site continues to drain to the combined sewer system.

Under the proposed project, the stormwater would be routed to a separate storm sewer system. Construction of the on-site project components would be required to comply with applicable stormwater design guidelines, which would ensure that no substantial erosion or siltation on-or off-site would occur.

Currently, the project site is comprised of open ground and paved areas. Once constructed, the project would change the quantity of stormwater runoff from the site. However, in accordance with the Stormwater Design Guidelines, stormwater controls would be designed to treat 90 percent of the annual stormwater runoff to the separate storm sewer system. Compliance with these design guidelines would ensure that no on- or off-site flooding would occur.

Therefore, neither alteration of existing drainage patterns at the project site nor changes in stormwater runoff volumes would result in substantial erosion, siltation, or flooding on- or off-site, and this impact would be less than significant. The project would not result in any new significant impacts or substantially more severe impacts related to alteration of drainage patterns from those previously identified in the FSEIR, and no new mitigation measures would be required.

Flooding

Impact HY-4: The project would not expose people, housing, or structures, to substantial risk of loss due to existing flooding risks and would not redirect or impede flood flows. (Less than Significant)

As discussed above, the Mission Bay FSEIR concluded that structures and roadways placed at elevations at or below -2.0 feet SFD could be subject to tidal flooding during a 100-year flood event and specified mitigation measures to address flooding issues. Elevations at the project site range from approximately -1 foot SFD to +3 feet SFD,⁶¹ therefore the project site would not be subject to tidal flooding during a

⁶¹ Langan Treadwell Rollo, Preliminary Geotechnical Evaluation, Block 29-32 Mission Bay, San Francisco, California. March 28, 2014.

100-year flood event. In addition, since publication of the FSEIR, the CCSF published interim flood maps in 2008 that show 100-year flooding zones within the City and County of San Francisco and the project site is not located within an identified 100-year flood zone.⁶²

Also subsequent to publication of the FSEIR in 1998, the SFPUC has specifically identified potential flooding hazards related to the depth of sewer lines relative to properties they serve. The SFPUC identified a potential flood zone south of Market Street but the proposed project is not within this zone.⁶³ However, the proposed project site is within an area located on fill, and the SFPUC notes that subsidence in areas located on fill or Bay Mud could subside to a point where the sewers do not drain freely during a storm (and sometimes during dry weather), and the resulting sewer backups could result in localized flooding. Accordingly, the project sponsor would be referred to the SFPUC at the beginning of the building permit process to determine whether the project would result in ground level flooding during storms. If so, the applicant would be required to comply with SFPUC requirements for projects in flood-prone zones as part of the permit approval process. These measures could include providing a pump station for the sewage flow, raising the elevation of entryways, providing special sidewalk construction, and constructing deep gutters, among others.

Therefore, impacts associated with exposure of people or structures to substantial risk of loss due to existing flooding risks and impedance of flood flows would be less than significant. Because the project would result in less than significant impacts related to flooding based on current flood hazard mapping by the CCSF and would be subject to SFPUC requirements for projects in flood zones that could result from sewer backups as part of the permit approval process (if needed), the project would result in less severe flooding impacts than those analyzed in the FSEIR. Therefore, compliance with SFPUC requirements for project in flood zones would obviate the need for Mitigation Measures K.6a through K.6f to mitigate existing flooding hazards, and these measures previously identified in the Mission Bay FSEIR would not be necessary to reduce this impact to a less than significant level. As stated below, potential future flood risks due to projected sea level rise and the applicability of these mitigation measures related to flooding as a result of sea level rise will be addressed in the SEIR.

Inundation by Seiche or Tsunami

Impact HY-5: The project would not expose people or structures to a significant risk of loss, injury or death involving inundation by seiche or tsunami. (Less than Significant)

As discussed above, the FSEIR estimated that the maximum flooding level in the Mission Bay plan area would be -1 feet SFD for the 100-year tsunami event and 2 feet SFD for the 500-year tsunami event. In addition, based on the state's official tsunami inundation maps published subsequent to publication of the FSEIR, the eastern portion of the project site is within a tsunami inundation zone.⁶⁴Based on modeling

⁶² City and County of San Francisco, San Francisco Interim Floodplain Map, Northeast, Final Draft. July, 2008.

⁶³ San Francisco Planning Department, Planning Director Bulletin No. 4, Review of Project Identified in Areas Prone to Flooding.

⁶⁴ California Emergency Management Agency, California Geological Survey, University of Southern California. Tsunami Inundation Map for Emergency Planning, San Francisco North Quadrangle/San Francisco South Quadrangle (SF Bay). June 15, 2009.

provided in the Tsunami Response Annex of the CCSF Emergency Response Plan, the potential tsunami and seiche run-up at the project site would be approximately 6 feet.⁶⁵

Although extremely rare, a tsunami or seiche could damage the proposed structures. Visitors and staff of the event center and other uses could also be endangered. However, as described below, the project is set back from the Bay which would provide a buffer between the Bay shoreline and the proposed project, and the project would also raise most occupied portions of the event center and mixed use development above the inundation depth. Further, San Francisco has a well-established Tsunami Warning System that would be activated and would protect people from harm, as also discussed below.

Structures. The proposed event center and other proposed structures would be constructed to current building standards. Although some damage to the structures could occur, the improvements constructed under the proposed project would be resilient to tsunamis or seiches. Therefore, impacts related to damage to structures from inundation by seiche and tsunami are considered less than significant and would not be a new significant impact or substantially more severe than impacts identified in the Mission Bay FSEIR.

People. The proposed project would increase the number of people at Blocks 29-32, and would therefore expose more people to tsunami or seiche hazards than under existing conditions. However, the project would include design features that would raise most occupied portions of the event center and mixed use development above the inundation depth. Proposed design features would include:

- Raising certain pedestrian access and outdoor areas, including the main plaza, the main pedestrian path providing access around the event center, and the Bayfront Overlook, Bayfront Terrace, and food hall roof
- Providing certain above-grade entry/exits to proposed buildings, including the main and secondary entries to the event center, to the office and retail buildings, and the upper floors of the proposed food hall

In the event that an earthquake occurred that would be capable of producing a seiche or tsunami that could affect San Francisco, the National Warning System would also provide warning to the City. The San Francisco outdoor warning system (sirens and loudspeakers, tested each Tuesday at 12:00 noon) would then be initiated which would sound an alarm alerting the public to tune into local TV, cable TV, or radio stations, which would carry instructions for appropriate actions to be taken as part of the Emergency Alert System. Police would also canvas the neighborhoods sounding sirens and bullhorns, as well as knocking on doors as needed, to provide emergency instructions. Evacuation centers would be set up if required. The advance warning system would allow for evacuation of people prior to a seiche or tsunami and would provide a high level of protection to public safety.

⁶⁵ City and County of San Francisco, Emergency Response Plan, an Element of the CCSF Emergency Management Program, Tsunami Response Annex, March 2011, <http://www.sfdem.org/ftp/uploadedfiles/DEM/PlansReports/TsunamiAnnex-2008.pdf>, accessed on September 10, 2014.

Therefore, impacts related to exposure of people to risk from inundation by seiche and tsunami are considered less than significant. This would not be a new or more significant impact than identified in the Mission Bay FSEIR.

Cumulative Impacts

Impact C-HY-1: The project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would not result in a considerable contribution to cumulative impacts on hydrology and water quality with respect to construction activities, dewatering, groundwater supplies, drainage pattern, flooding, seiche or tsunami. (Less than Significant)

The geographic scope of potential cumulative impacts on water quality encompasses central San Francisco Bay and the Downtown Groundwater Basin. The geographic scope of effects on drainage and flooding consists of Bayside Drainage Basin. Impacts related to inundation by tsunami could occur along the entire San Francisco Waterfront; therefore the geographical scope for this impact includes the entire waterfront. This analysis is based on past, present, and reasonably foreseeable future projects in this area, including those listed above in Section D, Approach to Analysis.

As discussed in Impacts HY-1 and HY-2, implementation of appropriate regulatory requirements would ensure that the proposed project would result in less than significant impacts related to erosion and discharges of groundwater during dewatering. Other projects that could potentially contribute to a cumulative impact would be subject to the same or similar regulatory requirements including the Construction General NPDES permit and Article 4.1 of the Public Works Code as supplemented by DPW Order No. 158170 (including implementation of an erosion control plan). Implementation of these requirements under each individual project would ensure that all discharges comply with regulatory standards and would not result in a violation of water quality standards. Therefore, cumulative impacts related to these topics would be less than significant.

As discussed in Impacts HY-3 and HY-4, project elements affecting drainage and flooding issues at the project site would be subject to compliance with established guidelines for the separate storm drainage system and/or the combined sewer system, which would reduce these impacts to less than significant. Other past, present, and reasonably foreseeable future projects within the Bayside Drainage Basin would also be subject to these regulations. Therefore, based on the City's established regulations and guidelines for the separate and combined sewer system, which are designed to serve the City as a whole, cumulative impacts would also be less than significant.

As discussed in Impact HY-5, a tsunami or seiche would not significantly damage the proposed structures and visitors and staff of the event center and other uses would not be exposed to substantial risks related to tsunami or seiche because the occupied portions of the event center and mixed use development would be constructed above the 500-year tsunami inundation elevation. San Francisco also has a well-established Tsunami Warning System that would be activated and would protect people from harm and the new structures would be constructed in accordance with the current building code which would make them resilient to damage by tsunamis. Because other projects would be built to current building codes, and the Tsunami Warning System would also protect other people in the project vicinity from harm due to tsunamis, cumulative impacts related to inundation by tsunami or seiche would be less than significant.

Issues to be Analyzed in the SEIR

The impact evaluation above explains why the proposed project would not result in new significant impacts or substantially increase the severity of impacts on hydrology and water quality with respect to criteria E.15 (b), (c), (d), (f), (g), (h), or (j), and no further analysis is required on these subjects. However, with respect to criteria E.15(a), (e) and (i), additional evaluation of the proposed project is necessary for both direct and cumulative impacts related to certain aspects of these criteria. The SEIR will include a detailed analysis of:

- The potential for changes in stormwater runoff from the site and wastewater discharged to the combined sewer to affect the frequency or duration of combined sewer discharges. This analysis will also discuss the applicability of FSEIR Mitigation Measures K.2, K.5, and M.5, which all pertain to stormwater management measures.
- The potential for changes in runoff patterns due to the proposed project and to cumulative development to affect the capacity of the combined sewer system. This analysis will also discuss the applicability of FSEIR Mitigation Measures K.3 and K.4, which pertain to cumulative impacts on the combined sewer system.
- The potential for the project to expose people or structures to a significant risk of loss or injury due to future flooding from sea level rise and the applicability of Mission Bay FSEIR Mitigation Measure K.6, which pertains to flooding.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
16. HAZARDS AND HAZARDOUS MATERIALS— Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Expose people or structures to a significant risk of loss, injury or death involving fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is not located within one-quarter mile of an existing or proposed school. Therefore, criterion E.16(c) is not applicable to the proposed project. Similarly, the project site is not located within an airport land use plan area or in the vicinity of a private airstrip. Therefore, criteria E.16(e) and E.16(f) are also not applicable. Thus, these topics are not discussed further in this Initial Study or in the SEIR.

Summary of Hazards and Hazardous Materials Impacts in Mission Bay FSEIR

The Mission Bay FSEIR addressed issues of hazards and hazardous materials in multiple sections: Health and Safety which addressed the proposed use, storage and disposal of hazardous materials during operation of the Mission Bay plan and emergency response; Contaminated Soil and Groundwater, which addressed issues related to potential soil and groundwater contamination in the Mission Bay plan area; Seismicity, which addressed issues related to emergency access and response; and Community Services and Utilities, which addressed public safety risks. Relevant information on hazards and hazardous materials from these sections is summarized below.

Mission Bay Plan Hazardous Materials Use, Waste Generation and Risk of Upset

Mission Bay Plan Hazardous Materials Use

The Mission Bay FSEIR Health and Safety impacts section indicated that businesses within the Commercial Industrial, Commercial Industrial/Retail and UCSF portions of the Mission Bay plan area would use substantial quantities of hazardous materials. The Mission Bay FSEIR reported that legal and regulatory requirements applicable to hazardous materials operations would require businesses to meet a range of health and safety laws and regulations, and that the implementation of these legally required health and safety measures would adequately address typical health and safety issues related to use and disposal of hazardous materials.

However, the FSEIR acknowledged laws and regulations do not address certain health and safety concerns related to the use of biohazardous materials that could be used by some of the businesses such as UCSF and surrounding businesses that would engage in research and development activities complimentary to UCSF activities. To address the lack of enforceable guidelines as it relates to aerosol transmission of biohazardous materials, the FSEIR identified Mitigation Measures I.1, I.2, and I.3 requiring implementation of appropriate guidelines, filtration of exhausts for Biosafety Level 3 laboratories or equivalent measures to avoid substantial health risks to individuals in the vicinity of the exhaust, and restrictions on the types biohazardous materials that could be used by businesses in the plan area. The FSEIR concluded that with implementation of this mitigation, potential health related to handling of biohazardous materials would be less than significant.

Mission Bay Plan Risk of Upset / Accidents

The Mission Bay FSEIR Health and Safety impacts section described potential safety concerns related to possible hazardous materials accidents and concluded that most accident risks would be adequately addressed by implementing required health and safety plans, providing emergency response training, and providing emergency response services. The Mission Bay FSEIR also stated that releases of highly toxic materials subject to the federal and state Accidental Release Programs could present more of a risk. However, existing regulations require the implementation of appropriate operational measures in accordance with required Risk Management Plans to reduce the possibility and consequences of potential accidents that could pose potential risks to neighboring residents, schools, or other off-site receptors (this is a plan required under state and federal regulations to specify operating and emergency response procedures to prevent a release of highly toxic materials, and is different from the risk management plan for exposure to hazardous materials required by Mission Bay FSEIR Mitigation Measure J.1, as discussed below). The Mission Bay FSEIR concluded that implementation of Risk Management Plans required under the Accidental Release Programs for the use of these toxic materials and compliance with school siting criteria outlined in the California Health and Safety Code, Education Code, and California Code of Regulations would ensure the impacts of accidents involving highly toxic materials would be less than significant.

Mission Bay Contaminated Soil and Groundwater

Setting

The Mission Bay FSEIR Contaminated Soil and Groundwater setting section described historic and current land uses in the Mission Bay plan area. The FSEIR reported that the Mission Bay plan area was filled beginning in 1859 and continuing for approximately 50 years, with the fill consisting primarily of earthquake rubble, municipal garbage, and rock and soil from other locations in the City. The FSEIR reported that uses previously and/or presently on Blocks 29-32 at that time included a range of commercial and industrial uses including, but not limited to, crude oil storage, offices, railroad tracks, trucking-related activities, maintenance and repair facilities, junk yard, stock corral, sand and gravel mixing, and open space. The Mission Bay FSEIR also reported that existing uses at the time of preparation of the FSEIR included a gravel plant, bus company facility, equipment rental, storage yard, railroad tracks, auto body shop, warehouse and parking.

The Mission Bay FSEIR Contaminated Soil and Groundwater setting section also summarized the results of soil and groundwater studies conducted in Mission Bay, including a comprehensive investigation conducted by ENVIRON in 1997 of the entire Mission Bay plan area. The 1997 investigation detected chemicals of various types and concentrations in the soil and groundwater throughout the Mission Bay plan area. The 1997 investigation identified petroleum hydrocarbons in soil, groundwater, and floating on groundwater (called “petroleum free product”) in the vicinity of Illinois and 16th Streets (including within Blocks 31 and 32), and attributed the free product to former petroleum bulk storage, pipelines and transfer facilities in the vicinity. The FSEIR determined that concentrations of contaminants in soil or groundwater in the Mission Bay plan area, with the exception of the identified petroleum free product area, did not present a human health or ecological risk under existing conditions. The FSEIR reported that potential effects on near-shore and aquatic organisms associated with the free product were being investigated and if necessary would be remediated by the oil companies responsible for the contamination.

Mission Bay Plan Development (Construction) Effects

The Mission Bay FSEIR Contaminated Soil and Groundwater impact section reported that the proposed development of the Mission Bay plan area could result in potential exposure of workers and the public (including residents, employees and visitors) in the Mission Bay plan area to chemicals in soil and groundwater that could be released during construction. The Mission Bay FSEIR indicated that vacant sites within the Mission Bay plan area could be a source of exposed soils during part or most of the approximately 20-year development period. In addition, the Mission Bay FSEIR indicated construction activities within the Mission Bay plan area that would involve the disturbance of contaminated soil or groundwater would affect increasingly greater number of persons during the later phases of development.

The Mission Bay FSEIR discussed various types of construction activities, including excavation, grading, trenching, soil movement/transport, pile installation, building demolition and removal of underground storage tanks that would potentially expose workers and the public to contaminated soils, dust, soil gases and other hazards. The Mission Bay FSEIR also noted the potential for construction dust-related effects on the aquatic and terrestrial environment. In addition, the FSEIR indicated that construction activities that would have the potential to affect groundwater, including pile driving activities (to potentially contaminate deeper groundwater zones), trenching activities (to result in potential horizontal migration of contaminants in groundwater and soil vapor), and construction dewatering (to potentially influence localized groundwater gradients and spread contaminated groundwater, particularly in and near the area discussed above that was identified with the petroleum free product on the groundwater).

The Mission Bay FSEIR Contaminated Soil and Groundwater section included Mitigation Measures J.1a through J.1k requiring preparation of a Risk Management Plan or Plans (RMP) incorporating specific measures that would provide for the management of risks associated with exposure to contaminated soil and groundwater and would be protective of human health and the aquatic environment. The Mission Bay FSEIR specified that the human health standard to be applied to the Mission Bay plan, as approved by the San Francisco Bay Regional Water Quality Control Board (RWQCB), would be a cumulative cancer risk of 10 in 1 million and a Hazard Index of 1 for non-cancer risks. Mitigation identified in the Mission Bay FSEIR specified minimum parameters to be included in the RMP for the addressing contaminated soils and groundwater prior to and during construction of individual development projects. The mitigation also provided measures for enforcement of the RMP. The Mission Bay FSEIR concluded that implementation of the RMP under the regulatory oversight, jurisdiction, and responsibility of the RWQCB would ensure any effects associated with contaminated soils and groundwater would be less than significant.

Mission Bay Plan Contaminated Soil and Groundwater — Long-Term Occupancy (Post Development) Effects

The 1997 ENVIRON investigation summarized in the Mission Bay FSEIR Contaminated Soil and Groundwater impact section included a quantitative human health and ecological risk assessment to evaluate potential effects on human and aquatic populations upon plan completion. The risk evaluation showed that the potential risks posed by residual contaminants would remain after plan completion would be below applicable human health and aquatic ecological risk criteria. The Mission Bay FSEIR indicated that currently exposed soils would be covered by proposed buildings, pavement, or with open space areas using approved fill materials, that would create a protective barrier, or cap, between residual contaminants in soil and human or ecological populations and required establishment and maintenance of this cap as mitigation. Additional mitigation addressed the re-use of soil and prohibited the use of

shallow groundwater for domestic, industrial, or irrigation purposes unless found acceptable using established risk assessment methodology.

The FSEIR also noted that deed restrictions required for each property within the Mission Bay plan area would place limits on future uses within Mission Bay consistent with the provisions of the RMP, and accordingly, property owners would be required to comply with applicable provisions of the RMP. These proposed RMP measures were included as Mitigation Measures J.1l through J.1o in the Mission Bay FSEIR.

The FSEIR also provided Mitigation Measure J.2 requiring the RMP to include a process for investigating sites proposed for school or child-care center uses within the Mission Bay plan area to ensure these facilities would be properly sited. The Mission Bay FSEIR concluded that the implementation of the RMP would ensure any potential post-development effects on human and aquatic populations would remain less than significant.

Mission Bay Emergency Response

The Mission Bay FSEIR Seismicity impacts section discussed impacts related to exposure of the concentrated population within the Mission Bay plan area to seismic hazards. Although the Mission Bay FSEIR noted that new fire station proposed at that time in Mission Bay South would improve emergency response to the area, the FSEIR also indicated potential difficulties in providing emergency access to the Mission Bay South plan area in the event of a major earthquake. This was determined to be a potentially significant impact. The FSEIR concluded that impacts associated with emergency access in the event of a major earthquake would be less than significant with implementation of Mitigation Measures H.1, H.2, H.3b, and H.5 requiring the project sponsor to store heavy construction equipment capable of negotiating roads damaged by an earthquake, coordinate emergency response plans with the City, and prepare a project-specific emergency response plan, and construct a new fire station.

The Mission Bay FSEIR Health and Safety impacts section also described the potential for a catastrophic event (e.g., an earthquake) to result in accidents involving hazardous materials and causing fires or explosions, requiring emergency response. The Mission Bay FSEIR Health and Safety impacts section determined that with mitigation identified in the FSEIR Seismicity section requiring preparation and implementation of comprehensive emergency preparedness and emergency response plan for the entire Mission Bay plan area, potential impacts to the public from hazardous materials accidents during a catastrophic event would be less than significant.

Mission Bay Plan Interim/Temporary Stormwater Collection Facility Safety Risks

The Mission Bay FSEIR Community Services and Utilities impacts section reported that interim detention basins would be created within the Mission Bay plan area to allow for temporary surface storage of rainwater associated with interim uses within Mission Bay (e.g., paved parking areas). The Mission Bay FSEIR indicated that construction of fencing around any interim detention basins, included as part of the Mission Bay plan and specified in Mitigation Measure M.4 would prevent potential safety impacts associated with humans entering the detention basins.

Impact Evaluation

Risk of Upset

Impact HZ-1: The project could create a significant hazard through routine transport, use, or disposal of hazardous materials or result in a substantial risk of upset involving the release of hazardous materials. (Less than Significant with Mitigation)

Transport, Use, and Disposal of Hazardous Materials

During operation, the proposed event center and other development would use common types of hazardous materials, such as cleaners, disinfectants, and chemical agents required to maintain the sanitation of the public use areas as well as the commercial bathrooms and food preparation areas. These commercial products are labeled to inform users of potential risks and to instruct them in appropriate handling procedures. In addition, the project anticipates installing on-site generators to provide a source of electricity in the event of an outage. These generators would require diesel for operation. Operations may also result in the production of minor amounts of hazardous waste associated with maintenance and cleaning that would require offsite disposition such as disposal or recycling.

As discussed above, the Mission Bay FSEIR Health and Safety impacts section concluded that legally required health and safety measures would adequately address most common health and safety issues related to the use, disposal, and accidental release of common hazardous materials. In San Francisco, the specific regulatory requirements are specified in Articles 21 and 22 of the San Francisco Health Code which provide for the safe handling of hazardous materials and waste in the City. These articles are implemented by the San Francisco Department of Public Health (DPH), which also implements the requirements of state and federal hazardous materials regulations. In accordance with Article 21, any facility that handles hazardous materials in excess of specified quantities would be required to obtain a Certificate of Registration from the DPH and to implement a Hazardous Materials Business Plan (HMBP) that includes inventories, a program for reducing the use of hazardous materials and generation of hazardous wastes, site layouts, a program and implementation plan for training all new employees and annual training for all employees, and emergency response procedures and plans. The proposed event center and individual site uses may also elect to participate in the San Francisco Green Business Program which would promote a reduction in the use of hazardous materials. Article 22 authorizes the DPH to implement the state hazardous waste regulations, including authority to conduct inspections and document compliance. Similarly, the transport of hazardous materials and wastes would be subject to the legal requirements discussed above and in the Mission Bay FSEIR.

As discussed in the Mission Bay FSEIR, use of highly toxic materials, referred to as regulated substances, would be subject to the federal and state Accidental Release Programs. None of the materials anticipated to be used at the arena and other developments would be classified as regulated substances under these programs. However, in the event that regulated substances could be needed for use at the event center (such as refrigerants or other chemicals to support the ice rink), a Risk Management Plan, specifying operational strategies to prevent a release and emergency procedures to be address a release should one occur, would be required in accordance with the California Accidental Release Program as implemented through Article 21A of the San Francisco Health Code as discussed in the FSEIR (this is different than the risk management plan for exposure to hazardous materials in soil and groundwater discussed below in

Impact HZ-2). In addition, none of the materials used would be classified as radioactive, and regulations pertaining to the management of these materials would not apply.

At this time, it is not known specifically what uses might occupy the proposed office development, and the possibility of uses that would handle biohazardous materials cannot be precluded. Thus, as identified in the Mission Bay FSEIR, in the event that there could be future activities that handle biohazardous materials, implementation of FSEIR Mitigation Measures I.1, I.2, and I.3 would reduce potential health and safety impacts to less than significant.

As also discussed above, the Mission Bay FSEIR concluded that the generation of household hazardous wastes from residential uses implemented under the Mission Bay Plan would be less than significant with implementation of appropriate City programs. However, this impact would not apply to the proposed project because it does not include any residential uses.

Implementation of the requirements of Articles 21, 21a and 22 also include implementation of emergency response procedures which would specify methods to prevent a release of hazardous materials, and control a release if one were to occur; this would ensure that impacts related to risk of upset involving a release of hazardous materials would be less than significant.

Given that the project would be required to implement all measures in compliance with all applicable hazardous materials and hazardous waste regulations, operation of the project would not result in any new significant impacts, or increase the severity of previously identified impacts related to the routine use, transport, and disposal of hazardous materials during operation. No new or different mitigation measures are required. With implementation of measures specified in the Mission Bay FSEIR, impacts associated with the routine transport, use, or disposal of hazardous materials or associated with risk of upset involving the release of hazardous materials would be less than significant.

Mitigation Measure M-HZ-1a. Guidelines for Handling Biohazardous Materials

Mission Bay FSEIR Mitigation Measure I.1. Require businesses that handle biohazardous materials and do not receive federal funding to certify that they follow the guidelines published by the National Research Council and the United States Department of Health and Human Services Public Health Service, National Institutes of Health, and Centers for Disease Control, as set forth in Biosafety in Microbiological and Biomedical Laboratories, Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines), and Guide for the Care and Use of Laboratory Animals, or their successors, as applicable.

Mission Bay FSEIR Mitigation Measure I.2. Require businesses handling biohazardous materials to certify that they use high efficiency particulate air (HEPA) filters or substantially equivalent devices on all exhaust from Biosafety Level 3 laboratories unless they demonstrate that exhaust from their Biosafety Level 3 laboratories would not pose substantial health or safety hazards to the public or the environment. Require such businesses to certify that they inspect or monitor the filters regularly to ensure proper functioning.

Mission Bay FSEIR Mitigation Measure I.3. Require businesses handling biohazardous materials to certify that they do not handle or use biohazardous materials requiring Biosafety Level 4

containment (i.e., dangerous or exotic materials that pose high risks of life-threatening diseases or aerosol-transmitted infections, or unknown risks of transmission) in the Project Area.

Safety Hazards Associated with Stormwater Detention Basins

As discussed above, the Mission Bay FSEIR Community Services and Utilities impacts section reported that interim detention basins constructed within the Mission Bay plan area to allow for temporary surface storage of rainwater associated with interim uses would present a safety hazard. The FSEIR included mitigation requiring construction of fencing around any interim detention basins. However, there would be no interim stormwater detention ponds constructed on the site under the proposed project. Therefore this impact would not be applicable to the proposed project, and the project would not result in any new or more severe impacts relative to those analyzed in the Mission Bay FSEIR. Mitigation Measure M.4 does not apply to the project, and no new or different mitigation measures are required.

Risk of Upset Involving Exposure to Naturally Occurring Asbestos

Naturally occurring asbestos was identified as a Toxic Air Contaminant (TAC) in 1986 by the California Air Resources Board (CARB) and is present in many parts of California. It is commonly associated with serpentine⁶⁶ and ultramafic⁶⁷ rock types such as Franciscan Complex mélange. Chrysotile (a form of asbestos from the serpentine mineral group) and amphibole asbestos (including crocidolite) are naturally occurring asbestos minerals that may present a human health hazard, if they become airborne.

The Mission Bay FEIR and FSEIR did not specifically address impacts associated with exposure to naturally occurring asbestos during construction of development projects under the Mission Bay Plan. However, the preliminary geotechnical evaluation completed for the project notes that the artificial fill at the site contains cobble and boulder sized pieces of serpentinite.⁶⁸ Therefore, if naturally occurring asbestos is present in the serpentinite within the artificial fill to be excavated, the workers and the public could be exposed to naturally occurring asbestos during excavation activities.

In 2001, the CARB adopted the Asbestos Airborne Toxic Control Measure (Asbestos ATCM) for Construction, Grading, Quarrying, and Surface Mining Operations in areas of serpentine and other ultramafic rocks (17 CCR Section 93105), which became effective in July 2002. The ATCM protects public health and the environment by requiring the use of best available dust mitigation measures to prevent off-site migration of asbestos-containing dust from road construction and maintenance activities, construction and grading operations, and quarrying and surface mining operations in areas of ultramafic rock, serpentine, or asbestos. The Bay Area Air Quality Management District (BAAQMD) implements the regulation.

⁶⁶ Serpentinite is a rock consisting of one or more serpentine minerals formed when ultramafic rocks have been metamorphosed (ultramafic rocks are formed in high-temperature environments well below the surface of the earth), and is commonly associated with ultramafic rock along faults such as the San Andreas fault. Serpentinite commonly contains chrysotile, an asbestiform variety of the serpentine minerals. Amphibole asbestos is also found in some forms of Franciscan Complex bedrock such as blueschist.

⁶⁷ Ultramafic rocks are one type of igneous rock (formed at high temperatures well below the surface of the earth) that is rich in iron and magnesium.

⁶⁸ Langan Treadwell Rollo, 2014. *Preliminary Geotechnical Investigation, Block 29-32 Mission Bay, San Francisco, California*. March 28.

For construction activities that would disturb more than 1 acre of land such as the proposed project, construction contractors are required to prepare an asbestos dust mitigation plan specifying measures that will be taken to ensure that no visible dust crosses the property boundary during construction. The asbestos dust mitigation plan must be submitted to and approved by the BAAQMD prior to the beginning of construction, and the site operator must ensure the implementation of all specified dust mitigation measures throughout the construction project. In addition, the BAAQMD may require air monitoring for off-site migration of asbestos dust during construction activities and may change the plan on the basis of the air monitoring results. Title 17 CCR Section 93105(h)(9) defines asbestos containing material as any material that has an asbestos content of 0.25 percent or greater.

While there is a well-established regulatory framework for managing naturally occurring asbestos during construction, this impact would be potentially significant because no sampling has been conducted to establish the asbestos content in the fill materials that would be excavated during construction. This impact would be reduced to a less-than-significant level with implementation of Mitigation Measure M-HZ-1b, identified in this Initial Study, requiring the project sponsor to implement a geologic investigation to assess the naturally occurring asbestos content of the fill materials. This mitigation also requires the project sponsor to implement the requirements of the asbestos ATCM, including implementation of a Dust Mitigation Plan for naturally-occurring asbestos, if the investigation determines that the asbestos content of the fill is 0.25 percent or greater. Implementation of this measure would ensure that if naturally occurring asbestos is present, no visible dust crosses the project boundaries, and could also require air monitoring to demonstrate compliance with this criterion if deemed necessary by the BAAQMD. Rock containing naturally occurring asbestos that would be disposed of off-site would not be considered a hazardous waste under California regulations.⁶⁹

Mitigation Measure M-HZ-1b: Geologic Investigation and Dust Mitigation Plan for Naturally Occurring Asbestos

The project sponsor shall conduct a geologic investigation in accordance with the guidelines of the California Geologic Survey⁷⁰ to determine the naturally occurring asbestos content of fill materials to be excavated at the project site. If the investigation determines that the naturally occurring asbestos content of the fill materials is 0.25 percent or greater, the project sponsor or its construction contractor shall submit the appropriate notification forms and prepare an asbestos dust mitigation plan in accordance with the Asbestos ATCM. The plan shall specify measures that will be taken to ensure that no visible dust crosses the property boundary during construction. The plan must specify the following measures:

- Prevent and control visible track-out from the property
- Ensure adequate wetting or covering of active storage piles
- Control disturbed surface areas and storage piles that would remain inactive for 7 days

⁶⁹ Department of Toxic Substances Control, 2000. *Letter to Jon A. Morgan, Director, Environmental Management Department, County of El Dorado. Naturally Occurring Asbestos*. January 20.

⁷⁰ California Geologic Survey, 2002. *Guidelines for Geologic Investigations of Naturally Occurring Asbestos in California. Special Publication 124*.

- Control traffic on on-site unpaved roads, parking lots, and staging areas, including a maximum vehicle speed of 15 miles per hour
- Control earthmoving activities
- Control offsite transport of dust emissions that contain naturally-occurring asbestos-containing materials
- Stabilize disturbed areas following construction

The asbestos dust mitigation plan shall be submitted to and approved by the Bay Area Air Quality Management District (BAAQMD) prior to the beginning of construction, and the site operator must ensure the implementation of all specified dust mitigation measures throughout the construction project. In addition, if required by the BAAQMD, the project sponsor or a qualified third party consultant shall conduct air monitoring for offsite migration of asbestos dust during construction activities and shall modify the dust mitigation plan on the basis of the air monitoring results if necessary.

Implementation of Mitigation Measure M-HZ-1b, above, would reduce impacts associated with potential exposure to naturally occurring asbestos during construction to less than significant.

Contaminated Soil and Groundwater

Impact HZ-2: The project would be located on a site identified on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Excavation could also require the handling of potentially contaminated soil and groundwater, potentially exposing workers and the public to hazardous materials, or resulting in a release into the environment during construction. (Less than Significant with Mitigation)

As discussed above, the Mission Bay FSEIR Contaminated Soil and Groundwater setting section states that Blocks 29-32 were historically used for a variety of industrial and commercial uses. A Phase I Environmental Site Assessment⁷¹ conducted in support of the proposed project also notes specific former uses on the site (between 1902 and 2010) included bulk fuel storage and distribution; railroad operations; a machine shop; boiler house; steel mill; well casing manufacturer; warehousing, shipping and receiving operations for a variety of products; fruit cannery, junk yards, vehicle parking and maintenance facilities and a ready-mix concrete facility.

As summarized in the Mission Bay FSEIR, a 1997 investigation conducted to evaluate soil and groundwater quality throughout the Mission Bay plan area identified petroleum hydrocarbons in soil, groundwater, and floating on groundwater (petroleum free product) in the vicinity of Illinois and 16th Streets (including within Blocks 31 and 32), and attributed the free product to former petroleum bulk storage as well as pipelines and transfer facilities in the vicinity. This area is collectively referred to as the Pier 64 area. As summarized in the FSEIR, the concentrations of contaminants in soil or groundwater in the Mission Bay

⁷¹ Langan Treadwell Rollo, 2014. Updated Phase I Environmental Site Assessment, Site X, Mission Bay Blocks 29-32, San Francisco, California. April 11.

plan area, with the exception of the identified petroleum free product area, did not present a human health or ecological risk under existing conditions.

Actions Completed Since Publication of the Mission Bay FSEIR

Risk Management Plan. Subsequent to publication of the Mission Bay FSEIR, a RMP was prepared and approved by the RWQCB in 1999 to address risk management measures to be implemented prior to development, during development (during construction), after development of specific parcels within the Mission Bay plan area.⁷² All risk management measures in the RMP are deemed to be protective of human health and the environment under the conditions specific to each phase of development.

Measures to be implemented prior to development are intended to manage risks associated with exposed soil before a site is developed and are protective of populations at and adjacent to the undeveloped parcel. Measures to be implemented during development are intended to manage risks during construction and are protective of construction site workers and the surrounding public. They include dust control measures, soil management protocols, stormwater pollution plan requirements, worker health and safety planning requirements, contingency requirements in the event that previously unidentified underground structures or contamination are identified, protocols for dewatering activities, and a framework for complying with the requirements of Article 20 of the San Francisco Health Code, commonly referred to as the Maher Ordinance (note that this ordinance was subsequently revised in 2013, and is now codified in Article 22A of the San Francisco Health Code). Several of the measures apply specifically to the free product area where the project site is located; these measures are intended to control the release and migration of free product during project construction.

Risk management measures to be implemented after development are intended to manage risks to site occupants and ensure that they would have no contact with site soils and groundwater as well as risks to maintenance and utility workers that may contact soil left in place during their normal work activities. They include covering of exposed areas; limiting future residential development within the Mission Bay plan area to preclude single family homes with private front or back yards; restricting the future use of groundwater for domestic, industrial, or irrigation purposes; providing protocols for future subsurface activities; and implementing a long-term groundwater monitoring program.

In addition, the RMP specifies the process to ensure regulatory oversight of development activities within the Mission Bay plan area. Owners must specifically notify the RWQCB in advance of initiating construction and must also submit a dust monitoring notification to the RWQCB and DPH. In addition, the owner must document compliance with specified measures to the RWQCB and must also notify the RWQCB of any unanticipated structures or contamination encountered during construction, as well as any unanticipated environmental conditions not covered by the RMP. The owner must also submit quarterly reports to the RWQCB during construction and a completion letter once construction is complete.

As stated in the RMP, completion of this RMP satisfies the requirements of Mission Bay FSEIR Mitigation Measure J.1 and provides guidelines for implementing Mitigation Measure J.2, described above. The requirements of the RMP are enforced through an environmental covenant recorded against each parcel in

⁷² Environ Corporation, 1999. *Risk Management Plan, Mission Bay Area, San Francisco, California*. May 11.

the Mission Bay plan area. The environmental covenant requires compliance with the RMP and runs with the property, binding future site owners to also comply with the requirements of the RMP.

Site Investigations and Remediation, and Regulatory Actions. As summarized in the Phase I Environmental Site Assessment completed for the project, the RWQCB adopted Order No. R2-2005-0028 in 2005 which established cleanup requirements for the Pier 64 area. The order divided the Pier 64 area into six operable units; portions of the Blocks 29-32 are located within the “North Terminal Operable Unit.” The site has been subject to several site investigations, underground tank removals, and remedial actions to address contaminants in the soil and groundwater prior to and pursuant to this order. As reported in the Phase I Environmental Site Assessment, the underground storage tank removals and remedial actions completed include:

Removal of a 13,500 gallon diesel underground storage tank from Block 31 in 1987 and a 1,000 gallon gasoline underground storage tank from Block 32 in 1997. These underground storage tanks were located with the area of the free petroleum product plume and free product in this area was removed during the remediation conducted in 2005 (discussed below);

Removal of a 4,000 gallon diesel underground storage tank, a 10,000 gallon underground tank, and a 5,000 gallon gasoline underground storage tank occurred in 1995. These tanks were located in portions of Blocks 29 and 31 that are outside of the North Terminal Operable Unit. Localized soil and groundwater affected by petroleum hydrocarbons were addressed at the time of tank removal. These tanks were removed under the oversight and authority of the DPH Local Oversight Program and RWQCB, and case closure was granted in February 1995.

The Phase I soil remediation conducted in 2001 included the removal of approximately 14,020 tons of visibly stained soil to a depth of approximately 2 feet below the groundwater table (a total depth of approximately 9 feet below ground surface) as well as petroleum pipelines encountered during excavation. During this remediation, free petroleum product accumulated on the groundwater surface was removed from the excavated area, and the excavation was backfilled.

The Phase II remediation conducted in 2005 which included demolition of the existing site structures and removal of approximately 90,000 tons of soil containing petroleum hydrocarbons from the North Terminal Operable Unit and adjacent areas. This excavation also extended to approximately two feet below the groundwater table, or nine feet below ground surface. During this remediation, free petroleum product accumulated on the groundwater surface was removed from the excavated area, and the excavation was backfilled. The revised RMP (described below) indicates that the site was not returned to original grade at this time, but that it would be the property owner's responsibility.

On December 22, 2006, the RWQCB issued a no further action letter stating that no further soil remediation was required. With completion of the above activities, and based on the results of a groundwater monitoring program required by the RWQCB, twenty groundwater monitoring wells installed in the Pier 64 area as part of the groundwater monitoring program were properly abandoned in June, 2013.

A Revised Risk Management Plan (RRMP) was prepared in 2006 in accordance with Order R2-2005-028 to reflect remedial actions conducted within the Pier 64 area in 2001 and 2005.⁷³ The RRMP determined that based on completion of the above described remedial actions, the risk management measures required prior to development no longer applied to the North Terminal Operable Unit where the proposed project is located. All of the RMP risk management measures applicable during development and after development would still apply, with the exception of those measures specific to development in the free product area (because the previous remediations in the North Terminal Operable Unit successfully removed from product within this area).

As stated in the RRMP, Catellus (the then owner of the North Terminal Operable Unit) and the City and County of San Francisco each recorded a Covenant and Environmental Restriction (deed restriction) on the property that, among other things, required property owners to comply with the terms of the Mission Bay RMP. Because this Covenant and Environmental Restriction will run with the property as discussed in the RMP, future site owners (including the project sponsor) will be subject to the requirements of the RMP. In 2014, the RWQCB issued order R2-2014-022 rescinding Order R2-2005-2008 because the above-described remediations and groundwater monitoring satisfied the requirements of that order. Order R2-2014-022 states that any residual contamination in the Pier 64 area poses acceptable risks to human health and the environment and can be effectively managed using the existing Mission Bay RMP.

While the completion of remedial actions described above would be considered substantial changes that have occurred at the project site, implementation of these actions has effectively removed free petroleum products in the Pier 64 area and reduced risks to human health and the environment in this area compared to conditions described in the FSEIR. With implementation of the Mission Bay RMP, prepared in accordance with Mission Bay FSEIR Mitigation Measure J.1, human health and environmental health risks would remain within acceptable levels, and the proposed project would not result in new or more severe impacts relative to the Mission Bay FSEIR.

Preparation of the Mission Bay RMP satisfies the requirements of Mission Bay FSEIR Mitigation Measure J.1; therefore this mitigation does not apply to the proposed project. In addition, compliance with the RMP as required by the deed restriction would ensure that human health and environmental risks during and after development of the proposed project would be within acceptable levels and no new or different mitigation would be required.

As stated above, the RWQCB has determined that the Mission Bay RMP, completed in accordance with Mission Bay FSEIR Mitigation Measure J.1, adequately addresses human health and environmental risks during and after development of the proposed project. Therefore, Mitigation Measure J.1, already implemented, adequately addresses impacts associated with contaminated soil and groundwater. Compliance with the RMP, as required by the deed restriction, would ensure that human health and environmental risks during and after development of the proposed project would be within acceptable levels and no new or different mitigation would be required. Furthermore, in the event that child care facilities were to occur under the proposed project, implementation of FSEIR Mitigation Measure J.2 would reduce this impact to less than significant.

⁷³ BBL Environmental Services, Inc., 2006. *Revised Risk Management Plan, Former Petroleum Terminals and Related Pipelines Located at Pier 64 and Vicinity, City and County of San Francisco, California*. August.

Mitigation Measure M-HZ-2: RMP Provisions for Child Care Facilities

Mission Bay FSEIR Mitigation Measure J.2. Carry out a site-specific risk evaluation for each site in a non-residential area proposed to be used for a public school or child care facility; submit to RWQCB for review and approval. If cancer risks exceed 1×10^{-5} and/or noncancer risk exceeds a Hazard Index of 1, carry out remediation designed to reduce risks to meet these standards or select another site that is shown to meet these standards.

Emergency Response

Impact HZ-3: The project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan or expose people or structures to a significant risk of loss, injury or death involving fires. (Less than Significant)

The proposed project would increase the number of employees and visitors in the Mission Bay South area. There would be an additional 2,728 new full-time equivalent (FTE) employees associated with the team operations and event center management, retail and office uses, and additional 1,000 day-of-game staff during a game/event at the event center. Depending on the game/event up to 18,500 patrons could be attendance at the event center, and there would be additional visitors associated with the retail uses. The project employees and visitors could contribute to congestion if an emergency evacuation of the Mission Bay plan area were required. As discussed above, the Mission Bay FSEIR Seismicity impact section concluded that with implementation of mitigation requiring the project sponsor to store heavy construction equipment capable of negotiating roads damaged by an earthquake, coordinate emergency response plans with the City, prepare a project-specific emergency response plan, and construct a new fire station, impacts associated with emergency access in the event of a major earthquake would be less than significant.

Section 12.202(e)(1) of the San Francisco Fire Code currently requires that all owners of high-rise buildings (taller than 75 feet), such as the event center and office buildings, “shall establish or cause to be established procedures to be followed in case of fire or other emergencies. All such procedures shall be reviewed and approved by the chief of division.” Additionally, project construction would have to conform to the provisions of the Building Code and Fire Code, which require additional life-safety protections for high-rise buildings and the final building plans for the new facilities would be reviewed by the San Francisco Fire Department (as well as DBI) to ensure conformance with the applicable provisions, including development of an emergency procedure manual and an exit drill plan. This regulatory requirement fulfills the intent of Mitigation Measure H.3b.

Although not “adopted” by legislative action, the City has a published Emergency Response Plan dated 2009 and prepared by the Department of Emergency Management as part of the City’s Emergency Management Program.⁷⁴ This plan includes plans for hazard mitigation and disaster preparedness and recovery, and identifies hazards to which San Francisco is particularly susceptible such as earthquake, hurricane, tsunami, flood, winter storm, and act of terrorism, including use of chemical, biological, radiological, nuclear, and explosive weapons. The Emergency Response Plan complies with several relevant

⁷⁴ San Francisco Department of Emergency Management, City and County of San Francisco Emergency Response Plan, December 2010. Available at: <http://www.sfdem.org/Modules/ShowDocument.aspx?documentid=1154>. Reviewed September 9, 2011.

state and federal directives for emergency planning, including the California Standardized Emergency Management System and the Incident Command System. The Plan includes sections on operations, including management and procedures; staffing, operations, and logistics regarding the City's emergency operations center; and mutual aid involving other agencies. The Emergency Response Plan assigns responsibilities for disaster planning, operations (including fire and rescue, law enforcement, human services, infrastructure, transportation, communications, and community support), and logistics, as well as finance and administration, to City agencies and departments. The Emergency Response Plan also identifies volunteer agencies, such as the American Red Cross, that are integral to disaster response efforts.

The Emergency Response Plan contains 16 "annexes" (similar to appendices), consistent with a federally established framework, that cover topics including firefighting, public works and engineering, mass casualty care, and earthquakes, among numerous others. The Earthquake Annex, in particular, sets forth planning assumptions for a series of earthquakes of varying magnitudes on different faults, and sets forth procedures for assessment of damage and injuries, and operational response and strategies in the event of a major earthquake.

Implementation of the project would increase the number of on-site employees and also the number of visitors that would be subject to a potential disaster, including a major earthquake or any of the other hazards identified in the Emergency Response Plan. However, in the event of such a disaster, implementation of the San Francisco Emergency Response Plan, prepared in 2008 (subsequent to publication of the Mission Bay FSEIR) would ensure that adequate city resources are available for response. Implementation of the site-specific emergency response plan required under the Fire Code, and life safety requirements of the Building and Fire Codes as described above would ensure that the proposed project would not obstruct implementation of the City's Emergency Response Plan, nor would it necessarily interfere with emergency evacuation planning. Preparation of the Emergency Response Plan, and implementation of these regulatory requirements fulfill the intent of Mission Bay FSEIR Mitigation Measures H.1 and H.2, therefore these measures do not apply to the proposed project.

In addition, the project site is located adjacent to Third Street, a primary evacuation route identified in the Emergency Response Plan. In addition, Terry A. François Boulevard is a designated Tsunami Evacuation Route. Project construction could interfere with implementation of the Emergency Response Plan if construction activities restricted access for emergency response vehicles or evacuating vehicles. However, any construction activities that could restrict access would be of a temporary nature. The Construction Management Plan required as part of the San Francisco Municipal Transportation Agency's Transportation Advisory Staff Committee would address localized construction effects (such as increased traffic and the need for coordination with emergency response providers) prior to construction. The plan would include measures to minimize construction-related disruptions and would be reviewed by the multi-agency Transportation Advisory Staff Committee. Due to the short duration of disruption and required coordination and review of the project's construction management plan, construction would not likely interfere with the Emergency Response Plan. Issues related to long-term emergency access will be discussed in the SEIR under the Transportation section.

Although not discussed in the Mission Bay FSEIR, the project would be constructed in a developed area of San Francisco, which lacks an "urban-wildland interface" and where fire, medical, and police services are available and provided. The street grid provides ample access for emergency responders and egress for

event attendees and workers, and the proposed project would neither directly nor indirectly alter that situation. Therefore, the proposed project would not directly or indirectly result in the additional exposure of persons to fire risk.

Construction of the new Public Safety Building at Third Street and Mission Rock was completed in the summer of 2014, and satisfies the requirements of Mission Bay FSEIR Mitigation Measure H.5. Therefore, this mitigation measure is no longer applicable to the proposed project.

As discussed above, implementation of the city's Emergency Response Plan, the site-specific emergency response plan required under the Fire Code, and life safety requirements of the Building and Fire Codes would ensure that the proposed project would not obstruct implementation of the City's Emergency Response Plan, nor would it necessarily interfere with emergency evacuation. These regulatory requirements fulfill the requirements of mitigation specified in the Mission Bay FSEIR for this impact, and no additional mitigation is required.

Cumulative Impacts

Impact C-HZ-1: The project, in combination with past, present, and reasonably foreseeable future projects in the site vicinity, would not result in a considerable contribution to cumulative impacts related to hazardous materials. (Less than Significant)

Hazardous materials impacts related to implementation of the proposed project could result from use of hazardous materials (Impact HZ-1), excavation within materials containing naturally occurring asbestos (Impact HZ-1), and conducting construction activities within potentially contaminated soil and groundwater and subsequent use of the site (Impact HZ-2). These impacts would be primarily restricted to the project site and immediate vicinity; therefore, the geographic scope for cumulative impacts related to hazards includes the project site and immediate vicinity.

As discussed above, the project would not result in any significant impacts with respect to hazards or hazardous materials that could not be mitigated to a less-than-significant level. All cumulative development in San Francisco would be subject to the same regulatory framework as would the project for the transport use, and storage of hazardous materials (Impact HZ-1) and compliance with these existing regulations would serve to minimize any cumulative impacts.

The project could result in exposure to naturally occurring asbestos during construction (Impact HZ-1), and cumulative projects in the area could also encounter these materials potentially resulting in a significant cumulative impact. However, implementation of Mitigation Measure M-HZ-1a requiring a geologic investigation, and compliance with the Asbestos ATCM would ensure that the project's contribution to this cumulative impact is less than significant with mitigation.

With implementation of the RMP for the entire Mission Bay Plan area, cumulative impacts related to soil and groundwater contamination would be less than significant as discussed in Impact HZ-2. Similarly, other projects within the Plan area would be required to investigate and, as necessary, abate soil and groundwater contamination on a project-by-project basis in accordance with Article 22A of the San Francisco Health Code. Therefore, cumulative impacts related to soil and groundwater contamination would be less than significant.

The Mission Bay FSEIR concluded that the effort to address cumulative hazardous waste generation and disposal impacts related to large quantity hazardous waste generators would require additional commitment of federal, State, and other local agencies. Therefore, efforts to offset the plan contribution to cumulative hazardous waste generation and disposal effects may not be successful, resulting in a residual impact that may be significant and unavoidable. However, as discussed in impact HZ-1, the project would only generate small quantities of hazardous wastes associated with maintenance and cleaning. Therefore, the project would not have a cumulatively considerable contribution to this cumulative impact, such that there would be no new or substantially more severe impact than what was identified in the Mission Bay FSEIR.

Issues related to long term emergency access will be discussed in the SEIR under the Transportation section.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
17. MINERAL AND ENERGY RESOURCES—Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Encourage activities which result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Mission Bay FSEIR did not specifically address potential impacts of the Mission Bay plan on mineral resources. However, the project site at Blocks 29-32 does not contain any known mineral resources delineated in the San Francisco General Plan or any other land use plans and does not include mineral resources that are of value to the region and the residents of the state.⁷⁵ Therefore, criteria E.17(a) and E.17(b) do not apply to the proposed project, and these topics are not discussed further in this Initial Study or in the SEIR.

Summary of Energy Resource Impacts in Mission Bay FSEIR

The Mission Bay FSEIR Initial Study Energy/Natural Resources section estimated that existing operational energy consumption within Mission Bay in 1998 was approximately 160 billion Btu⁷⁶ annually for electricity and natural gas sources, and approximately 420 billion Btu annually for transportation sources.

⁷⁵ California Department of Conservation, Division of Mines and Geology, 1996. Update of Mineral Land Classification: Aggregate Materials in the South San Francisco Bay Production-Consumption Zone, Open File Report 96-03.

⁷⁶ Electric energy is usually measured in kilowatt hours (kWh), and natural gas in million cubic feet (MMcf). Both may be converted to British thermal units (Btu); 1 Btu is the quantity of heat necessary to raise the temperature of 1 pound of water 1 degree Fahrenheit.

The Mission Bay FSEIR Initial Study estimated that at buildout, operational energy consumption from the Mission Bay plan would be about 2,109 billion Btu annually for electricity and natural gas sources, and 3,212 billion Btu annually for transportation sources. However, impacts associated with this increase in energy use were considered less than significant because compliance with Title 24 Energy Conservation Standards would ensure that electricity and natural gas would not be used in a wasteful manner. The Mission Bay FSEIR Initial Study Energy/Natural Resources section estimated that construction of projects under the Mission Bay plan would consume approximately 20,645 billion Btu. As such, the Mission Bay FSEIR identified no significant impacts to energy resources from the Mission Bay plan, and accordingly, did not require any mitigation measures related to energy resources.

The Mission Bay FSEIR Community Services and Utilities impacts section estimated the Mission Bay plan would require approximately 2.9 million gallons per day (mgd) of water at build-out. The FSEIR specified water conservation measures, proposed as part of the plan and included as Mitigation Measures M.2a through M.2f that would ensure that the effects of plan implementation on water supply would remain less than significant.

Impact Evaluation

Energy and Water Use

Impact ME-1: The project would not result in the use of large amounts of fuel, water, or energy, or use these in a wasteful manner. (Less than Significant)

Construction Energy

As discussed above, the Mission Bay FSEIR Initial Study Energy/Natural Resources section estimated that the construction of development projects under the Mission Bay Plan would use approximately 20,645 billion Btu of energy. Construction of the event center and other proposed developments would also require the use of fuel, energy, and water. The FSEIR did not estimate energy consumption specific to the development of proposed on Blocks 29-32 or the amount of water that would be used during construction. However, the amount of these resources used for construction of the proposed project would be typical of a normal construction project in San Francisco, and energy consumption would be expected to be commensurate with the percentage of development at this site relative to total development under the Plan. Therefore, as indicated in the FSEIR, the use of these resources during construction would not be wasteful, and impacts related to the use of energy resources during construction would be less than significant. No new mitigation would be required.

Operational Energy and Water Resources

Fuels. As stated above, the Mission Bay FSEIR estimated that at full build out of the Mission Bay plan, fuel usage for transportation would be 3,212 billion Btu, approximately 8 times greater than the use of fuels at the time of FSEIR publication. The amount of fuel use attributable to development on Blocks 29-32 was not specifically calculated in the FSEIR.

The project could contribute to the estimated increase in the use of transportation fuels by introducing new event attendees, employees, and site visitors to the project site. However, as described in the Project

Description, the event center and other proposed developments will be served by multiple public transportation opportunities; Terry A. François Boulevard would be realigned and reconfigured to include a two-way bicycle route; the project would ensure access to bicycle parking and incorporate alternative transportation facilities. With these features, the event attendees, employees, and site visitors would be encouraged to use public transportation or use alternative transportation methods. Should one travel in a personal vehicle, the use of low emission and fuel efficient vehicles would be encouraged by providing designated parking spots in the parking garage in accordance with Section 5.103.1.10 of the San Francisco Green Building Code. Therefore, the project would not result in the wasteful use of transportation fuels and this impact would be less than significant. No new mitigation is necessary.

Energy. The Mission Bay FSEIR did not estimate energy consumption specific to the development proposed on Blocks 29-32, but concluded that compliance with Title 24 Energy Conservation Standards would ensure that the area-wide 13 fold increase in energy use at full build out in the Mission Bay plan area would not result in a wasteful use of energy.

The proposed event center and other proposed developments would require the use of energy for purposes such as lighting, heating, cooling, ventilation, food storage and preparation, and equipment operation. Subsequent to publication of the Mission Bay FSEIR, San Francisco adopted its own green building code, implementing the California Green Building Code and California Building Energy Efficiency Standards, with amendments. Accordingly, the design of the buildings would need to meet or exceed the energy efficiency requirements of the 2013 San Francisco Green Building Code which, at a minimum, would require compliance with the 2013 California Building Energy Efficiency Standards. In accordance with the San Francisco Green Building Code, the project would be designed to Leadership in Energy and Environmental Design (LEED) Gold standards, including provision of either some on-site renewable energy or purchase of green energy credits. Alternatively, the project could exceed the energy efficiency requirements specified in the 2013 California Building Energy Efficiency Standards by 10 percent. In addition, in accordance with the San Francisco Green Building Code, the project sponsor would be required to commission the building's energy systems and components to verify that they meet the energy code requirements.

As described in the Project Description, the project would use a campus approach for LEED certification. This approach treats the entire site as a shared campus, allowing several LEED credits to be pre-approved under a campus site application and then referenced by each individual or group of buildings located on the site. The arena would pursue LEED for New Construction certification as an individual building, while the mixed-use development would pursue LEED for Core and Shell certification as a group project. Some examples of energy conservation measures that could be addressed in the building designs include sustainable building envelope strategies; shading; plug load reduction such as occupancy and daylight sensors; VAV demand control ventilation systems; water-cooled chillers, variable speed pumps, and airside/waterside economizers.

No new mitigation measures or alternatives are required because, as for the Mission Bay FSEIR, compliance with Title 24 regulations and now the San Francisco Green Building Code would ensure that the proposed project would not use energy in a wasteful manner.

Water. As discussed above, the Mission Bay FSEIR Community Services and Utilities impacts section estimated the Mission Bay plan would require approximately 2.9 million gallons per day (mgd) of water at build-out and specified water conservation measures, proposed as part of the plan and included as mitigation, that would ensure that the effects of plan implementation on water supply would remain less than significant. Implementation of these measures would also ensure that water used under Mission Bay plan would not be used in a wasteful manner.

The proposed project would require the indoor use of water for toilet flushing and other sanitary needs, food preparation, and other indoor activities. However, the project would be required to comply with the water conservation measures specified in the 2013 California Green Building Code. Further, in accordance with the 2013 San Francisco Green Building Code, the project sponsor would be required to incorporate plumbing fixtures and fixture fittings to reduce the amount of potable water used by 30 percent. If and when a supply of recycled water becomes available through the Eastside Recycled Water Project⁷⁷ the project would also use recycled water for non-potable uses.

For outdoor water use (landscape irrigation), the project sponsor would be required to use climate-appropriate plants and submit the required landscape documentation to the SFPUC in accordance with the San Francisco Water Efficient Irrigation Ordinance and the San Francisco Green Landscaping Ordinance. Installation of weather- or soil moisture-based irrigation controllers that would automatically adjust irrigation in response to changes in plants' needs as weather conditions change would also be required.

Compliance with the above standards would ensure that water is not used wastefully during operation of the event center and other proposed developments, and would in effect implement FSEIR Mitigation Measures M.2a through M.2f. Therefore, impacts related to wasteful use of water would be less than significant and FSEIR Mitigation Measures M.2a through M.2f are no longer required for the proposed project. No new mitigation measures are required.

Cumulative Impacts

Impact C-ME-1: The project, in combination with other past, present, and reasonably foreseeable future projects, would not result in significant adverse cumulative impacts on energy resources. (Less than Significant)

The proposed project would use fuel, energy, and water. Although other projects in the region would also use these resources, cumulative impacts would be less than significant because all of the regional projects, including the proposed project, would be required to comply with the California Green Building Standards Code and Building Energy Efficiency Standards at a minimum. Furthermore, many of the regional projects would also be subject to local green building requirements such as those of the City and County of San Francisco, which must be as stringent as the state requirements and are often more stringent. These building codes encourage sustainable construction and operational practices related to planning and design,

⁷⁷ The SFPUC plans to provide 2 million gallons per day of high quality recycled water to the customers in the east side of the City through the Eastside Recycled Water Project for non-potable uses such as irrigation and toilet flushing. This project is still in the planning stages, and the implementation date is uncertain.

energy efficiency, water efficiency, and conservation. Therefore, cumulative impacts related to wasteful use of fuel, energy, and water resources would be less than significant.

Topics:	<i>Potentially Significant Effects Not Identified in Prior EIR</i>	<i>Potentially Substantial Increase in Severity of Significant Impact Identified in Prior EIR</i>	<i>Sponsor Declines to Adopt Feasible Mitigation Measures or Alternatives</i>	<i>No New or More Severe Significant Effects</i>
18. AGRICULTURE AND FOREST RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
—Would the project				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)) or timberland (as defined by Public Resources Code Section 4526)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The Mission Bay FSEIR did not specifically address potential impacts of the Mission Bay plan on agriculture and forest resources. However, the project site at Blocks 29-32 does not contain any prime farmland, unique farmland, farmland of statewide importance, forest, or timberlands; does not support agricultural or timber uses; is not zoned for agricultural or timber uses; and is not under a Williamson Act contract. Therefore, none of the agriculture and forest resources significance criteria are applicable to the proposed project, and these topics are not discussed further in this Initial Study or in the SEIR.

F. MITIGATION MEASURES

This section lists the mitigation measures identified in this Initial Study. Implementation of these measures would mitigate significant project environmental impacts, and/or considerable project contribution to cumulative environmental impacts such that all corresponding impacts would be reduced to less than significant. The listed mitigation measures include those measures originally identified in the Mission Bay FSEIR that are applicable to the proposed project, as well as certain new mitigation measures identified in this Initial Study to reduce potential impacts to less than significant. Mitigation measures are numbered to correspond to the Initial Study impact number, with a cross reference to the impact numbering system from the Mission Bay FSEIR where appropriate.

It should also be noted that certain mitigation measures identified in the Mission Bay FSEIR are no longer applicable to the proposed project, as described in Section E above; those measures are not listed in this section. For those topics and impact areas to be analyzed in the SEIR, additional mitigation measures will be identified in the SEIR as needed.

Mitigation Measure M-CP-2a: Archaeological Testing, Monitoring and/or Data Recovery Program

Based on a reasonable presumption that archaeological resources may be present within the project site, the following measures shall be undertaken to avoid any potentially significant adverse effect from the proposed project on buried or submerged historical resources. The project sponsor shall retain the services of an archaeological consultant approved by OCII or its designated representative such as those from the rotational Department Qualified Archaeological Consultants List (QACL) maintained by the Planning Department archaeologist. The project sponsor shall contact the Department archaeologist to obtain the names and contact information for the next three archaeological consultants on the QACL. The archaeological consultant shall undertake an archaeological testing program as specified herein. In addition, the consultant shall be available to conduct an archaeological monitoring and/or data recovery program if required pursuant to this measure. The archaeological consultant's work shall be conducted in accordance with this measure at the direction of OCII or its designated representative. All plans and reports prepared by the consultant as specified herein shall be submitted first and directly to OCII or its designated representative for review and comment, and shall be considered draft reports subject to revision until final approval by OCII or its designated representative. Archaeological monitoring and/or data recovery programs required by this measure could suspend construction of the project for up to a maximum of four weeks. At the direction of the OCII or its designated representative, the suspension of construction can be extended beyond four weeks only if such a suspension is the only feasible means to reduce to a less than significant level potential effects on a significant archaeological resource as defined in CEQA Guidelines Sect. 15064.5 (a)(c).

Consultation with Descendant Communities: On discovery of an archaeological site⁷⁸ associated with descendant Native Americans, the Overseas Chinese, or other descendant group an appropriate

⁷⁸ By the term "archaeological site" is intended here to minimally include any archaeological deposit, feature, burial, or evidence of burial.

representative⁷⁹ of the descendant group and OCII or its designated representative shall be contacted. The representative of the descendant group shall be given the opportunity to monitor archaeological field investigations of the site and to consult with OCII or its designated representative regarding appropriate archaeological treatment of the site, of recovered data from the site, and, if applicable, any interpretative treatment of the associated archeological site. A copy of the Final Archaeological Resources Report shall be provided to the representative of the descendant group.

Archaeological Testing Program. The archaeological consultant shall prepare and submit to OCII or its designated representative for review and approval an archaeological testing plan (ATP). The archaeological testing program shall be conducted in accordance with the approved ATP. The ATP shall identify the property types of the expected archaeological resource(s) that potentially could be adversely affected by the proposed project, the testing method to be used, and the locations recommended for testing. The purpose of the archaeological testing program will be to determine to the extent possible the presence or absence of archaeological resources and to identify and to evaluate whether any archaeological resource encountered on the site constitutes an historical resource under CEQA.

At the completion of the archaeological testing program, the archaeological consultant shall submit a written report of the findings to OCII or its designated representative. If based on the archaeological testing program the archaeological consultant finds that significant archaeological resources may be present, OCII or its designated representative in consultation with the archaeological consultant shall determine if additional measures are warranted. Additional measures that may be undertaken include additional archaeological testing, archaeological monitoring, and/or an archaeological data recovery program. No archaeological data recovery shall be undertaken without the prior approval of OCII or its designated representative. If OCII or its designated representative determines that a significant archaeological resource is present and that the resource could be adversely affected by the proposed project, at the discretion of the project sponsor either:

- A. The proposed project shall be re-designed so as to avoid any adverse effect on the significant archaeological resource; or
- B. A data recovery program shall be implemented, unless OCII or its designated representative determines that the archaeological resource is of greater interpretive than research significance and that interpretive use of the resource is feasible.

Archaeological Monitoring Program. If OCII or its designated representative in consultation with the archaeological consultant determines that an archaeological monitoring program shall be implemented the archaeological monitoring program shall minimally include the following provisions:

⁷⁹ An "appropriate representative" of the descendant group is here defined to mean, in the case of Native Americans, any individual listed in the current Native American Contact List for the City and County of San Francisco maintained by the California Native American Heritage Commission and in the case of the Overseas Chinese, the Chinese Historical Society of America. An appropriate representative of other descendant groups should be determined in consultation with the Department archaeologist.

- The archaeological consultant, project sponsor, and OCII or its designated representative shall meet and consult on the scope of the AMP reasonably prior to any project-related soils disturbing activities commencing. OCII or its designated representative in consultation with the archaeological consultant shall determine what project activities shall be archaeologically monitored. In most cases, any soils- disturbing activities, such as demolition, foundation removal, excavation, grading, utilities installation, foundation work, driving of piles (foundation, shoring, etc.), site remediation, etc., shall require archaeological monitoring because of the risk these activities pose to potential archaeological resources and to their depositional context;
- The archeological consultant shall advise all project contractors to be on the alert for evidence of the presence of the expected resource(s), of how to identify the evidence of the expected resource(s), and of the appropriate protocol in the event of apparent discovery of an archaeological resource;
- The archaeological monitor(s) shall be present on the project site according to a schedule agreed upon by the archaeological consultant and OCII or its designated representative until OCII or its designated representative has, in consultation with project archaeological consultant, determined that project construction activities could have no effects on significant archaeological deposits;
- The archaeological monitor shall record and be authorized to collect soil samples and artifactual/ecofactual material as warranted for analysis;
- If an intact archaeological deposit is encountered, all soils-disturbing activities in the vicinity of the deposit shall cease. The archaeological monitor shall be empowered to temporarily redirect demolition/excavation/pile driving/ construction activities and equipment until the deposit is evaluated. If in the case of pile driving activity (foundation, shoring, etc.), the archaeological monitor has cause to believe that the pile driving activity may affect an archaeological resource, the pile driving activity shall be terminated until an appropriate evaluation of the resource has been made in consultation with OCII or its designated representative. The archaeological consultant shall immediately notify the OCII or its designated representative of the encountered archaeological deposit. The archaeological consultant shall make a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological deposit, and present the findings of this assessment to OCII or its designated representative.

Whether or not significant archaeological resources are encountered, the archaeological consultant shall submit a written report of the findings of the monitoring program to the OCII or its designated representative.

Archaeological Data Recovery Program. The archaeological data recovery program shall be conducted in accord with an archaeological data recovery plan (ADRP). The archaeological consultant, project sponsor, and OCII or its designated representative shall meet and consult on the scope of the ADRP prior to preparation of a draft ADRP. The archaeological consultant shall submit a draft ADRP to OCII or its designated representative. The ADRP shall identify how the proposed data recovery program will preserve the significant information the archaeological resource is expected to contain. That is, the ADRP will identify what scientific/historical research questions are applicable to the expected resource, what data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. Data recovery, in general, should be limited to the portions of the historical property that could be adversely affected

by the proposed project. Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practical.

The scope of the ADRP shall include the following elements:

- *Field Methods and Procedures.* Descriptions of proposed field strategies, procedures, and operations.
- *Cataloguing and Laboratory Analysis.* Description of selected cataloguing system and artifact analysis procedures.
- *Discard and Deaccession Policy.* Description of and rationale for field and post-field discard and deaccession policies.
- *Interpretive Program.* Consideration of an on-site/off-site public interpretive program during the course of the archaeological data recovery program.
- *Security Measures.* Recommended security measures to protect the archaeological resource from vandalism, looting, and non-intentionally damaging activities.
- *Final Report.* Description of proposed report format and distribution of results.
- *Curation.* Description of the procedures and recommendations for the curation of any recovered data having potential research value, identification of appropriate curation facilities, and a summary of the accession policies of the curation facilities.

Human Remains and Associated or Unassociated Funerary Objects. The treatment of human remains and of associated or unassociated funerary objects discovered during any soils disturbing activity shall comply with applicable State and Federal laws. This shall include immediate notification of the Coroner of the City and County of San Francisco and in the event of the Coroner's determination that the human remains are Native American remains, notification of the California State Native American Heritage Commission (NAHC) who shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code Sec. 5097.98). The archaeological consultant, project sponsor, OCII or its designated representative, and MLD shall make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines, Sec. 15064.5(d)). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects.

Final Archaeological Resources Report. The archeological consultant shall submit a Draft Final Archaeological Resources Report (FARR) to OCII or its designated representative that evaluates the historical significance of any discovered archaeological resource and describes the archaeological and historical research methods employed in the archaeological testing/monitoring/data recovery program(s) undertaken. Information that may put at risk any archaeological resource shall be provided in a separate removable insert within the final report.

Once approved by OCII or its designated representative, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and OCII or its designated representative shall receive a copy of the transmittal of the FARR to the NWIC. As requested by OCII, the Environmental Planning division of the Planning Department shall receive one bound, one unbound and one unlocked, searchable PDF copy on CD

of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest in or the high interpretive value of the resource, OCII or its designated representative may require a different final report content, format, and distribution than that presented above.

Mitigation Measure M-CP-2b: Accidental Discovery of Archaeological Resources (Implementing FSEIR Mitigation D.6)

The following mitigation measure is required to avoid any potential adverse effect from the proposed project on accidentally discovered buried or submerged historical resources as defined in *CEQA Guidelines* Section 15064.5(a)(c). The project sponsor shall distribute the Planning Department archaeological resource "ALERT" sheet to the project prime contractor; to any project subcontractor (including demolition, excavation, grading, foundation, pile driving, etc. firms); or utilities firm involved in soils disturbing activities within the project site. Prior to any soils disturbing activities being undertaken each contractor is responsible for ensuring that the "ALERT" sheet is circulated to all field personnel, including machine operators, field crew, pile drivers, supervisory personnel, etc. The project sponsor shall provide OCII officer or its designated representative with a signed affidavit from the responsible parties (prime contractor, subcontractor(s), and utilities firm) confirming that all field personnel have received copies of the Alert Sheet.

Should any indication of an archaeological resource be encountered during any soils disturbing activity of the project, the project Head Foreman and/or project sponsor shall immediately notify OCII officer or its designated representative and shall immediately suspend any soils disturbing activities in the vicinity of the discovery until OCII officer or its designated representative has determined what additional measures should be undertaken.

If OCII officer or its designated representative determines that an archaeological resource may be present within the project site, the project sponsor shall retain the services of an archaeological consultant from the pool of qualified archaeological consultants maintained by the Planning Department archaeologist. The archaeological consultant shall advise OCII officer or its designated representative as to whether the discovery is an archaeological resource, retains sufficient integrity, and is of potential scientific/historical/cultural significance. If an archaeological resource is present, the archaeological consultant shall identify and evaluate the archaeological resource. The archaeological consultant shall make a recommendation as to what action, if any, is warranted. Based on this information, OCII officer or its designated representative may require, if warranted, specific additional measures to be implemented by the project sponsor.

Measures might include: preservation in situ of the archaeological resource; an archaeological monitoring program; or an archaeological testing program. If an archaeological monitoring program or archaeological testing program is required, it shall be consistent with the Environmental Planning (EP) division guidelines for such programs. OCII officer or its designated representative may also require that the project sponsor immediately implement a site security program if the archaeological resource is at risk from vandalism, looting, or other damaging actions.

The project archaeological consultant shall submit a Final Archaeological Resources Report (FARR) to OCII officer or its designated representative that evaluates the historical significance of any

discovered archaeological resource and describing the archaeological and historical research methods employed in the archaeological monitoring/data recovery program(s) undertaken. Information that may put at risk any archaeological resource shall be provided in a separate removable insert within the final report.

Copies of the Draft FARR shall be sent to OCII officer or its designated representative for review and approval. Once approved by OCII officer or its designated representative, copies of the FARR shall be distributed as follows: California Archaeological Site Survey Northwest Information Center (NWIC) shall receive one (1) copy and OCII officer or its designated representative shall receive a copy of the transmittal of the FARR to the NWIC. OCII and the Environmental Planning division of the Planning Department shall each receive one bound copy, one unbound copy and one unlocked, searchable PDF copy on CD three copies of the FARR along with copies of any formal site recordation forms (CA DPR 523 series) and/or documentation for nomination to the National Register of Historic Places/California Register of Historical Resources. In instances of high public interest or interpretive value, OCII officer or its designated representative may require a different final report content, format, and distribution than that presented above.

Mitigation Measure M-BI-4a: Preconstruction Surveys for Nesting Birds

To the extent practicable, vegetation removal and grading of the site in advance of new site construction shall be performed between September 1 and January 31 in order to avoid breeding and nesting season for birds. If these activities cannot be performed during this period, a preconstruction survey of onsite vegetation for nesting birds shall be conducted by a qualified biologist.

In coordination with the OCII or its designated representative, pre-construction surveys of onsite vegetation shall be performed during bird breeding season (February 1 – August 31) no more than 14 days prior to vegetation removal, grading, or initiation of construction in order to locate any active passerine nests within 250 feet of the project site and any active raptor nests within 500 feet of the project site. Surveys shall be performed in accessible areas within 500 feet of the project site and include suitable habitat within line of sight as access is available. If active nests are found on either the project site or within the 500-foot survey buffer surrounding the project site, no-work buffer zones shall be established around the nests. Buffer distances will consider physical and visual barriers between the active nest and project activities, existing noise sources and disturbance, as well as sensitivity of the bird species to disturbance. Modification of standard buffer distances, 250 feet for active passerine nests and 500 feet for active raptor nests, will be determined by a qualified biologist in consultation with the California Department of Fish and Wildlife (CDFW). No vegetation removal or ground-disturbing activities including grading or new construction shall occur within a buffer zone until young have fledged or the nest is otherwise abandoned as determined by the qualified biologist.

If construction work during the nesting season stops for 14 days or more and then resumes, then nesting bird surveys shall be repeated, to ensure that no new birds have begun nesting in the area.

Mitigation Measure M-BI-4b: Bird Safe Building Practices

The project sponsor shall design and implement the project consistent with the San Francisco *Standards for Bird-Safe Buildings* and Planning Code Section 139, as approved by OCII. OCII shall consult with the Planning Department and the Zoning Administrator concerning project consistency with Planning Code Section 139.

Mitigation Measure M-HZ-1a. Guidelines for Handling Biohazardous Materials

Mission Bay FSEIR Mitigation Measure I.1. Require businesses that handle biohazardous materials and do not receive federal funding to certify that they follow the guidelines published by the National Research Council and the United States Department of Health and Human Services Public Health Service, National Institutes of Health, and Centers for Disease Control, as set forth in Biosafety in Microbiological and Biomedical Laboratories, Guidelines for Research Involving Recombinant DNA Molecules (NIH Guidelines), and Guide for the Care and Use of Laboratory Animals, or their successors, as applicable.

Mission Bay FSEIR Mitigation Measure I.2. Require businesses handling biohazardous materials to certify that they use high efficiency particulate air (HEPA) filters or substantially equivalent devices on all exhaust from Biosafety Level 3 laboratories unless they demonstrate that exhaust from their Biosafety Level 3 laboratories would not pose substantial health or safety hazards to the public or the environment. Require such businesses to certify that they inspect or monitor the filters regularly to ensure proper functioning.

Mission Bay FSEIR Mitigation Measure I.3. Require businesses handling biohazardous materials to certify that they do not handle or use biohazardous materials requiring Biosafety Level 4 containment (i.e., dangerous or exotic materials that pose high risks of life-threatening diseases or aerosol-transmitted infections, or unknown risks of transmission) in the Project Area.

Mitigation Measure M-HZ-1b: Geologic Investigation and Dust Mitigation Plan for Naturally Occurring Asbestos

The project sponsor shall conduct a geologic investigation in accordance with the guidelines of the California Geologic Survey⁸⁰ to determine the naturally occurring asbestos content of fill materials to be excavated at the project site. If the investigation determines that the naturally occurring asbestos content of the fill materials is 0.25 percent or greater, the project sponsor or its construction contractor shall submit the appropriate notification forms and prepare an asbestos dust mitigation plan in accordance with the Asbestos ATCM. The plan shall specify measures that will be taken to ensure that no visible dust crosses the property boundary during construction. The plan must specify the following measures:

- Prevent and control visible track-out from the property
- Ensure adequate wetting or covering of active storage piles
- Control disturbed surface areas and storage piles that would remain inactive for 7 days
- Control traffic on on-site unpaved roads, parking lots, and staging areas, including a maximum vehicle speed of 15 miles per hour
- Control earthmoving activities
- Control offsite transport of dust emissions that contain naturally-occurring asbestos-containing materials

⁸⁰ California Geologic Survey, 2002. *Guidelines for Geologic Investigations of Naturally Occurring Asbestos in California*. Special Publication 124.

- Stabilize disturbed areas following construction

Mitigation Measure M-HZ-2: RMP Provisions for Child Care Facilities

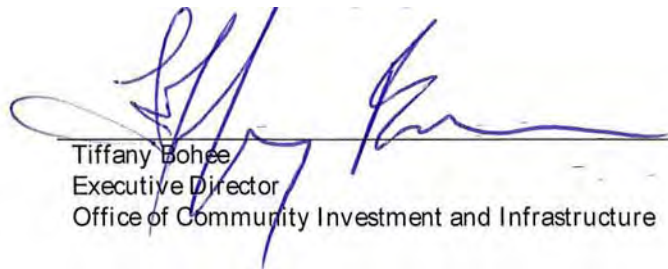
Mission Bay FSEIR Mitigation Measure J.2. Carry out a site-specific risk evaluation for each site in a non-residential area proposed to be used for a public school or child care facility; submit to RWQCB for review and approval. If cancer risks exceed 1×10^{-5} and/or noncancer risk exceeds a Hazard Index of 1, carry out remediation designed to reduce risks to meet these standards or select another site that is shown to meet these standards.

C. DETERMINATION

On the basis of this Initial Study:

- ☐ I find that the proposed project COULD NOT have a new or substantially more severe significant effect on the environment than identified in the Mission Bay FSEIR, and a NEGATIVE DECLARATION will be prepared.
- ☐ I find that although the proposed project could have a new or substantially more severe significant effect on the environment than identified in the Mission Bay FSEIR, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a new or substantially more severe significant effect on the environment than identified in the Mission Bay FSEIR, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☒ I find that the proposed project MAY have a “potentially new or substantially more severe significant impact” or “potentially new or substantially more severe significant unless mitigated” impact on the environment than identified in the Mission Bay FSEIR, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A SUBSEQUENT ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a new or substantially more severe significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental documentation is required.

11-17-14
Date


Tiffany Bohee
Executive Director
Office of Community Investment and Infrastructure

H. Initial Study Preparers

Office of Community Investment and Infrastructure
Successor Agency to the Redevelopment Agency of the City and County of San Francisco
1 South Van Ness Avenue, Fifth Floor
San Francisco, CA 94103
Project Manager: Catherine Reilly
Associate Planner: Immanuel Bereket

Planning Department, City and County of San Francisco
Environmental Planning Division
1650 Mission Street, Suite 400
San Francisco, CA 94103
Deputy Environmental Review Officer: Viktoriya Wise
Senior Environmental Planner: Chris Kern
Environmental Planner: Brett Bollinger

EIR Consultants

Environmental Science Associates
550 Kearny Street, Suite 800
San Francisco, CA 94108

Orion Environmental Associates
211 Sutter Street, Suite 803
San Francisco, CA 94108

APPENDIX A
Special Status Species Tables

TABLE 1
SPECIAL-STATUS PLANT SPECIES REPORTED OR WITH POTENTIAL TO OCCUR NEAR THE
EVENT CENTER AND MIXED-USE DEVELOPMENT AREA AT MISSION BAY BLOCKS 29-32

Common Name Scientific Name	Federal Status	State Status	Calif. Rare Plant Rank	Habitat Description / Blooming Period	Potential to Occur in the Action Area
Species Listed or Proposed for Listing					
Presidio Manzanita <i>Arctostaphylos montana</i> ssp. <i>ravenii</i>	FE	CE	1B.1	Open, rocky, serpentine slopes in chaparral, coastal scrub, and coastal prairie. February – March	Absent. No suitable habitat present.
Marsh sandwort <i>Arenaria paludicola</i>	FE	CE	1B.1	Freshwater or brackish marshes and swamps. May – August	Low. No suitable habitat present.
Presidio clarkia <i>Clarkia franciscana</i>	FE	CE	1B.1	Serpentine outcrops in coastal scrub, and valley and foothill grassland. May – July	Low. No suitable habitat present.
Beach layia <i>Layia carnosa</i>	FE	CE	1B.1	Sand dunes. March – July	Low. No suitable habitat present.
San Francisco lessingia <i>Lessingia germanorum</i>	FE	CE	1B.1	Coastal scrub, sandy soils free of competing species. July – November	Low. No suitable habitat present.
White rayed pentachaeta <i>Pentachaeta bellidiflora</i>	FE	CE	1B.1	Open, dry, rocky slopes and grassy areas, usually on serpentine. March – May	Low. No suitable habitat present.
Marin western flax <i>Hesperolinon congestum</i>	FT	CT	1B.1	Chaparral and grassland, usually on serpentine barrens. April – July	Low. No suitable habitat present.
California seablite <i>Suaeda californica</i>	FE	--	1B.1	Coastal Salt Marsh, wetland-riaprian July - October	Low. Documented occurrences south of the proposed project at Pier 94 and India Basin. Suitable habitat not present within the project site.
Franciscan manzanita <i>Arctostaphylos franciscana</i>	FE	--	1B.1	Open, rocky, serpentine outcrops in chaparral. February – April	Absent. No suitable habitat present. This species was believed to be extinct in the wild (although still extant through cultivation), but was rediscovered in Presidio National Park in late 2009.
Robust spineflower <i>Chorizanthe robusta</i> var. <i>robusta</i>	FE	--	1B.1	Sandy or gravelly coastal dunes, coastal scrub, cismontane woodland and maritime chaparral. April – September	Low. No suitable habitat present.
Showy rancheria clover <i>Trifolium amoenum</i>	FE	--	1B.1	Valley grassland, wetland riparian April - June	Low. No suitable habitat present. No local records documented in San Francisco.

TABLE 1 (Continued)
SPECIAL-STATUS PLANT SPECIES REPORTED OR WITH POTENTIAL TO OCCUR NEAR THE
EVENT CENTER AND MIXED-USE DEVELOPMENT AREA AT MISSION BAY BLOCKS 29-32

Common Name Scientific Name	Federal Status	State Status	Calif. Rare Plant Rank	Habitat Description / Blooming Period	Potential to Occur in the Action Area
Species Listed or Proposed for Listing (cont.)					
San Bruno Mountain manzanita <i>Arctostaphylos imbricata</i>	--	CE	1B.1	Chaparral and coastal scrub, usually on sandstone outcrops. February – May	Absent. No suitable habitat present.
Pacific manzanita <i>Arctostaphylos pacifica</i>	--	CE	1B.2	Coastal scrub and chaparral. February – April	Absent. No suitable habitat present.
San Francisco popcorn- flower <i>Plagiobothrys diffusus</i>	--	CE	1B.1	Coastal prairie, and valley and foothill grasslands. March – June	Low. No suitable habitat present.
Federal Species of Concern or State Species of Special Concern					
Adobe sanicle <i>Sanicula maritima</i>	--	Rare	1B.1	Moist clay or ultramafic soil in chaparral, coastal prairie, meadows, seeps, and valley and foothill grassland. February – May	Low. No suitable habitat present.
Hairless popcorn-flower <i>Plagiobothrys glaber</i>	--	--	1A	Coastal salt marshes and alkaline meadows. March – May	Low. No suitable habitat present.
coast lilly <i>Lilium maritimum</i>	--	--	1B.1	Coastal Prairie, mixed evergreen forest, northern coastal scrub, closed-cone pine forest, north coastal coniferous forest, wetland-riparian May – August	Low. No suitable habitat present.
Northern curly-leaved mondarella <i>Mondarella sinuata</i> ssp. <i>Nigrescens</i>	--	--	1B.2	Coastal strand, chaparral May - July	Low. No suitable habitat present.
Blue coast gilia <i>Gilia capitata</i> spp. <i>chamissonis</i>	--	--	1B.1	Coastal dunes and scrub. April – July	Low. No suitable habitat present. Extant population is present within the Presidio of San Francisco.
Kellogg's horkelia <i>Horkelia cuneata</i> ssp. <i>sericea</i>	--	--	1B.1	Coastal scrub, dunes, and openings of closed-cone coniferous forests. February – July	Low. No suitable habitat present.
Rose leptosiphon <i>Leptosiphon rosaceus</i>	--	--	1B.1	Coastal bluff scrub. April – July	Low. No suitable habitat present.
Fragrant fritillary <i>Fritillaria liliacea</i>	--	--	1B.2	On clay, often serpentine derived soils in coastal scrub, grassland, and coastal prairie. February – April	Low. No suitable habitat present. Extant population located at Twin Peaks.

TABLE 1 (Continued)
SPECIAL-STATUS PLANT SPECIES REPORTED OR WITH POTENTIAL TO OCCUR NEAR THE
EVENT CENTER AND MIXED-USE DEVELOPMENT AREA AT MISSION BAY BLOCKS 29-32

Common Name Scientific Name	Federal Status	State Status	Calif. Rare Plant Rank	Habitat Description / Blooming Period	Potential to Occur in the Action Area
Federal Species of Concern or State Species of Special Concern (cont.)					
Bent-flowered fiddleneck <i>Amsinckia lunaris</i>	--	--	1B.2	Coastal bluff scrub, cismontane woodland, and valley and foothill grassland. March – June	Low. No suitable habitat present.
Montara manzanita <i>Arctostaphylos montaraensis</i>	--	--	1B.2	Slopes and ridges in chaparral and coastal scrub. January – March	Absent. No suitable habitat present.
Alkali milk-vetch <i>Astragalus tener</i> var. <i>tener</i>	--	--	1B.2	Alkali flats, flooded grassland, playas and vernal pools. March – June	Low. No suitable habitat present; species presumed extirpated in San Francisco.
Pappose tarplant <i>Centromadia parryi</i> ssp. <i>parryi</i>	--	--	1B.2	Chaparral, coastal prairie, meadows, seeps, coastal salt marshes and swamps, and vernal mesic, often alkaline, valley and foothill grasslands. May – November	Low. No suitable habitat present.
Franciscan thistle <i>Cirsium andrewsii</i>	--	--	1B.2	Coastal bluff scrub, coastal prairie, coastal mesic scrub, and broadleaf upland forest; sometimes on serpentine. March – July	Low. No suitable habitat present.
San Francisco Bay spineflower <i>Chorizanthe cuspidata</i> var. <i>cuspidata</i>	--	--	1B.2	Coastal scrub, dunes and grassland. April – July	Low. No suitable habitat present.
Point Reyes bird's-beak <i>Chloropyron maritimum</i> ssp. <i>palustre</i>	--	--	1B.2	Coastal salt marshes and swamps. June – October	Low. No suitable habitat present.
Compact cobwebby thistle <i>Cirsium occidentale</i> var. <i>compactum</i>	--	--	1B.2	Coastal scrub, grassland, and dunes. April – June	Low. No suitable habitat present.
Round-headed Chinese-houses <i>Collinsia corymbosa</i>	--	--	1B.2	Coastal dunes and coastal prairie. April – June	Low. No suitable habitat present; species has not been seen in San Francisco for more than 100 years.
San Francisco collinsia <i>Collinsia multicolor</i>	--	--	1B.2	On humus-covered soil derived from mudstone in closed-cone coniferous forest, coastal scrub. March – May	Low. No suitable habitat present.
Dark-eyed gilia <i>Gilia millefoliata</i>	--	--	1B.2	Coastal dunes. April – July	Low. No suitable habitat present; species potentially extirpated in San Francisco.

TABLE 1 (Continued)
SPECIAL-STATUS PLANT SPECIES REPORTED OR WITH POTENTIAL TO OCCUR NEAR THE
EVENT CENTER AND MIXED-USE DEVELOPMENT AREA AT MISSION BAY BLOCKS 29-32

Common Name Scientific Name	Federal Status	State Status	Calif. Rare Plant Rank	Habitat Description / Blooming Period	Potential to Occur in the Action Area
Federal Species of Concern or State Species of Special Concern (cont.)					
Diablo helianthella <i>Helianthella castanea</i>	--	--	1B.2	On rocky soils in broadleaf upland forest, cismontane woodland, coastal scrub, riparian woodland, and valley and foothill grassland. March – June	Absent. No suitable habitat present.
White seaside tarplant <i>Hemizonia congesta</i> ssp. <i>congesta</i>	--	--	1B.2	Grassy valleys and hills, often on fallow fields in coastal scrub. April – November	Low. No suitable habitat present.
Short-leaved evax <i>Hesperovax sparsiflora</i> var. <i>brevifolia</i>	--	--	1B.2	Sandy bluffs and flats in coastal scrub and coastal dunes. March – June	Low. No suitable habitat present.
Arcuate bush mallow <i>Malacothamnus arcuatus</i>	--	--	1B.2	Gravelly alluvium in chaparral and cismontane woodland. April – September	Absent. No suitable habitat present.
Marsh microseris <i>Microseris paludosa</i>	--	--	1B.2	Closed-cone coniferous forest, cismontane woodland, coastal scrub, and valley and foothill grassland. August – June	Low. No suitable habitat present.
Choris's popcorn-flower <i>Plagiobothrys chorisianus</i> var. <i>chorisianus</i>	--	--	1B.2	Mesic sites in chaparral, coastal scrub, and coastal prairie. March – June	Low. No suitable habitat present.
San Francisco champion <i>Silene verecunda</i> ssp. <i>verecunda</i>	--	--	1B.2	Mudstone, shale, or serpentine substrates in coastal scrub, coastal prairie, chaparral and valley and foothill grassland. March – June	Low. No suitable habitat present.
Santa Cruz microseris <i>Stebbinsoseris decipiens</i>	--	--	1B.2	On sandstone, shale or serpentine derived seaward facing slopes in broadleaf upland forest, closed-cone coniferous forest, chaparral, coastal prairie, and coastal scrub. April – May	Low. No suitable habitat present.
Coastal triquetrella <i>Triquetrella californica</i>	--	--	1B.2	On shaded soil, rocks sand or gravel in dry or moist conditions or in coastal bluff and coastal scrub.	Low. No suitable habitat present.
San Francisco owl's clover <i>Triphysaria floribunda</i>	--	--	1B.2	Grasslands. April – June	Low. No suitable habitat present.
Bristly sedge <i>Carex comosa</i>	--	--	2B.1	Lake margins, marshes, swamps, coastal prairie, and valley and foothill grasslands. May – September	Absent. No suitable habitat present.

TABLE 1 (Continued)
SPECIAL-STATUS PLANT SPECIES REPORTED OR WITH POTENTIAL TO OCCUR NEAR THE
EVENT CENTER AND MIXED-USE DEVELOPMENT AREA AT MISSION BAY BLOCKS 29-32

Common Name Scientific Name	Federal Status	State Status	Calif. Rare Plant Rank	Habitat Description / Blooming Period	Potential to Occur in the Action Area
Federal Species of Concern or State Species of Special Concern (cont.)					
Oregon polemonium <i>Polemonium carneum</i>	--	--	2B.2	Coastal prairie, coastal scrub, lower montane coniferous forest. April – September	Low. No suitable habitat present.
San Francisco gumplant <i>Grindelia hirsutula</i> var. <i>maritima</i>	--	--	3.2	On sandy or serpentine slopes of sea bluffs in coastal scrub, or valley and foothill grasslands. June – September	Absent. No suitable habitat present.

NOTES:

The “Potential for Effect” category is defined as follows:

High = Species is expected to occur and habitat meets species requirements.

Moderate = Habitat is only marginally suitable or is suitable but not within species geographic range.

Low = Habitat does not meet species requirements as currently understood in the scientific community.

STATUS CODES:

Federal:

FE = Listed as “endangered” under the federal Endangered Species Act

FT = Listed as “threatened” under the federal Endangered Species Act

FSC = NOAA Fisheries designated “species of concern”

FPD = Proposed delisted

FD = Delisted

State:

CE = Listed as “endangered” under the California Endangered Species Act

CT = Listed as “threatened” under the California Endangered Species Act

CSC = California Department of Fish and Wildlife designated “species of special concern”

CFP = California Department of Fish and Wildlife designated “fully protected”

SC = California Department of Fish and Wildlife designated “candidate threatened”

WL = California Department of Fish and Wildlife designated “watch list”

3503.5 = Eggs, Nests, and Nestlings Protected under section 3503.5 of the California Department of Fish and Game Code

* = California special animal

California Rare Plant Rank:

List 1A = Plants presumed extirpated in California and either rare or extinct elsewhere

List 1B = Plants rare, threatened, or endangered in California and elsewhere

List 2A = Plants presumed extirpated in California, but more common elsewhere

List 2B = Plants rare, threatened, or endangered in California, but more common elsewhere

List 3 = Plants about which we need more information--a review list

List 4 = Plants of limited distribution--a watch list

SOURCE: USFWS (2014), CDFW (2014), CNPS (2014).

TABLE 2
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR NEAR THE
EVENT CENTER AND MIXED-USE DEVELOPMENT AREA AT MISSION BAY BLOCKS 29-32

Common Name Scientific Name	Federal Status	State Status	Habitat Description	Potential to Occur in the Action Area
Invertebrates				
San Bruno elfin butterfly <i>Callophrys mossii bayensis</i>	FE	--	Coastal scrub on rocky outcrops with broadleaf stonecrop (<i>Sedum spathulifolium</i>)	Low. No suitable habitat present. Three known populations at San Bruno Mountain, Montara, and Pacifica.
Bay checkerspot butterfly <i>Euphydryas editha bayensis</i>	FT	--	Serpentine grasslands.	Low. No suitable habitat present.
Mission blue butterfly <i>Plebejus icarioides missionensis</i>	FE	--	Grassland with <i>Lupinus albifrons</i> , <i>L. Formosa</i> , and <i>L. varicolor</i> .	Low. Closest suitable habitat present at Twin Peaks. Species unlikely to occur at the project site.
Callippe silverspot butterfly <i>Speyeria callippe callippe</i>	FE	--	Found in native grasslands with <i>Viola pedunculata</i> as larval food plant.	Low. No suitable habitat present.
Monarch butterfly <i>Danaus plexippus</i>	--	*	Eucalyptus groves (wintering sites).	Low. No suitable habitat present though may occur on a transient basis. Several records of this species wintering in eucalyptus groves within San Francisco including Golden Gate Park, the Presidio, Fort Mason, and Telegraph Hill.
Tomales isopod <i>Caecuditea tomalensis</i>	--	--	Still-to slow-moving water in vegetated ponds, preferably spring-fed.	Low. No suitable habitat present.
Reptiles and Amphibians				
Western pond turtle <i>Emys marmorata</i>	--	CSC	Ponds, marshes, rivers, streams, and irrigation ditches with aquatic vegetation. Requires basking sites and suitable upland habitat for egg-laying. Nest sites most often characterized as having gentle slopes (<15%) with little vegetation or sandy banks.	Low. No suitable habitat present.
San Francisco garter snake <i>Thamnophis sirtalis tetrataenia</i>	FE	SE	Densely vegetated ponds near open hillsides with abundant small mammal burrows.	Absent. Species is considered likely extirpated from San Francisco.
California red-legged frog <i>Rana draytonii</i>	FT	CSC	Freshwater ponds and slow streams with emergent vegetation for egg attachment.	Low. No suitable habitat present.
Birds				
California clapper rail <i>Rallus longirostris obsoletus</i>	FE	CE	Salt marsh wetlands along the San Francisco Bay.	Low. No suitable habitat present.
Bank swallow <i>Riparia riparia</i> (nesting)	--	CT	Vertical banks and cliffs with sandy soil, near water. Nests in holes dug in cliffs and river banks.	Low. No suitable habitat present.
Yellow warbler <i>Dendroica petechia brewsteri</i>	--	CSC	Nests in dense riparian cover and montane chaparral. Breeding distribution includes the coast ranges and western slopes of the Sierra Nevada. Rare to uncommon in lowland areas.	Low. No suitable riparian habitat present.

TABLE 2 (Continued)
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR NEAR THE
EVENT CENTER AND MIXED-USE DEVELOPMENT AREA AT MISSION BAY BLOCKS 29-32

Common Name Scientific Name	Federal Status	State Status	Habitat Description	Potential to Occur in the Action Area
Birds (cont.)				
California black rail <i>Laterallus jamaicensis coturniculus</i>	--	CT	Salt and brackish marshes; also in freshwater marshes at low elevations.	Low. No suitable habitat present.
Salt marsh common yellowthroat <i>Geothlypis trichas sinuatus</i>	--	CSC	Forages in various marsh, riparian and upland habitats. Nests on or near the ground in concealed locations.	Low. No suitable riparian habitat present.
Alameda song sparrow <i>Melospiza melodia pusillula</i>	--	CSC	Salt marshes of eastern and south San Francisco Bay.	Low. No suitable habitat present.
San Pablo song sparrow <i>Melospiza melodia samuelis</i>	--	CSC	Salt marshes of eastern and north San Francisco Bay.	Low. No suitable habitat present.
Peregrine falcon <i>Falco peregrinus</i>	FD	FP	Woodlands, coastal habitats, riparian areas, coastal and inland waters, human made structures that may be used as nest or temporary perch sites.	Low. May forage over the project area though proposed project site does not provide nesting habitat.
Double-crested cormorant <i>Phalacrocorax auritus</i>	--	WL, 3503.5	Coastal areas and inland lakes in fresh, saline, and estuarine waters.	Low. No suitable nesting habitat present at the proposed project site though colonies are known to nest on the Bay Bridge. Species may occur in adjacent Bay waters or over the project site on a transient basis.
Cooper's hawk <i>Accipiter cooperii</i>	--	3503.5	Nests in riparian areas and oak woodlands, forages at woodland edges.	Low. No suitable habitat present.
Sharp-shinned hawk <i>Accipiter striatus</i>	--	3503.5	Nests in riparian areas and oak woodlands, forages in open areas	Low. No suitable habitat present.
Great horned owl <i>Bubo virginianus</i>	--	3503.5	Riparian, coniferous, chaparral and desert habitats.	Low. No suitable habitat present.
Red-tailed hawk <i>Buteo jamaicensis</i>	--	3503.5	Found in nearly all habitats and elevations.	Low. No suitable habitat present. May occur over the project on a transient basis.
Red-shouldered hawk <i>Buteo lineatus</i>	--	3503.5	Riparian woodlands with swamps and emergent wetlands.	Low. No suitable habitat present.
American kestrel <i>Falco sparverius</i>	--	3503.5	Frequents generally open grasslands, pastures, and fields; primarily a cavity nester.	Low. No suitable habitat present. May occur over the project on a transient basis.
Osprey <i>Pandion haliaetus</i>	--	3503.5	Habitat varies greatly and usually includes adequate supply of accessible fish, shallow waters, open and elevated nest sites (10-60 feet in height), and artificial structures such as towers. Builds large platform stick nests near or in open waters such as lakes, estuaries, bays, reservoirs, and within the surf zone.	Low. No suitable habitat is present. May forage in adjacent waters. Project site does not provide suitable nesting habitat.
Great blue heron <i>Ardea herodias</i>	--	3503.5	Shallow estuaries and fresh and saline emergent wetlands.	Low. May forage in standing water of the onsite basin.
American goldfinch <i>Carduelis tristis</i>	--	3503.5	Cismontane foothills; riparian and cropland habitats.	Present. Suitable habitat is present.

TABLE 2 (Continued)
SPECIAL-STATUS ANIMAL SPECIES REPORTED OR WITH POTENTIAL TO OCCUR NEAR THE
EVENT CENTER AND MIXED-USE DEVELOPMENT AREA AT MISSION BAY BLOCKS 29-32

Common Name <i>Scientific Name</i>	Federal Status	State Status	Habitat Description	Potential to Occur in the Action Area
Birds (cont.)				
Barn swallow <i>Hirundo rustica</i>	--	3503.5	Open areas from coastal grassland and shrubland to mixed coniferous forests.	Moderate. Suitable habitat is present.
Mammals				
Western red bat <i>Lasiurus blossevillei</i>	--	CSC	Roosts primarily in trees, 2-40 feet above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Low. No suitable habitat is present.
Pallid bat <i>Antrozous pallidus</i>	--	CSC	Prefers caves, crevices, hollow trees, or buildings in areas adjacent to open space for foraging. Associated with lower elevations in California.	Low. No suitable habitat is present.
Townsend's big-eared bat <i>Corynorhinus townsendii</i>	--	CSC SC	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings of rocky areas with caves or tunnels. Roosting sites limited. Extremely sensitive to human disturbance.	Low. No suitable habitat is present.
American badger <i>Taxidea taxus</i>	--	CSC	Open grasslands with loose, friable soils.	Low. No suitable habitat present.
Point Reyes jumping mouse <i>Zapus trinotatus orarius</i>	--	CSC	Upland areas of bunch grass in marshes in Point Reyes.	Low. Project site is south of the known range for this species.

NOTES:

The "Potential for Effect" category is defined as follows:

High = Species is expected to occur and habitat meets species requirements.

Moderate = Habitat is only marginally suitable or is suitable but not within species geographic range.

Low = Habitat does not meet species requirements as currently understood in the scientific community.

STATUS CODES:

Federal:

FE = Listed as "endangered" under the federal Endangered Species Act

FT = Listed as "threatened" under the federal Endangered Species Act

FSC = NOAA Fisheries designated "species of concern"

FPD = Proposed delisted

FD = Delisted

State:

CE = Listed as "endangered" under the California Endangered Species Act

CT = Listed as "threatened" under the California Endangered Species Act

CSC = California Department of Fish and Wildlife designated "species of special concern"

CFP = California Department of Fish and Wildlife designated "fully protected"

SC = California Department of Fish and Wildlife designated "candidate threatened"

WL = California Department of Fish and Wildlife designated "watch list"

3503.5 = Eggs, Nests, and Nestlings Protected under section 3503.5 of the California Department of Fish and Game Code

* = California special animal

SOURCE: USFWS (2014), CDFW (2014), CNPS (2014).