originally scheduled from November 12, 2009, through December 28, 2009. Additionally, the Agency Commission and the Planning Commission ~~will hold~~ held public hearings on this Draft EIR. The first Agency Commission hearing ~~will be~~ was held on December 15, 2009, in Room 416. At the conclusion of that hearing, a second Agency Commission hearing was scheduled for January 5, 2010. In addition, the Agency Commission voted to extend the comment period to January 12, 2010. The Planning Commission hearing ~~will be~~ was held on December 17, 2009, in Room 400 and the Planning Commission concurred with the Agency Commission's decision to extend the comment period to January 12, 2010. Both hearing rooms are located in City Hall, Dr. Carlton B. Goodlett Place, beginning at 1:30 P.M. or later (call (415) 588-6422 the week of the hearing for a recorded message giving a more specific time).

Page I-12, fourth bullet

- **Chapter IV (Project Variants)**—This chapter describes ~~five~~ six variants to the Project. These variants are also evaluated at a project-level in this chapter as follows:
  - > Variant 1: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—Research and Development Variant
  - > Variant 2: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—Housing Variant
  - > Variant 2A: San Francisco 49ers move outside the Project area (no football stadium constructed at HPS Phase II)—Housing/R&D Variant
  - > Variant 3 (Tower Variants ~~3a~~A, ~~3b~~B, C, and ~~3c~~D): ~~Three~~ Four Candlestick Point tower variants would have the same land use program and overall description as with the Project, but would have different locations, massings, and heights for residential towers at Candlestick Point
  - > Variant 4: A utilities variant would include an automated solid waste collection system, decentralized wastewater treatment, and district energy
  - > Variant 5: Shared stadium where both the San Francisco 49ers and Oakland Raiders would play at the stadium at HPS Phase II

Page I-12, last bullet

- **Chapter VI (Alternatives)**—This chapter analyzes alternatives to the Project, including the required No Project Alternative, compares their environmental effects to those of the Project, and identifies the environmentally superior alternative. Alternatives evaluated in this chapter include the following:
  - > Alternative 1: No Project
  - > Alternative 2: CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
  - > Alternative 3: Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
  - > Alternative 4: Reduced CP-HPS Phase II Development, Historic Preservation, No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge
    - ○ Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation

> Alternative 5: Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and Without the Yosemite Slough Bridge

F.3 Changes to Chapter II (Project Description)

Page II-1, in Table II-1 (Project Site Area), the note has been revised

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table II-1 Project Site Areas [Revised]

Development Area	*Acres*
Candlestick Point	281
Hunters Point Shipyard Phase II	421
Total	***702***

SOURCE: Lennar Urban, 2009.
Candlestick Point includes the approximately 120.2-acre Candlestick Point State Recreation Area.

Page II-2, Figure II-1 (Project Location) has been revised

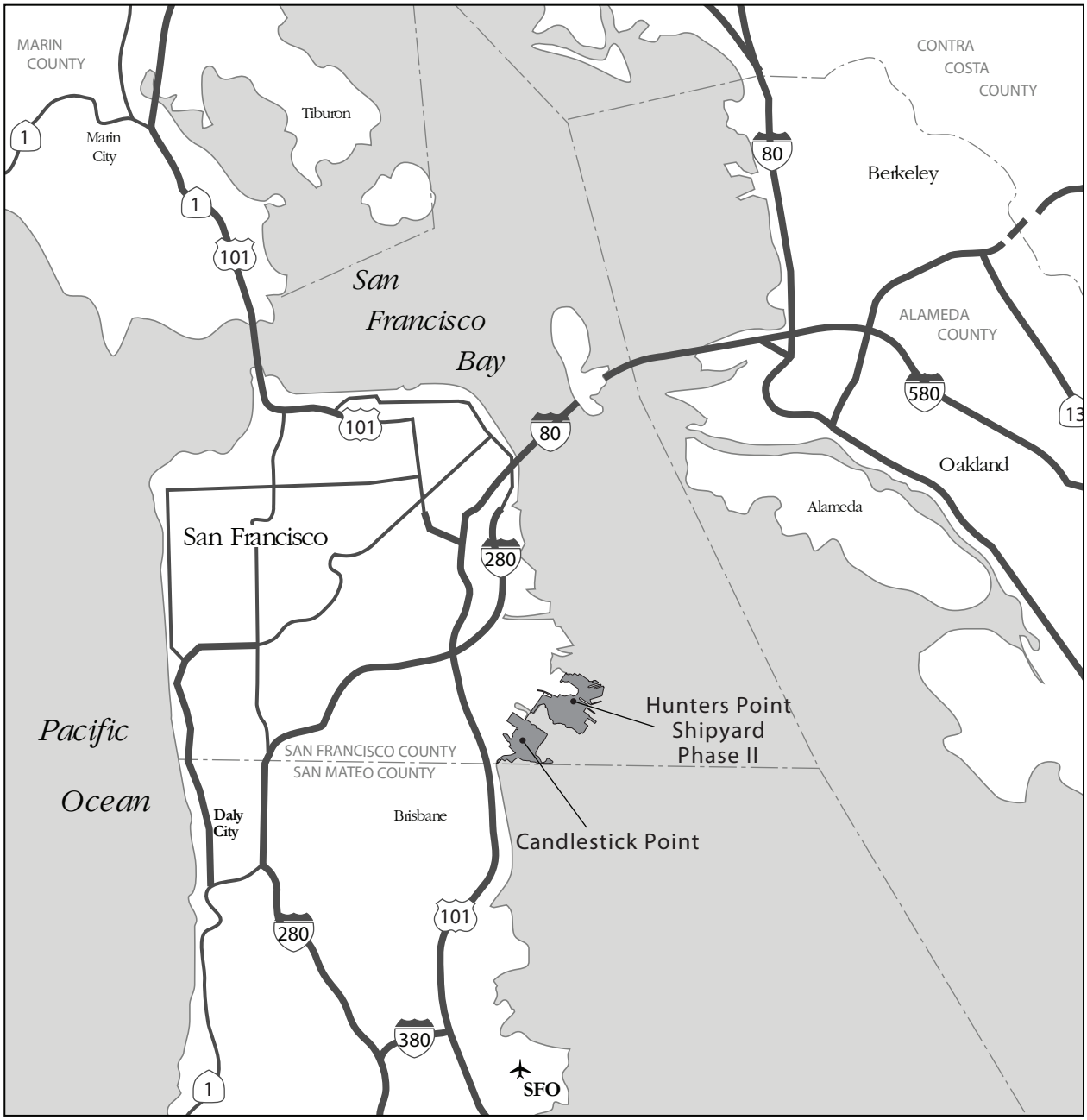
[NOTE: The figure has been revised to correct the Project Site boundaries to include Alice Griffith and Harney Way.]

Page II-3, Figure II-2 (Project Site and Context) has been revised

[NOTE: The figure has been revised to indicate the boundaries of the CPSRA and of Area C, and to clarify the boundaries of HPS Phase I.]

Page II-12, Figure II-5 (Proposed Maximum Building Heights) has been revised

[NOTE: The figure has been revised to identify major roadways.]



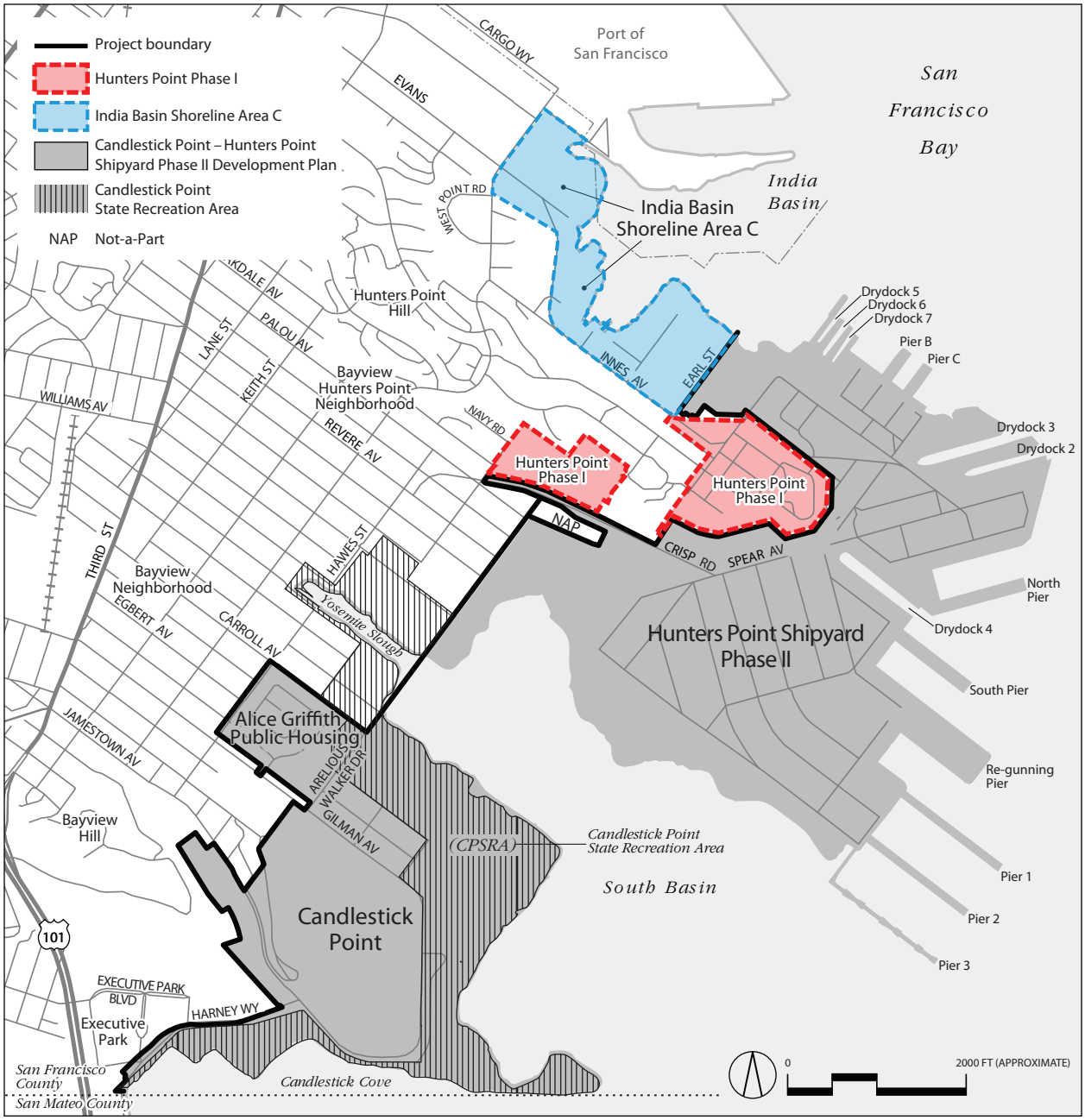
SOURCE: Clement Designs, 2008.

PBS&J 04.19.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROJECT LOCATION [REVISED]

FIGURE II-1

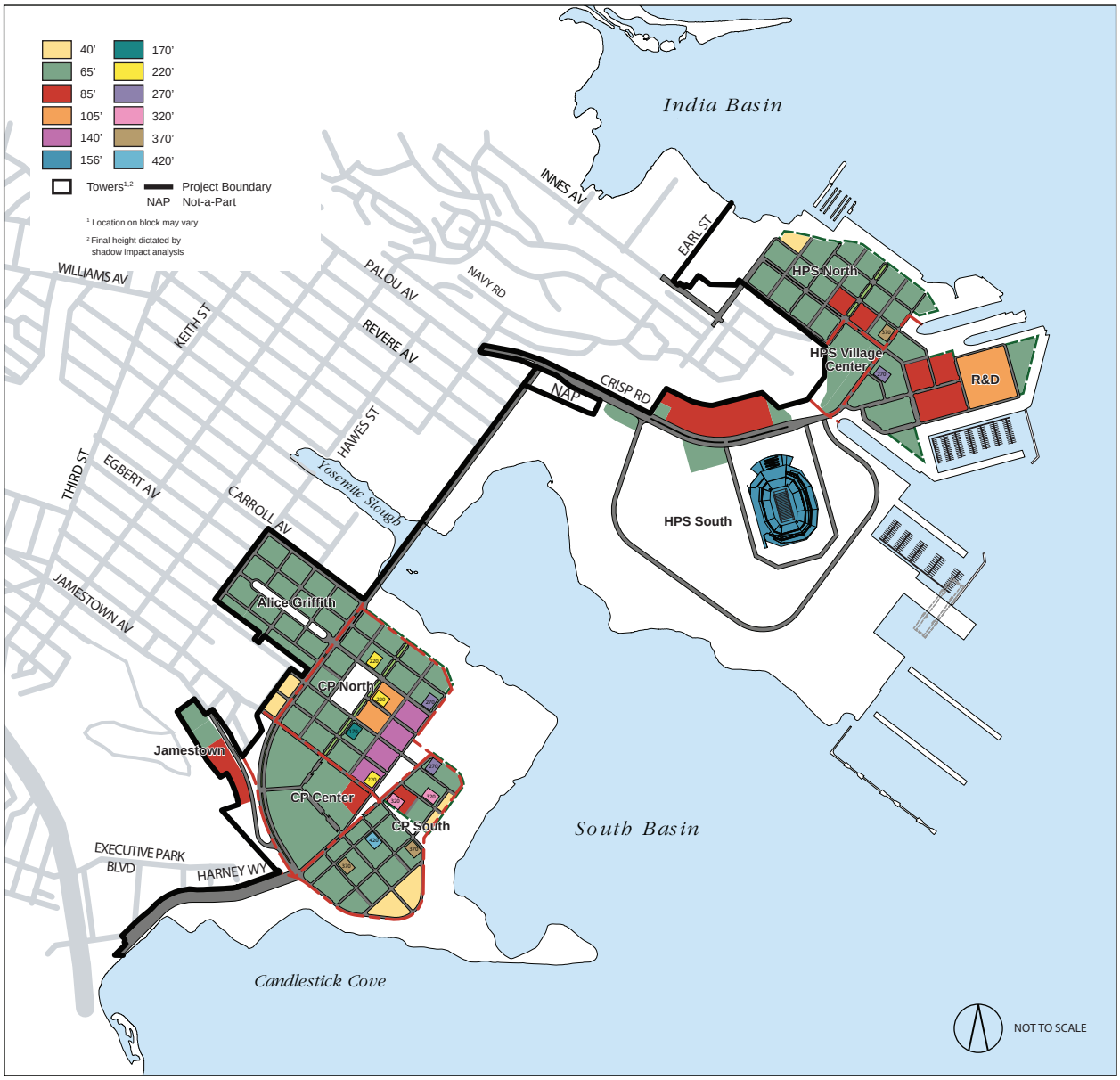


SOURCE: San Francisco Redevelopment Agency, Lennar Urban, 2009; PBS&J, 2010.

PBS&J 04.19.10 02056 | JCS | 10

FIGURE II-2 Candlestick Point — Hunters Point Shipyard Phase II EIR

PROJECT SITE AND CONTEXT [REVISED]



SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED MAXIMUM BUILDING HEIGHTS [REVISED]

FIGURE II-5

Page II-13, second bullet

- **Regional Retail:** A regional retail center of up to 635,000 gross square feet (gsf) is proposed on Candlestick Point. Retailers could include a variety of general merchandise, apparel, furniture and home furnishings, food service and restaurants, and entertainment related businesses to serve the regional market. ~~Commercial~~ Community services may also be allowed on sites designated for regional retail uses.

Page II-14, third bullet

- **Artists' Studios/Arts Center:** Up to 225,000 gsf of artists' studios and accessory neighborhood retail is proposed on Hunters Point Shipyard and 30,000 gsf would be dedicated for the construction of an arts center.

Page II-17, fifth paragraph

Development on HPS Phase II would include demolition and replacement of studios for approximately 300 artists. In addition, all of the vacant, and some leased, Navy buildings would be demolished, with the exception of historic Drydocks Nos. 2 and 3 and Buildings 140, 204, 205, ~~and~~ 207, and 208, as discussed in Section III.J (Cultural and Paleontological Resources).

Page II-24, fifth paragraph

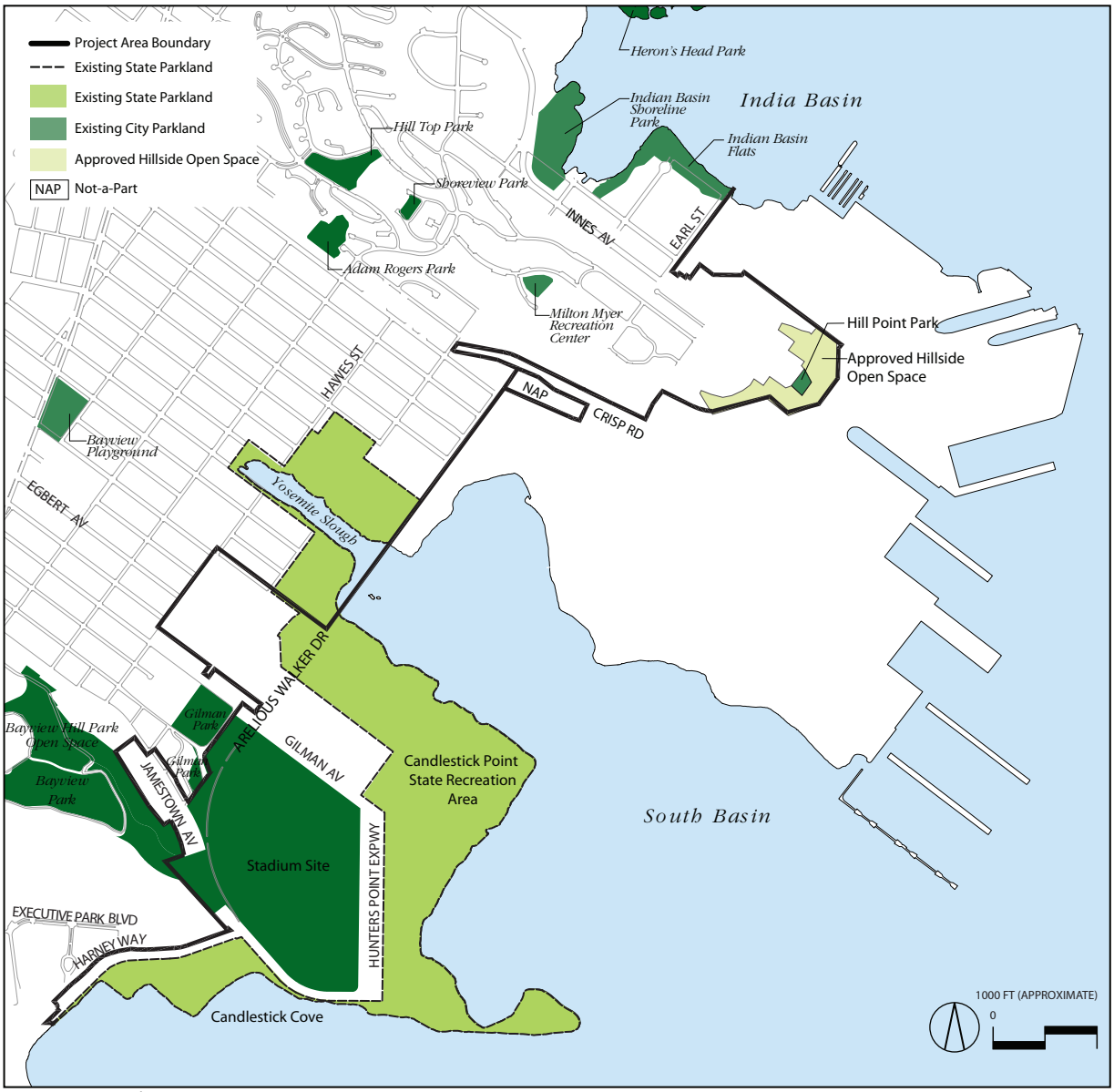
… Table II-7 (Candlestick Point Proposed State Parks Reconfiguration) presents the proposed acreage of the areas proposed to be added to or removed from the Park, as ~~required~~ identified by Senate Bill 792 (SB 792). …

Page II-26, Figure II-8 (Existing and Approved Parks and Open Space) has been revised

[NOTE: The figure has been revised to add "Approved" to Hillside Open Space; and to expand the Gilman Park and Bayview Hill Park Open Space boundaries.]

Page II-27, Figure II-9 (Proposed Parks and Open Space) has been revised

[NOTE: The figure has been revised to show the Bay Trail in the preferred alignment along the Yosemite Slough shoreline. The figure has also been revised to add "Approved" to Hillside Parks & Open Space; and to expand the boundaries of Gilman Park and Bayview Hill Park Open Space.]



SOURCE: Lennar Urban, RHAA, 2009; PBS&J, 2010.

PBS&J 04.16.10 2056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING AND APPROVED PARKS AND OPEN SPACE [REVISED]

FIGURE II-8

SOURCE: Lennar Urban, RHAA, 2009; PBS&J, 2010.

PBS&J 04.09.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED PARKS AND OPEN SPACE [REVISED]

FIGURE II-9

Page II-28, first paragraph

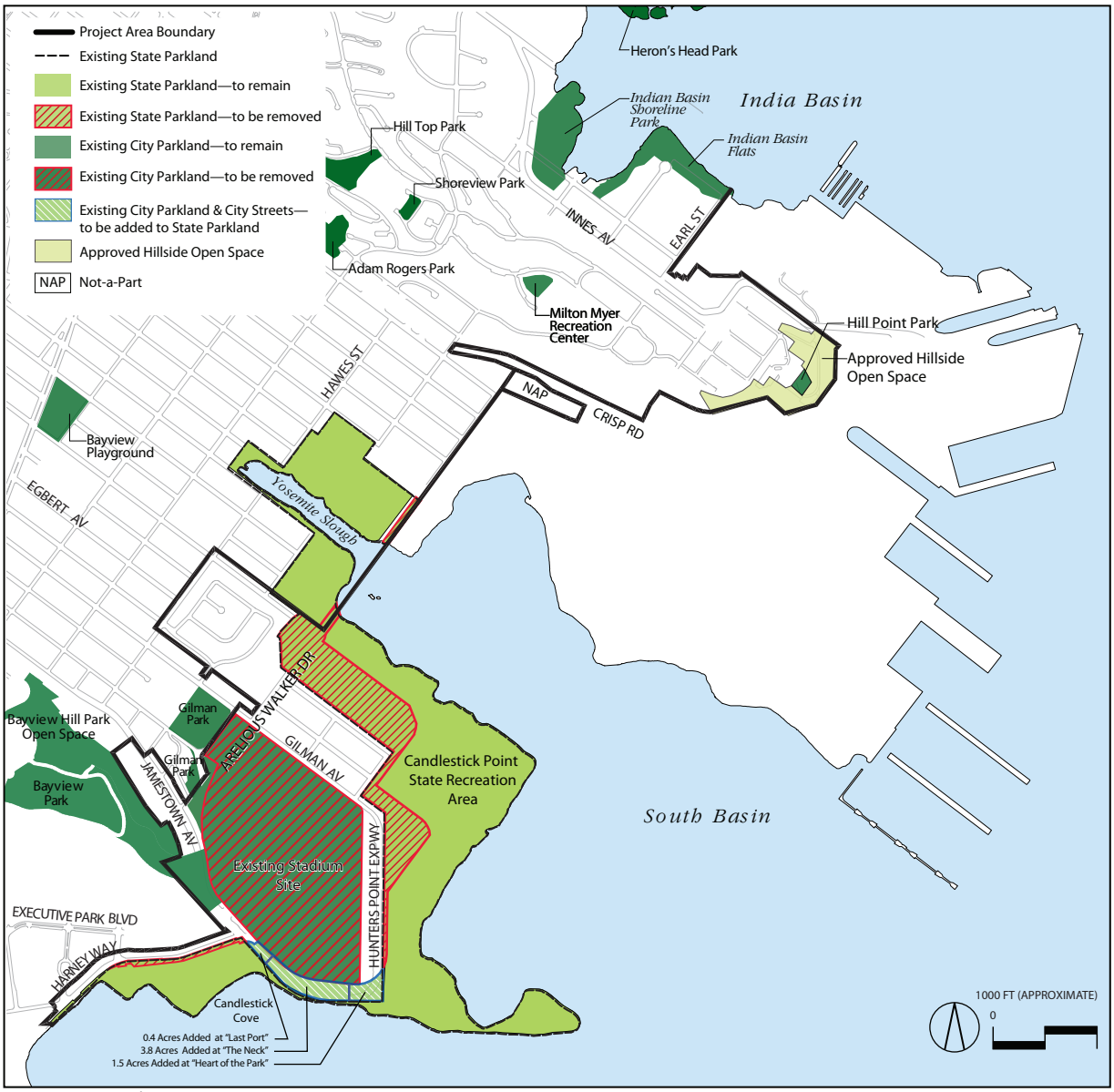
… Prior to construction of park improvements, the California Department of Parks and Recreation (CDPR) must undertake a ~~community~~ public planning process and complete an update to the general plan.

Page II-28, second paragraph

Consistent with the current CPSRA General Plan and the CDPR mission, after Project development, the CPSRA would primarily contain areas of passive uses and minimal formal landscaping. The portion of the park that is currently undeveloped or used for Candlestick Park stadium parking would be substantially improved as part of the Project to enhance overall park aesthetics and landscape ecology; reconnect visitors to the bay shoreline; and provide direct access to the bay for swimming, fishing, kayaking, and windsurfing. Proposed Project improvements include revegetation and landscaping, shoreline restoration and stabilization, infrastructure improvements (such as trails, pathways, and visitor facilities), a biofiltration pond to cleanse stormwater, the provision of habitat and opportunities for environmental education, 'Eco-Gardens,' and salt-marsh restoration. …

Page II-29, Figure II-10 (Proposed CPSRA Reconfiguration) has been revised

[NOTE: The figure has been revised to add "Approved" to Hillside Parks & Open Space; and to expand the boundaries of Gilman Park and Bayview Hill Park Open Space.]



SOURCE: Lennar Urban, RHAA, 2009; PBS&J 2010.

PBS&J 04.21.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED CPSRA RECONFIGURATION [REVISED]

FIGURE II-10

Page II-31, second and third bullets

- Hillside Parks and Open Space within the Project site. The hillside parks and open space include the eastern 'tail' of Bayview Park and other hillside areas below Jamestown Road. ~~The steeper areas will be maintained in a more natural state., while the flatter portion of Bayview Hill may be further developed as a neighborhood-serving park space.~~ The steeper areas and the flatter portion of Bayview Hill would be maintained in a more natural state.
- Yosemite Slough. While not located within the Project site ~~except for the mouth of the Slough, where the proposed bridge would be located~~, the Yosemite Slough is located directly adjacent to the Project site and is planned for restoration by the California State Parks and the California State Parks Foundation. The restoration will focus on providing new wetland habitat and environmental education opportunities. The proposed Yosemite Slough bridge would cross a small portion of the CPSRA on the southern side of the slough and pass along the edge of the eastern boundary of the CPSRA on the north side.

Page II-33, third full paragraph

… The following ecological enhancement measure would be implemented in open space areas outside the CPSRA. At the CPSRA, ecological enhancements would be identified during the CDPR ~~community~~ public planning process and CPSRA general plan update described above and could include the enlisted measures or other measures …

Page II-37, Figure II-12 (Proposed Roadway Improvements) has been revised

[NOTE: The figure has been revised to clarify the two separate proposed projects at the new US-101 interchange. The labels have been revised from US-101/Harney Way Interchange Improvements to Candlestick Point Interchange Improvements/US-101 Auxiliary Lanes, and Geneva Avenue Extension has been changed to proposed Geneva Avenue Extension (pending City of Brisbane approval).]

SOURCE: Fehr & Peers; AECOM, 2010.

PBS&J 04.20.10 02056 | JCS | 10

FIGURE II-12 Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED ROADWAY IMPROVEMENTS [REVISED]

Page II-38, Item 5

5. **Yosemite Slough Bridge.** A new Yosemite Slough bridge would extend Arelious Walker Drive from Candlestick Point to Hunters Point Shipyard. The 81-foot-wide, seven-lane bridge would cross the slough at its narrowest point and would primarily function for transit, bicycle, and pedestrian use. Figure II-12 illustrates the bridge location. The bridge and its approach streets would have two dedicated 11-foot-wide BRT lanes and a separate 12-foot-wide Class I bicycle and pedestrian facility, which would be open at all times. The bridge would also have a 40-foot-wide greenway, which would be converted to four peak direction auto travel lanes on 49ers game days only. Those four lanes would be open on game days to vehicle traffic in the peak direction of travel. The roadway would be planted with grass and would serve as an open space amenity on all non-game days. Two-foot-tall barriers would separate the BRT lanes from the bicycle/pedestrian plaza and the vehicle lanes. The greenway would be designed to function as a stormwater treatment control facility for the auto travel lanes. Runoff from the BRT lanes would also be routed to the greenway and/or to land-based stormwater treatment facilities, in accordance with the City's requirements for stormwater treatment.

Page II-39, first paragraph

The 81-foot-wide span across Yosemite Slough would be approximately 902 feet long with abutments on the north and south ends connecting the bridge to land. Eight piers, with two columns each, would support the bridge. The columns of the three southernmost piers would rest on bedrock. Ten sets of steel piles would be driven to support the columns of the five piers to the north. Section II.F.2 (Site Preparation) provides additional information regarding bridge construction. The bridge footings on either side of Yosemite Slough would require removal of portions of parkland from the CPSRA (red hatched areas). On the north side of the slough, this would result in 0.8 acre, and on the south side of the slough it would be part of 2.6 acres, that would be reconfigured. The bridge footings on the north side of the slough are located at the eastern edge of the park boundary. On the south end of the slough, the area removed for bridge footings would impinge approximately 300 feet or less (270 feet) through the CPSRA. On the south side, the bridge would extend Arelious Walker Drive through a portion of the CPSRA.

Page II-40, Figure II-13 (Proposed Transit Improvements) has been revised

[NOTE: The figure has been revised to delete Phase I Improvements from the legend, and rename Phase II Improvements to Bus Rapid Transit. The labels have been revised from Geneva Avenue Extension to proposed Geneva Avenue Extension (pending City of Brisbane approval).]

SOURCE: Fehr & Peers; AECOM, 2010.

PBS&J 04.09.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED TRANSIT IMPROVEMENTS [REVISED]

FIGURE II-13

Page II-41, Item E

E. **Palou Avenue Transit Preferential Street.** One Muni line (24-Divisadero) would be extended along Palou Avenue to serve Hunters Point Shipyard Transit Center. Transit priority technology would be installed on Palou Avenue including installation of new traffic signals. This would improve transit travel times and reliability on the 24-Divisadero and also the 23-Monterey and ~~54-Felton~~ 44-O'Shaughnessy, which would continue to operate on Palou Avenue ~~but would not be extended into the Project~~.

Page II-50, first full paragraph

It is anticipated that the Project would be constructed over time beginning in ~~2010~~2011, with full build-out by ~~2029~~2031, which represents an approximately ~~19~~20-year construction period. Figure II-16 (Proposed Site Preparation Schedule) illustrates the site preparation sequence that precedes building construction. Figure II-17 (Proposed Building and Parks Construction Schedule) illustrates the building construction sequence.

Page II-50, third full paragraph

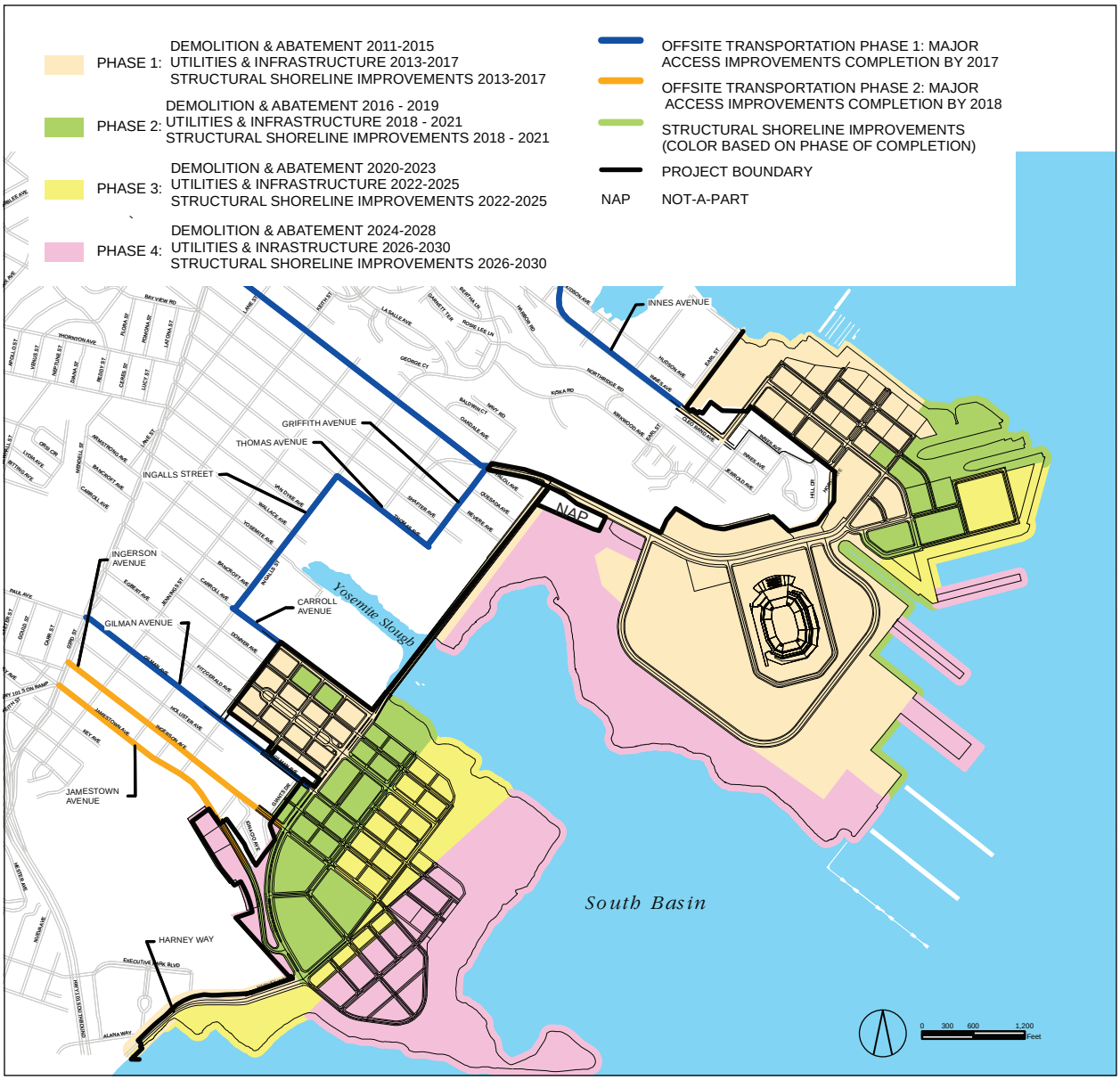
Demolition of existing structures within the Project site would occur from 2011 to ~~2024~~2028 ~~on Candlestick Point and from 2010 through 2016 on HPS Phase II~~. As the majority of development would occur on HPS Phase II during the first phase by ~~2017~~2019, most demolition would initially occur in that area of the Project site. …

Page II-51, Figure II-16 (Proposed Site Preparation Schedule) has been revised

[NOTE: The figure has been revised to indicate that site preparation activities will commence 1 to 2 years later than originally planned.]

Page II-52, Figure II-17 (Proposed Building and Parks Construction Schedule) has been revised

*[NOTE: The figure has been revised to indicate that building construction activities will commence 1 to 2 years later than originally planned. The note * Dates Subject to Change has been added.]*



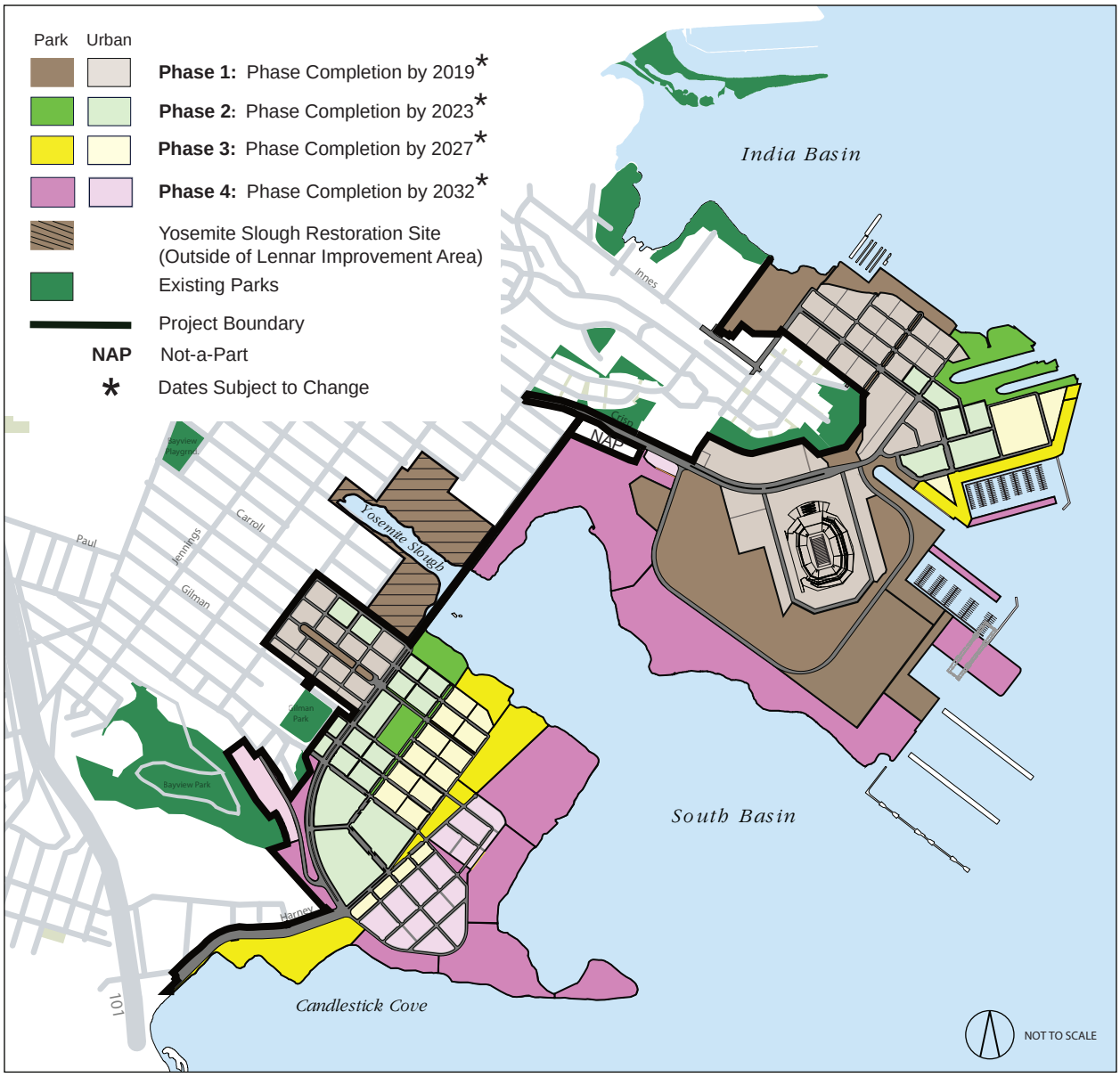
SOURCE: MACTEC, 2010.

PBS&J 04.19.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED SITE PREPARATION SCHEDULE [REVISED]

FIGURE II-16



SOURCE: Lennar Urban, 2010.

PBS&J 04.19.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

FIGURE II-17

PROPOSED BUILDING AND PARKS CONSTRUCTION SCHEDULE [REVISED]

Page II-54, first full paragraph

The estimate of earthwork grading requirements for Candlestick Point was based on a profile along the edge of development, which allows for overland flow and piped storm drainage flow. All earthwork is assumed to be used on site for Project grading and for grading improvements to the State Park land, or is exported to HPS Phase II. Hunters Point Shipyard soil shall not be used for grading adjustments within CPSRA. …

Page II-55, first paragraph

Construction of Yosemite Slough bridge would include: radiological excavations along the boundary of Parcel E to clear the HPS Phase II bridge approach from radiological restrictions; bridge and revetment construction; and construction of the streets leading to the bridge. … The construction of footings and piers would require cofferdams for access to those specific sites. The bridge footings on either side of Yosemite Slough would require removal of portions of parkland from the CPSRA (red hatched areas). On the north side of the slough, this would result in 0.8 acre, and on the south side of the slough it would be part of 2.6 acres, that would be reconfigured. The bridge footings on the north side of the slough are located at the eastern edge of the park boundary. On the south end of the slough, the area removed for bridge footings would impinge approximately 300 feet or less (270 feet) through the CPSRA. On the south side, the bridge would extend Arelious Walker Drive through a portion of the CPSRA. Construction materials would be transported to the construction area from the South bay or by barge from the East bay. …

Page II-55, a new last sentence to the fourth paragraph

… several locations. The creation or expansion of beaches or tidal habitat will be determined during the public general plan process for the CPSRA.

Page II-58, Table II-13 (Summary of Shoreline Improvements at the Project Site) has been revised

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table II-13 Summary of Shoreline Improvements at the Project Site [Revised]

			Proposed Shoreline Improvements										
			Repairs				Modifications						
Parcel or Area	*Location*	*Proposed Use*	*Deck*	*Piles*	*Walls*	*Riprap*	*Remove*	*Remove Portion*	*Slope Top of Wall*	*New Buttress*	*Sandy Beach*	*Tidal Habitat*	*Estimated Change in Shoreline Location (feet)*[d]
…													
	Berth 37 to 42	Wildlife Habitat						X					0
	Natural Edge/Riprap	Grasslands Ecology Park										X	~~-3.0~~+3.0
E2	Natural Edge/Riprap	Grasslands Ecology Park										X	~~-3.0~~+3.0

…

d. These numbers represent an average estimated change in the shoreline at the specified location. A positive number indicates an increase in the shoreline (bay fill); and a negative number indicates a decrease in the shoreline (creation of bay).

…

Page II-78, last paragraph

Building construction at Candlestick Point would coincide with completion of the utilities and roadways for each district. Building construction would begin in the Alice Griffith district ~~followed by Candlestick Center, Candlestick North, and then Candlestick South districts~~. The second major phase of development would construct the Candlestick North district. Development of CP Center District and the Harney Way improvements would occur in Phase 3, and, finally, CP South and major shoreline improvements would be completed in Phase 4. Development in Candlestick Point would begin in 2012 and would conclude in ~~2029~~2031.

Page II-79, Table II-15 (Building Construction Completion Dates) has been revised. For readability, the new data are shown without underline, and deleted numbers are not shown.

[NOTE: This table is included to provide the reader with a comparison of the revised development schedule compared to the original schedule described in the Draft EIR.]

Table II-15 Building Construction Completion Dates [Revised]

Use	Development Area	Completion Year 2019	2023	2027	2032	Subtotal	Total
Residential Units	CP	1,000	1,515	2,505	2,830	7,850	10,500
	HPS	2,160	490	—	—	2,650	
Regional Retail (gsf)	CP	—	635,000	—	—	635,000	635,000
	HPS	—	—	—	—	—	
Neighborhood Retail (gsf)	CP	—	35,000	90,000	—	125,000	250,000
	HPS	84,000	41,000	—	—	125,000	
Office (gsf)	CP	—	150,000	—	—	150,000	150,000
	HPS	—	—	—	—	—	
Hotel (gsf)	CP	—	150,000	—	—	150,000	150,000
	HPS	—	—	—	—	—	
R&D (gsf)	CP	—	—	—	—	—	2,500,000
	HPS	583,000	842,000	1,075,000	—	2,500,000	
Community Services (gsf)	CP	—	50,000	—	—	50,000	100,000
	HPS	38,000	—	—	12,000	50,000	
Performance Venue (gsf/seats)	CP	—	10,000	—	—	10,000	10,000
Stadium (Seats)	HPS	69,000	—	—	—	69,000	69,000

SOURCE: Lennar Urban, 2010.

Page II-79, first paragraph following Table II-15

At Hunters Point Shipyard, new development would begin with the construction of the 49ers stadium, scheduled for completion during the 2014–2017 time period. Hunters Point North residential development and the mixed-use, neighborhood retail and residential development at Hunters Point Village Central District would begin in the first Major Phase ~~during 2011–2015~~ and is planned for

completion by ~~2017~~2023. Build-out of the Shipyard Research and Development Park is planned by ~~2017~~2027. ~~The mixed-use, neighborhood retail and residential development at Hunters Point Village Center district would be completed in 2021.~~

Page II-80, first paragraph

Construction activities in Candlestick Point would occur from ~~2011~~2012 through ~~2028~~2031.[39] Off-site roadway, utility, and shoreline improvements would be constructed ~~during years 2013 through 2021~~ beginning in 2013 and would align with vertical development. The number of construction workers on the site on any given day would vary from a low of ~~10~~70 during the final stages of vertical development to a maximum of ~~180~~328 workers during the peak years of development. The number of truck trips on any given day would vary from a low of ~~4~~ 8 truck trips to a maximum of ~~152~~96 during site preparation at Alice Griffith. The number of on-site equipment would be about ~~60~~68 pieces during the height of construction activity.

Page II-80, second paragraph

Construction activities in HPS Phase II would occur from ~~2010~~2011 through ~~2023~~2031.[40] Off-site roadway, utility, and shoreline improvements would be constructed ~~during years 2011 through 2016~~ beginning in 2013 and would align with vertical development. The number of construction workers on the site on any given day would vary from a low of ~~14~~15 workers during the final stage of ~~shoreline improvements~~ vertical development to a maximum of ~~504~~455 workers during the peak years of development. The number of truck trips on any given day would vary from a low of 4 to 8 trucks trips to a maximum of ~~512~~288 truck trips, primarily during the peak year of grading and infrastructure development. The number of on-site equipment would be about ~~130~~65 pieces during the height of construction activity.

Pages II-80 to II-82, Table II-16 (Major Project Approvals) has been revised

[NOTE: This table has been revised in response to comments and as requested by staff to include additional information on Project approvals.]

Table II-16 Major Project Approvals [Revised]

...

Redevelopment Agency Commission

...

- ~~Approves~~ Reports to the Board of Supervisors on the amendments to Redevelopment Plans

...

- Approves land transfer agreements with Port Commission, State Lands Commission, and California Department of Parks and Recreation (CDPR)

...

Table II-16 Major Project Approvals [Revised]

…

Bay Conservation and Development Commission

- Approves amendments of the Bay Plan and Seaport Plan
- Approves permits for activities within BCDC's jurisdiction, including the proposed Yosemite Slough bridge
- Reviews Project land use plan for federal consistency under the Coastal Zone Management Act for activities not previously authorized in Consistency Determination No. CN 1-99

…

US Army Corps of Engineers

- Approves permit for fill related to the Yosemite Slough bridge, shoreline improvements, and other activities.
- Consults with USFWS or NMFS regarding federally listed species prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to Section 7 of federal ESA
- Consults with NMFS regarding pile-driving and harbor seal and California sea lion prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to *Marine Mammal Protection Act*
- Consults with NMFS regarding modifying designated EFH prior to carrying out its discretionary authority under Section 404 of the CWA, pursuant to the *Magnuson-Stevens Act*

…

Page II-83, last paragraph

~~**Streetscape Plan.** The Streetscape Plan describes street types (e.g., Residential Streets, Commercial Streets, Parkways, Transit Priority Streets), and the pedestrian, bicycle, and transit amenities proposed for each type. Design guidelines for amenities including street furnishings, plantings, lighting, and special pavement treatments at crosswalks would be included.~~

Page II-84, third paragraph

In addition, construction employees would also be needed to construct the Project. The number of construction employees would vary depending upon the phase of construction, but would range from ~~60~~83 workers at the commencement of construction activities to approximately ~~500~~617 workers during ~~2016~~2015, the most labor-intensive phases of construction. …

F.4 Changes to Section III.A (Introduction to the Analysis)

Page III.A-5, first full paragraph

This EIR evaluates the direct, indirect, and cumulative impacts resulting from planning, construction, and operation of the Project, including impacts that occur on site or off site. Since publication of the Draft EIR, the development was revised to begin one to two years later, with the completion of building construction in 2031 (rather than 2029) and full occupancy by 2032. Appendices A1 through A5 provide substantiation that the change in phasing does not alter the conclusions of this EIR.

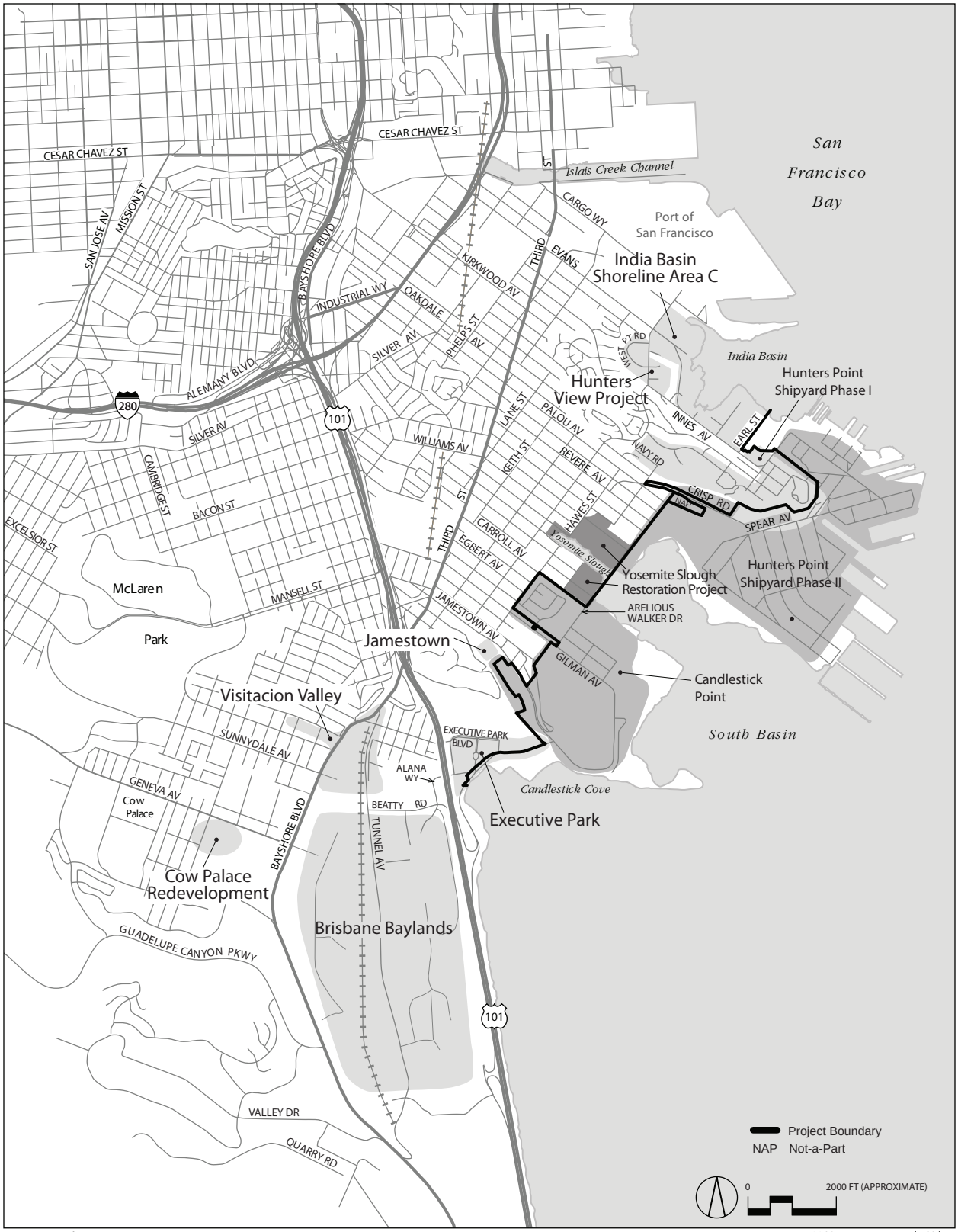
Page III.A-7, beginning with the first paragraph after the bulleted list

- Visitacion Valley/Schlage Lock

A comprehensive list of all related projects included in background growth assumptions for the traffic, air quality, and noise analyses can be found in the Traffic Report, which is included as Appendix D (Transportation Study) to this EIR. For other issue areas, the Yosemite Slough Restoration Project was also included as a related project.

Page III.A-8, Figure III.A-1 (Cumulative Development in the Project Vicinity) has been revised

[NOTE: The figure has been revised to add Yosemite Slough Restoration Project.]



SOURCE: Fehr & Peers, AECOM, 2010.

PBS&J 04.19.10 02056 | JCS | 10

FIGURE III.A-1

Candlestick Point — Hunters Point Shipyard Phase II EIR

CUMULATIVE DEVELOPMENT IN THE PROJECT VICINITY [REVISED]

F.5 Changes to Section III.B (Land Use and Plans)

Page III.B-2, last paragraph

… Other uses in the Baylands include building supply businesses, lumberyards, the Kinder Morgan Energy tank farm, and the Bayshore Sanitary ~~water~~ Sewer pump station. …

Page III.B-3, Figure III.B-1 (Existing Land Use) has been revised

[NOTE: The figure has been revised to switch the label colors between Residential and Commercial/Industrial.]

SOURCE: San Francisco Planning Department; PBS&J, 2010.

PBS&J 04.19.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

FIGURE III.B-1

EXISTING LAND USE [REVISED]

Page III.B-10, first paragraph

Project Consistency: The Project includes both trust consistent and trust inconsistent uses; they will be distributed consistent with the final Trust map approved in Senate Bill 792. A trust exchange agreement will be approved as part of the Project consistent with the final Trust map. Negotiations with the CSLC are ongoing.

Pages III.B-10 and -11, beginning with last partial paragraph

The Facilities Element lists the following types of recreational uses for the park: trails (hiking, jogging, and bicycling), group picnic areas, family picnic areas, group campgrounds, fishing piers, wind surfing facilities, a sand beach, a quiet area in the southeastern point, scenic overlooks, and a cultural program center. Maritime facilities proposed in the CPSRA General Plan include a non-powered boat/wind surfing rental facility; a boating center for boat classes and education; a boat access facility that includes a four-lane launching ramp; a ~~200~~251-space parking area for car-boat trailers; a boat service station; and a ferry landing. A family dinner restaurant and family picnic rest stop are proposed for the Last Port area to the west of Hermit's Cove, off Harney Way.

The facilities and land uses called for in the current CPSRA General Plan have only been partly realized. Current uses in the park include hiking, limited bicycling, day use picnicking, group picnicking, jogging, nature viewing, three sand beaches, undeveloped windsurfing, two piers used by fishermen, and three restroom buildings. The park also includes a park staff/maintenance facility, ~~140~~275 parking spaces for the developed portion of the park and a community garden. However, substantial portions (73 acres) of the park remain undeveloped (refer to Section III.P [Recreation]). Of this, approximately 40 acres of the park are used for parking for football games and other events at Candlestick Park.

Page III.B-12, fourth paragraph

Pursuant to SB 792, no CPSRA General Plan Amendment is required for the reconfiguration of the recreation area. However, before new facilities would be developed, a CPSRA General Plan Amendment would be required to reflect the boundary changes and the proposed new uses that would located on park lands ~~removed from the park~~ following the reconfiguration. The proposed improvements described in Draft EIR Section III.P (Recreation) will be reviewed by the CDPR as an option for the development of CPSRA. …

Page III.B-13, the following paragraph is inserted prior to the last paragraph on the page

The Bay Plan also includes design policies related to waterfront development so as to enhance the visual quality of development around the Bay. Design policies that are applicable to the proposed Project are set forth in Section III.E (Aesthetics). The proposed Project is a high-quality urban development that integrates substantial open space, pedestrian pathways, and shoreline improvements and would redevelop an underutilized, primarily vacant, or deteriorated site. The Bay Plan indicates that "uses such as parking lots and industrial structures, which neither visually complement the Bay nor take advantage of a waterfront location, should be phased out or upgraded by normal market forces." The Project has been designed to preserve view corridors. The Project would connect the existing street grid in an orientation that would allow an uninterrupted view toward the Bay from numerous area streets. Project towers have

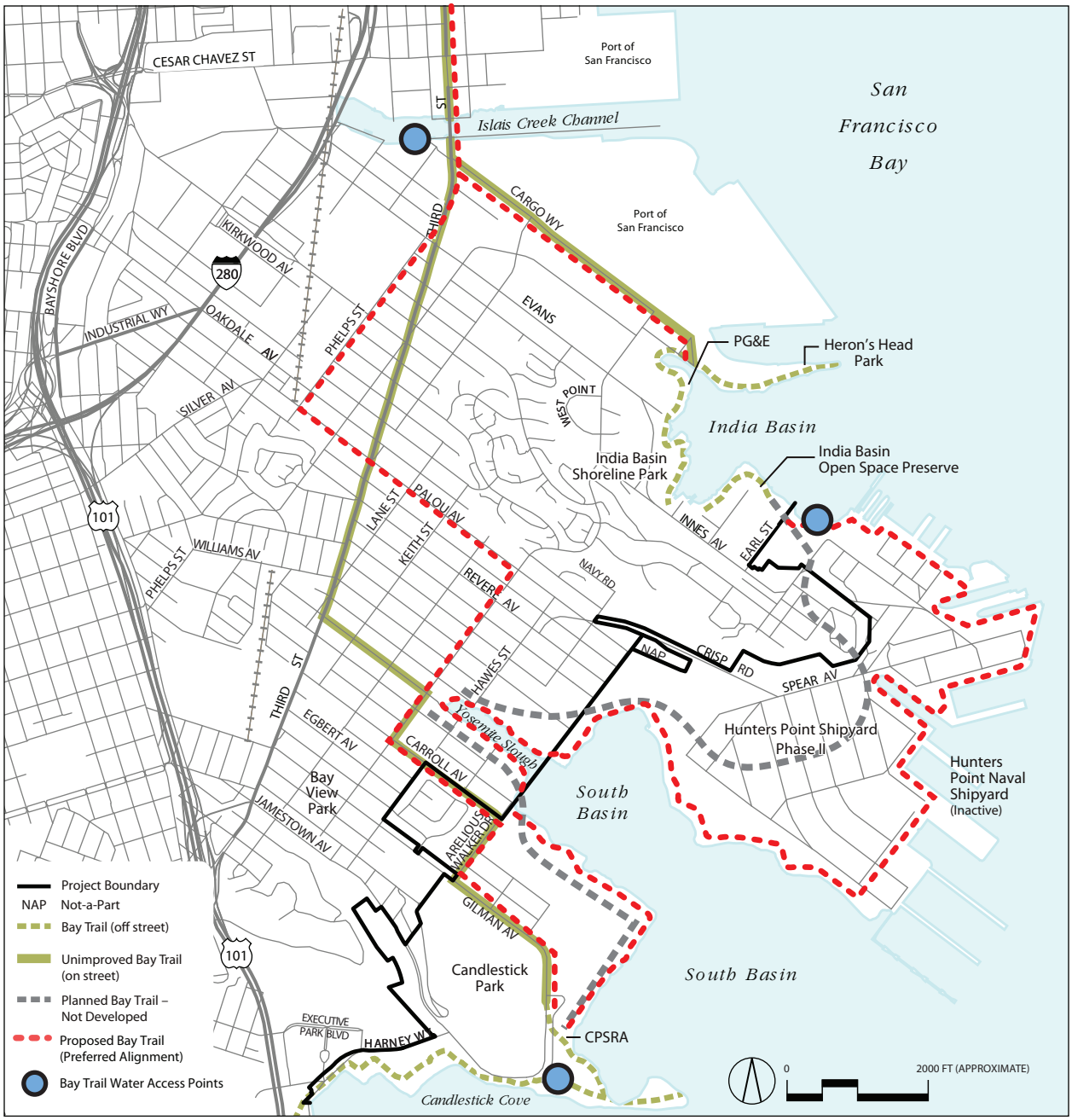
been situated in zones that would allow the provision of view corridors. Numerous open space areas and waterfront pedestrian pathways would provide expansive viewing opportunities as well. Buildings and structures have been designed to be complementary to the surroundings. Parking structures are not proposed for shoreline areas. The proposed bridge would be low in height and would connect two urban areas, relating to the adjacent developed and to-be-redeveloped land uses. The proposed bridge would provide unique viewing opportunities that are not currently available. The bridge would not substantially obstruct views of the Bay or affect the visual dominance of the hills around the Bay. The Project has been developed in conformance with the BCDC's Public Access Design Guidelines. Therefore, the Project would be consistent with the design policies of the Bay Plan.

Page III.B-15, first full paragraph

The Project is consistent with the intent of the Bay Plan as it relates to the Candlestick Point area. The Project would provide park improvements, and on-going funding for park operation and maintenance. The ultimate configuration of improvements to various areas of the CPSRA would be determined by the ~~CPDR~~CDPR but the Project would not preclude a water trail camping site or fishing, windsurfing, hiking and viewing opportunities. The inclusion of the Yosemite Slough bridge would not conflict with the Bay Plan's policy regarding additional bridges over the Bay, which aims to preserve the visual impact of the large expanse of the Bay. Expansive views of the Bay would remain from numerous vantage points, even with inclusion of the bridge over the neck of the slough.

Page III.B-18, Figure III.B-3 (Existing San Francisco Bay Trail Route) has been revised

[NOTE: The figure has been revised to include Bay Area Water Trail access points in the Project vicinity; and to show the Bay Trail in the preferred alignment along the Yosemite Slough shoreline.]



SOURCE: San Francisco Bay Trail Plan; PBS&J, 2010.

PBS&J 04.19.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING SAN FRANCISCO BAY TRAIL PLAN ROUTE [REVISED]

FIGURE III.B-3

Page III.B-33, first paragraph after "Analytic Method"

The analysis compares land use conditions at full build-out of the Project against the existing land use environment, on the ground, as of the date of publication of the NOP. The Project would be built out by the year ~~2029~~2031, with full occupancy occurring in ~~2030~~2032. Changes in land use character at Project build-out are described and assessed according to the significance criteria listed above.

Page III.B-34, second full paragraph

… Pedestrian access to the CPSRA and the San Francisco Bay from surrounding land uses is limited. …

Page III.B-35, new paragraph following second full paragraph

There are five blocks with privately owned parcels on Candlestick Point that the Applicant seeks to acquire for the development, including one on Jamestown Avenue (currently vacant) in the Jamestown District and four contiguous blocks (currently vacant or developed with an RV park) in the Candlestick Point North District. If these private parcels are not acquired by the Applicant, they would be permitted under the BVHP Redevelopment Plan and the Planning Code to develop via an Owner Participation Agreement (OPA) in a manner that is consistent with the BVHP Redevelopment Plan or would be allowed to operate as an existing non-conforming use. For those parcels that are currently developed, or for any of the parcels if they develop via an OPA, that development would be included in the overall total development that would occur on the Project site. The total amount of development would not change; that is, the Applicant's development on the remaining portion of the site plus any development under separate OPAs as envisioned under the Project would result in the same overall development level as proposed by the Applicant.

Page III.B-38, last paragraph

The Project would be inconsistent with the *San Francisco Zoning Code*'s "Public" or "P" designation for Candlestick Point. … Similarly, the zoning inconsistencies related to the widening of Harney Way and the Walker-Crisp road connection do not ~~implicate~~ relate to designations that protect the environment. If the Applicant is unable to acquire any or all of the privately owned parcels on Candlestick Point, the private parcels would be permitted under the BVHP Redevelopment Plan and the Planning Code to develop via an Owner Participation Agreement (OPA) in a manner that is consistent with the BVHP Redevelopment Plan, or would be allowed to operate as an existing non-conforming use. Thus, the Project's inconsistency with the P zoning is not considered a significant environmental impact.

Page III.B-41, first full paragraph

The geographic context for evaluation of cumulative impacts associated with land use changes … including the India Basin Shoreline Plan, the Executive Park project, HPS Phase I, Jamestown, and Hunters View. In addition, the Yosemite Slough Restoration Project, which has been approved and would add approximately 12 acres of wetlands to the tidally influenced area of Yosemite Slough, is considered in this cumulative context. Future conditions would also account for land use changes expected through implementation of the Bayview Hunters Point Redevelopment Plan.

F.6 Changes to Section III.C (Population, Housing, and Employment)

Page III.C-11, first paragraph under "Analytic Method"

The analysis compares the population, housing, and employment that would result from implementation of the Project to existing conditions, which is defined as conditions in 2005. The 2005 data are used to represent baseline conditions because 2005 data are the most current data consistently available for the Project site across all population, employment, and housing indices. Table III.C-6 (Project Housing Units and Population) through Table III.C-8 (Project Construction Employment) provide the projected population, housing, and employment characteristics of the Project. The population, housing, and employment that would result from implementation of the Project are also compared against 2030 projections, either the latest year for which projections have been formulated or the closest year to Project build-out for projections which extend in 5-year increments beyond 2030.

Page III.C-13, Table III.C-8 (Project Construction Employment) has been revised. For readability, the new data are shown without underline, and deleted numbers are not shown.

[NOTE: This table has been updated to reflect the construction employment as a result of the revised development schedule.]

Table III.C-8 Project Construction Employment [Revised]

	Candlestick Point		*HPS Phase II*		*Combined*	
Year	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*	*Max. Number of Daily Workers*	*Avg. Number of Daily Workers*
2011	0	0	95	76	95	76
2012	0	0	83	66	83	66
2013	93	74	130	104	223	178
2014	158	126	205	152	363	278
2015	163	130	455	364	617	494
2016	163	130	446	358	609	488
2017	163	130	278	227	440	357
2018	176	139	280	227	456	366
2019	218	174	253	202	470	376
2020	218	174	243	194	460	368
2021	115	92	143	114	258	206
2022	255	203	189	152	443	355
2023	285	228	149	120	434	348
2024	235	187	60	48	295	235
2025	208	166	56	46	264	212
2026	155	133	123	102	278	235
2027	162	129	73	58	235	187
2028	282	225	38	30	320	255
2029	328	262	20	16	348	278

Table III.C-8 Project Construction Employment [Revised]

	Candlestick Point		HPS Phase II		Combined	
Year	Max. Number of Daily Workers	Avg. Number of Daily Workers	Max. Number of Daily Workers	Avg. Number of Daily Workers	Max. Number of Daily Workers	Avg. Number of Daily Workers
2030	163	130	33	26	195	156
2031	70	56	15	12	85	68

SOURCE: MACTEC, 2010.

a. Construction employment includes on-site construction, off-site roadway improvements, field management, and shoreline improvements.

Page III.C-14, first paragraph after Impact PH-1

There would be direct, but temporary, construction job growth at the Project site as a result of the Project. … Peak construction employment would occur in ~~2016 and 2017~~2029 for Candlestick Point, with an average of ~~144~~262 and a maximum of ~~169~~328 workers on site in ~~2016 and an average of 136 and a maximum of 172 workers on site in 2017~~2029. Peak construction employment for HPS Phase II would occur in 2015~~ and 2016~~. During ~~this time~~2015, an average of ~~275~~364 workers and a maximum of ~~342~~455 construction workers would be employed at HPS Phase II in 2015~~, and an average of 269 and maximum of 335 construction workers during 2016. A maximum of 504 construction workers would be expected to be working at the Project site at any given point~~ during the construction period.

Page III.C-14, last paragraph

As shown in Table III.C-6, the Project would develop approximately 10,500 housing units, of which 7,850 (approximately 75 percent) would be at Candlestick Point. Based on an average household size of 2.3 persons per unit and full occupancy of all units, population at Candlestick Point would be approximately 18,290 residents at full ~~build-out~~ occupancy in ~~2030~~2032. … In total, the population at Candlestick Point would represent approximately 2.0 percent of the citywide population of 916,800 in 2030, while employment would represent 0.5 percent of the 748,100 jobs in 2030.

Page III.C-18, first full paragraph

Direct population growth at HPS Phase II would include the residents and employees who would occupy the new homes and businesses developed at this site. As shown in Table III.C-6, 2,650 housing units (approximately 25 percent of the Project total) would be at HPS Phase II. The population at HPS Phase II would be approximately 6,175 residents at full ~~build-out~~ occupancy in ~~2030~~2032. … In total, the population at HPS Phase II would represent approximately 0.7 percent of the citywide population of 916,800 in 2030, while employment would represent 1.0 percent of the 748,100 jobs in 2030.

Page III.C-24, third full paragraph

Development at the Project site would provide 10,730 permanent jobs by ~~2030~~2032 (along with temporary construction-related jobs). … The Project's contribution of 10,730 permanent jobs would represent 0.3 percent of the anticipated increase in regional employment through 2030 (the closest year to Project build-out for which employment projections have been prepared). …

F.7 Changes to Section III.D (Transportation and Circulation)

Page III.D-4, last paragraph

Bayshore Boulevard is a north/south arterial that generally parallels US-101. Bayshore Boulevard has two to three travel lanes in each direction, separated by a median. …

Page III.D-8, seventh paragraph

Tunnel Avenue is a two-way north/south roadway that extends south of Bayshore Boulevard and merges into Bayshore Boulevard at Old County Road. The roadway has one lane in each direction with sidewalks and unrestricted on-street parking on both sides of the street north of Sierra Point Lumber. On-street parking is prohibited on Tunnel Avenue south of Sierra Point Lumber. Tunnel Avenue provides access to Bayshore Caltrain Station and to the US-101 ramps at Alana/Beatty. Tunnel Avenue is part of Bicycle Route #905.

Page III.D-19, seventh paragraph, fifth line

… At various locations, the Bay Trail consists of paved multi-use paths, dirt trails, and in some cases, bike lanes~~,~~ and sidewalks~~, or city streets signed as bike routes~~. …

Page III.D-27, under "State"

~~There are no state transportation regulations applicable to the Project.~~The San Francisco Bay Plan was prepared by the San Francisco Bay Conservation and Development Commission (BCDC) pursuant to the McAteer-Petris Act of 1965 which established the Commission as a temporary agency to prepare an enforceable plan to guide the future protection and use of San Francisco Bay and its shoreline. The Bay Plan contains the following transportation policies that are relevant to the Project:

- Transportation Policy 1: Because of the continuing vulnerability of the Bay to filling for transportation projects, the Commission should continue to take an active role in Bay Area regional transportation and related land use planning affecting the Bay, particularly to encourage alternative methods of transportation and land use planning efforts that support transit and that do not require fill. The Metropolitan Transportation Commission, the California Department of Transportation, the California Transportation Commission, the Federal Highway Administration, county congestion management agencies and other public and private transportation authorities should avoid planning or funding roads that would require fill in the Bay and certain waterways.
- Transportation Policy 2: If any additional bridge is proposed across the Bay, adequate research and testing should determine whether feasible alternative route, transportation mode or operational improvement could overcome the particular congestion problem without placing an additional route in the Bay and, if not, whether a tunnel beneath the Bay is a feasible alternative.
- Transportation Policy 3: If a route must be located across the Bay or a certain waterway, the following provisions should apply:
    a. The crossing should be placed on a bridge or in a tunnel, not on solid fill.
    b. Bridges should provide adequate clearance for vessels that normally navigate the waterway beneath the bridge.

c. Toll plazas, service yards, or similar facilities should not be located on new fill and should be located far enough from the Bay shoreline to provide adequate space for maximum feasible public access along the shoreline.

d. To reduce the need for future Bay crossings, any new Bay crossing should be designed to move the largest number of travelers possible by employing technology and operations that increase the efficiency and capacity of the infrastructure, accommodating non-motorized transportation and, where feasible, providing public transit facilities.

- Transportation Policy 4: Transportation projects on the Bay shoreline and bridges over the Bay or certain waterways should include pedestrian and bicycle paths that will either be a part of the Bay Trail or connect the Bay Trail with other regional and community trails. Transportation projects should be designed to maintain and enhance visual and physical access to the Bay and along the Bay shoreline.
- Transportation Policy 5: Ferry terminals should be sited at locations that are near navigable channels, would not rapidly fill with sediment and would not significantly impact tidal marshes, tidal flats or other valuable wildlife habitat. Wherever possible, terminals should be located near higher density, mixed-use development served by public transit. Terminal parking facilities should be set back from the shoreline to allow for public access and enjoyment of the Bay.

Page III.D-36, second bullet

- **Geneva Avenue/Harney Way Extension**— … The lead agency for this Project is the City of Brisbane, with the Caltrans Project Study Report (PSR) expected to be completed in ~~early~~ 2010.

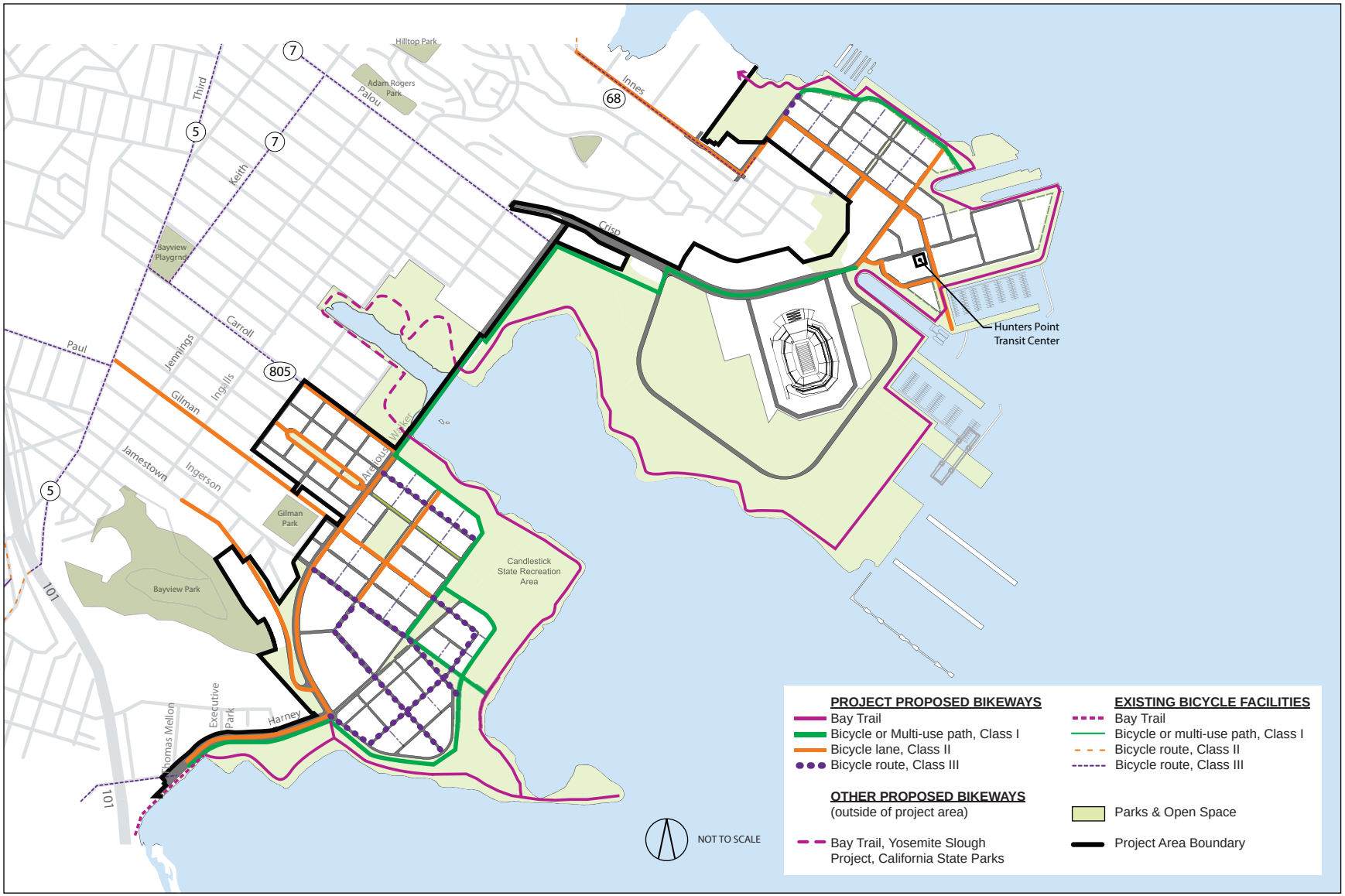
Page III.D-36, third bullet

- **New US-101 Interchange at Geneva/Harney**—In conjunction with the extension of Geneva Avenue east, the existing Harney Way interchange ~~would~~ is proposed to be redesigned as a typical diamond interchange, subject to review and approval by Caltrans. …

  At the time the analysis was completed, ~~T~~the Geneva Avenue/Harney Way crossing of US-101 ~~would~~ was proposed to have six lanes eastbound (three left-turn lanes and three through lanes) and six lanes westbound (three left-turn lanes and three through lanes), for a total of twelve lanes (refer to Appendix L of the Transportation Study). …

Page III.D-51, Figure III.D-10 (Project Bicycle Network and Bay Trail Improvements) has been revised

[NOTE: The figure has been revised to show the improvements to Gilman Avenue are proposed to be a Class III bicycle route rather than a Class II route.]



SOURCE: Fehr & Peers, 2010.

PBS&J 04.16.10 02056 | JCS | 10

FIGURE III.D-10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROJECT BICYCLE NETWORK AND BAY TRAIL IMPROVEMENTS [REVISED]

Page III.D-61, third paragraph

The geographic distribution of spectators was obtained from information provided by the San Francisco 49ers on their season ticket holders. Since the vast majority of football spectators are season ticket holders, the pattern can be expected to be representative of travel patterns by both season, as well as non-season, ticket holders. The information obtained from the 49ers indicates that approximately 40 percent of the season ticket holders reside in the South Bay (including all of San Mateo County), 16 percent in the East Bay, 14 percent within San Francisco, and 10 percent in the North Bay counties. The remaining 20 percent reside in locations outside the Bay Area such as the Central Valley and Sacramento.

Page III.D-66, Table III.D-9 (Additional Muni Transit Vehicle Requirements—2030 Conditions Weekday AM and PM Peak Periods) has been revised

[NOTE: This table has been revised to reflect modifications in transit mitigation measures requested by City/Agency staff.]

Table III.D-9 Additional Muni Transit Vehicle Requirements—2030 Conditions Weekday AM and PM Peak Periods [Revised]

	Project Requirement		2030 No Project Needs	
Route	AM	PM	AM	PM
9-San Bruno	1	1	5	7
23-Monterey	0	0	1	1
24-Divisadero	~~1~~2	~~3~~2	1	0
28L-19th Avenue/Geneva Limited	1	1	1	1
29-Sunset	~~1~~2	~~3~~4	1	0
44-O'Shaughnessy	~~2~~1	~~2~~3	3	4
48-Quintara-24th Street	~~1~~0	~~0~~1	1	1
54-Felton 2	0	1	1	1
T-Third	0	1	2	1
Total	***7***	***~~12~~14***	***16***	***16***

SOURCE: Fehr & Peers

Page III.D-67, first, second, and third paragraphs after Impact TR-1

Build-out of the Project would occur over a 20-year period between ~~2010~~2011 and ~~2029~~2031. Initial construction activities would include demolition of existing structures, utility relocation and site clearance and grading at Hunters Point Shipyard to make the land available for the new stadium. …

Construction of the Project would occur in several phases. The duration of each phase would vary, depending on the type of development (e.g., residential, retail, office) and the amount of building space included in each phase. The majority of development would occur and be occupied by the end of the second phase, which has a scheduled completion date of ~~2021~~2023. The majority of the roadway network improvements would occur by ~~2017~~2019 (Phase I), and most transit improvements would be phased in by ~~2021~~2023 (within Phase I and Phase II). …

During construction of the Project phases, building activities would generate traffic volumes from construction workers, truck deliveries of supplies and construction equipment, and the hauling of soils during Project grading and excavation. The peak phases of construction activities would occur between ~~2012~~2013 and ~~2016~~2018, when grading and infrastructure improvements would be ongoing at both Candlestick Point and Hunters Point Shipyard. During this phase, there would be between ~~50~~130 and ~~180~~460 construction workers that would be on site on a daily basis, and between ~~140~~70 and ~~570~~540 construction truck trips that would travel to and from the site on a daily basis. … Shoreline improvements at both Hunters Point Shipyard and Candlestick Point would peak in ~~2016 and~~ 2017, and would require an additional ~~40~~45 to 50 construction workers on site.

Pages III.D-69 to -70, mitigation measure MM TR-1

MM TR-1 Candlestick Point–Hunters Point Shipyard Phase II Construction Traffic Management Program. …

Preparation of the Construction Management Program shall be the responsibility of the Project Applicant, and shall be reviewed and approved by SFMTA and DPW prior to initiation of construction. The Project Applicant shall update the program prior to approval of development plans for Phase ~~II~~2, Phase ~~III~~3, and Phase ~~IV~~4 of construction to reflect any change to Project development schedule, reflect transportation network changes, to update status of other development construction activities, and to reflect any changes to City requirements.

Pages III.D-79 to -80, Table III.D-12 (Intersection LOS Existing, 2030 No Project and Project Conditions—Sunday PM Peak Hour) has been revised

[NOTE: The changes to Table III.D-12 represent typographical corrections and do not indicate new impacts at any intersection. All of the impacts were correctly reported in the Draft EIR. In particular, these typographical corrections do not indicate a new Project impact at the intersections of Bayshore/Visitacion or Alana/Beatty.]

Table III.D-12 Intersection LOS Existing, 2030 No Project and Project Conditions—Sunday PM Peak Hour [Revised]

		Existing		2030 No Project		2030 Project	
	Intersection	Delay[a]	LOS[b]	Delay	LOS	Delay	LOS
	…						
21	Bayshore Blvd/Bacon St	13	B	~~63/0.57~~17	~~E~~B	~~58/0.70~~31	~~E~~C
22	Bayshore Blvd/Arleta St	12	B	~~17~~56	~~B~~D	~~30~~49	~~C~~D
23	Bayshore Blvd/Leland Ave	24	C	~~54~~41	D	~~49~~38	D
24	Bayshore Blvd/Visitacion Ave	18	B	~~41~~64/0.98	~~D~~E	~~38~~70/1.03	~~D~~E
25	Bayshore Blvd/Sunnydale Ave	15	B	~~64/0.98~~55	~~E~~D	~~70/1.03~~55	~~E~~D
26	Tunnel Ave/Blanken	19	B	~~55~~30	~~D~~C	~~55~~51	D
27	Alana/Beatty (US-101 SB Ramps)[c]	8	A	~~30~~>80/2.04	~~C~~F	~~51~~>80/2.34	~~D~~F
28	Alana/Harney/Mellon (101 NB)[c]	8	A	~~>80/2.04~~54	~~F~~D	>80/~~2.34~~1.36	F
29	Harney Way/Jamestown Ave[d]	9	A	~~54~~22	~~D~~C	~~>80/1.36~~24	~~F~~C
30	Crisp Ave/Palou Ave[d]	7	A	~~22~~37	~~C~~D	~~24~~46	~~C~~D
31	Ingalls St/Thomas Ave[d]	11.1 (sb)	B	~~37~~11.8 (wb)	~~D~~B	~~46~~26	~~D~~C
32	Ingalls St/Carroll Ave[d]	9.9 (wb)	A	~~11.8 (wb)~~9	~~B~~A	~~26~~28	C

Table III.D-12 Intersection LOS Existing, 2030 No Project and Project Conditions—Sunday PM Peak Hour [Revised]

		Existing		2030 No Project		2030 Project	
	Intersection	Delay[a]	LOS[b]	Delay	LOS	Delay	LOS
33	Ingalls St/Egbert Ave	7	A	~~9~~8	A	~~28~~8	~~C~~A
34	Arelious Walker/Gilman Ave[d]	7	A	~~8~~72.5 (eb)	~~A~~F	~~8~~36	~~A~~D
35	Amador St/Cargo Way	8.9 (sb)	A	~~72.5 (eb)~~21	F	~~36~~20	~~D~~B
36	Bayshore Blvd/Cortland Ave	28	C	~~21~~23	C	~~20~~25	~~B~~C
37	Bayshore Blvd/Oakdale Ave	17	B	~~23~~21	C	~~25~~21	C
38	Bayshore/Alemany/Industrial	24	C	~~21~~40	C	~~21~~52	~~C~~D
39	Bayshore/US-101 nb off to Cesar	35	D	~~40~~25	D	~~52~~26	~~D~~C
40	Bayshore Blvd/Silver Ave	25	C	~~25~~19	C	26	C
	…						

Page III.D-84, mitigation measure MM TR-6

MM TR-6 …

Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts, including freeway segment impacts, shall be formulated through the current interjurisdictional Bi-County Transportation Study effort being led by the SFCTA or its equivalent. The Project Applicant shall contribute its fair share to the Harney Interchange Project.

Page III.D-86, mitigation measure MM TR-8

MM TR-8 …

Mitigations and associated fair-share funding measures for cumulative regional roadway system impacts, including freeway segment impacts, shall be formulated through the current interjurisdictional Bi-County Transportation Study effort being led by the SFCTA or its equivalent. The Project Applicant shall contribute its fair share to the Geneva Avenue Extension Project.

Pages III.D-92 to -94, Table III.D-14 (Ramp Junction LOS Existing, 2030 No Project and 2030 Project Conditions) has been revised

[NOTE: These revisions correct typographical errors to make the table consistent with the Draft EIR impact analysis and determination. No impact conclusions have changed.]

Table III.D-14 Ramp Junction LOS Existing, 2030 No Project and 2030 Project Conditions [Revised]

	Existing		*2030 No Project*		*2030 Project*		*~~Project-Var. 1 (R&D)~~*		*~~Project-Var. 2 (Housing)~~*	
Ramp Location	*LOS*	*Density[a] (pc/mi/ln)*	*LOS*	*Density (pc/mi/ln)*	*LOS*	*Density (pc/mi/ln)*	*~~LOS~~*	*~~Density (pc/mi/ln)~~*	*~~LOS~~*	*~~Density (pc/mi/ln)~~*
WEEKDAY ~~P~~AM PEAK HOUR										
US-101										
NB on from Sierra Point Parkway	C	27.0	C	27.5	D	30.4				
…										
SB on from Pennsylvania/25th	C	22.9	E	36.3	E	36.1				
~~SUN~~WEEKDAY PM PEAK HOUR										
US-101										
NB on from Sierra Point Parkway	D	29.7	F	>45	F	>45				
…										
SB on from Pennsylvania/25th	E	38.5	F	>45	F	>45				
SUNDAY PM PEAK HOUR										
US-101										
NB on from Sierra Point Parkway	B	19.3	~~A~~C	~~9.1~~22.5	~~A~~C	~~9.8~~25.3				
…										
SB on from Pennsylvania/25th	C	26.4	D	29.5	D	29.5				

SOURCE Fehr and Peers, 2009

a. Density of vehicles per segment. pc/mi/ln = passenger cars per mile per lane.

b. Cumulative 2030 No Project conditions assume the reconstruction of the Harney Way interchange, as well as the extension of Geneva Avenue from Bayshore Boulevard east to the reconstructed interchange.

c. Ramp junctions at LOS E or LOS F conditions highlighted in bold

Page III.D-97, Impact TR-16

Impact TR-16 **Implementation of the Project would increase traffic volumes ~~and~~, but would not ~~contribute~~ make a considerable contribution to cumulative traffic volumes on Harney Way. (Less than Significant with Mitigation)** ***[Criterion D.a]***

Page III.D-98, mitigation measure MM TR-16

MM TR-16 Widen Harney Way as shown in Figure 5 in the Transportation Study. *Prior to issuance of the grading permit for Development Phase ~~II~~1 of the Project, the Project Applicant shall widen Harney Way as shown in Figure 5 in the Transportation Study.* …

Page III.D-105, mitigation measure MM TR-21.1

MM TR-21.1 Maintain the proposed headways of the 9-San Bruno. *To address Project impacts to the 9-San Bruno, prior to issuance of a grading permit for Development Phase ~~I~~1, the Project Applicant in cooperation with SFMTA* …

Pages III.D-105 to -106, last partial paragraph

The ~~three~~ treatments for Impact TR-21 contained in mitigation measure MM TR-21.1 combined could reduce AM peak hour travel times by 4 minutes and 6 seconds in the northbound direction, and 6 minutes 18 seconds in the southbound direction. During the PM peak hour, these treatments could reduce PM peak hour travel times by 4 minutes 6 seconds in the northbound direction and by 8 minutes in the southbound direction. With the combination of mitigation measures, transit travel times in each direction and during each peak period would be ~~no greater than for~~ similar to 2030 No Project conditions. …

Page III.D-106, last paragraph

Project-related transit delays due to congestion on study area roadways and passenger boarding delays … Overall, the Project-related congestion would add up to ~~7~~9 minutes of delay per bus during peak hours. The provision of transit-only lanes on Palou Avenue would reduce travel time delays and impacts on these lines.

Pages III.D-107 to -108, mitigation measure MM TR-22.1

MM TR-22.1 Maintain the proposed headways of the 23-Monterey, 24-Divisidero, and the 44-O'Shaughnessy. *To address Project impacts to the 23-Monterey, 24-Divisidero and the 44-O'Shaughnessy, prior to issuance of a grading permit for Development Phase ~~I~~1, the Project Applicant in cooperation with SFMTA shall conduct a study to evaluate the effectiveness and feasibility of the following improvements which could reduce Project impacts on transit operations along the Palou Avenue corridor, generally between Griffith Street and Newhall Street. The study shall create a monitoring program to determine the implementation extent and schedule (as identified below) to maintain the proposed headways of the 23-Monterey, 24-Divisidero, and the 44-O'Shaughnessy.*

- …

- *As an alternative to the bulleted measures above, narrow the existing sidewalks on Palou … Treatment for transit-only lanes can range from striping to physical elevation changes to protect right-of-way from mixed-flow traffic. Subsequent to publication of the Draft EIR, SFMTA and the Project Applicant conducted an evaluation of this alternative measure and determined that it is a feasible and viable alternative to the four bulleted items above.*

…

Page III.D-108, beginning with second bullet

- **24-Divisadero**—~~Combined, these measures (either the first three bullets combined or the fourth alone)~~ Mitigation measure MM TR-22.1 could reduce AM peak hour travel times by 4 minutes and ~~45~~43 seconds in the westbound direction and by 4 minutes in the eastbound direction. During the PM peak hour travel times could be reduced by 8 minutes and ~~15~~16 seconds in the westbound direction and by 4 minutes in the eastbound direction. In each direction ~~and~~ during the PM peak hour, the transit travel times with the Project might ~~not be~~ remain greater than the 2030 No Project travel times by more than ½ headway, and therefore additional transit vehicles ~~would not~~ may still be required.
- **44-O'Shaughnessy**—The improvements along Palou Avenue ~~between Keith Street and Newhall Street~~ would improve the travel times on the 44-O'Shaughnessy by 4 minutes and 26 seconds in the westbound direction and by 4 minutes in the eastbound direction in the AM peak hour. During the PM peak hour, travel times could be reduced by 4 minutes and 43 seconds in the westbound direction and 4 minutes in the eastbound direction. In each direction during the PM peak hour, the transit travel times with the Project might remain ~~such that in each direction and peak hour, the transit travel times with the Project would not be~~ greater than the 2030 No Project travel times by more than ½ headway, and therefore additional vehicles ~~would not~~ may still be required to maintain the proposed headways.

With the ~~combination of~~ treatments identified in mitigation measure MM TR-22.1, transit travel times in ~~each~~ some directions and during ~~each~~ some peak periods would be no greater than for 2030 No Project conditions. …

Pages III.D-109 to -110, beginning with second full paragraph

Project-related transit delays due to congestion on study area roadways and passenger loading delays associated with increased ridership would result in significant impacts on the operation of the 29-Sunset. Within the study area, the 29-Sunset would experience substantial delays at key intersections along Gilman Avenue and Paul Avenue, particularly at Third Street and Bayshore Boulevard. Overall, the Project-related congestion would add up to ~~17~~21 minutes of delay per bus during peak hours. The provision of transit-only lanes on Gilman Avenue and Paul Avenue would reduce travel time delays and impacts on this line.

MM TR-23.1 Maintain the proposed headways of the 29-Sunset. *To address Project impacts to the 29-Sunset, prior to issuance of a grading permit for Development Phase ~~I~~1, the Project Applicant in cooperation with SFMTA …*

- …
- *As an alternative to the two bulleted measures above, ~~narrow the existing sidewalks~~ convert one of the travel lanes in each direction on Gilman Avenue from Third Street to Griffith Street ~~(four~~*

~~blocks) from 15 feet to 12 feet in width. The resulting 12-foot-wide sidewalks would be consistent with the Better Streets Plan guidelines. The reduction in sidewalk width~~to transit-only. This would allow for the provision of a 7-foot-wide on-street parking lane, an 11-foot-wide transit-only lane, and a 10-foot-wide mixed-flow lane in each direction on Gilman Avenue. This would preserve on-street parking along the corridor and provide four-block transit-only lanes on Gilman Avenue between Griffith Street and Third Street. Treatment for transit-only lanes can range from striping to physical elevation changes to protect right-of-way from mixed-flow traffic. Subsequent to publication of the Draft EIR, SFMTA and the Project Applicant conducted an evaluation of this alternative measure and determined that is a feasible and viable alternative to the two bulleted items above.

- …

Pages III.D-110 to -111, last full paragraph

Implementation of transit-only lanes identified in mitigation measure MM TR-23.1 could reduce AM peak hour transit travel times by ~~4~~5 minutes and ~~48~~17 seconds in the westbound direction and 5 minutes and ~~10~~59 seconds in the eastbound direction. During the PM peak, these measures would reduce transit travel times by ~~5~~6 minutes and ~~20~~25 seconds in the westbound direction and by ~~2~~1 minute~~s~~ in the eastbound direction. With the ~~combination of~~ mitigation measures, transit travel times ~~in each direction and during each peak period~~ would ~~be no~~ remain greater than for 2030 No Project conditions. ~~However,~~ ~~b~~Because 2030 No Project conditions constitute adverse delays to transit service, cumulative adverse delays to transit service would occur even with these Project transit mitigation measures. Because adverse transit delays affecting this line are generated by adverse traffic congestion to which the Project has a considerable contribution, the Project also has a cumulatively considerable contribution to adverse transit delays.

~~Implementation of mitigation measure MM TR-23.1, on the other hand, would allow operation of headways as described under MM TR-17. However, g~~Given the congestion along the Gilman Avenue corridor, implementation of MM TR-23.2 alone, without MM TR-23.1, might not be sufficient to reduce the impact to less-than-significant levels.

Page III.D-111, third full paragraph

Project-related transit delays due to congestion on study area roadways and passenger loading delays … up to ~~3~~8 minutes of delay per bus during peak hours. The provision of transit-only lanes on Evans Avenue and other transit-priority treatments would reduce travel time delays and impacts on this line.

Page III.D-111, mitigation measure MM TR-24.1

MM TR-24.1 Maintain the proposed headways of the 48-Quintara-24th Street. *To address Project impacts to the 48-Quintara-24th Street, prior to issuance of a grading permit for Development Phase ~~1~~1, the Project Applicant in cooperation with SFMTA …*

Page III.D-112, first full paragraph

Provision of the transit-only lane on Evans Avenue, as identified in mitigation measure MM TR-24.1 would reduce AM peak hour transit travel times by ~~80~~104 seconds in the westbound direction, and by

~~2~~3 minutes and ~~33~~50 seconds in the eastbound direction. During the PM peak hour transit travel times would be reduced by ~~1 minute and 40~~58 seconds in the westbound direction, and by ~~2~~13 minutes and ~~15~~31 seconds in the eastbound direction. With the combination of mitigation measures, transit travel times in each direction and during each peak period would be no more than ½ headway greater than for 2030 No Project conditions. …

Page III.D-113, last paragraph

Project-related transit delays due to congestion on Third Street and passenger loading delays associated … within an exclusive right-of-way. Overall, the Project-related congestion would add up to 3 minutes of delay per ~~bus~~ vehicle during peak hours. Providing exclusive right-of-way for the T-Third in the segment between Thomas Avenue and Kirkwood Avenue would reduce travel time delays for the T-Third.

Page III.D-114, mitigation measure MM TR26.1

MM TR-26.1 Maintain the proposed headways of the T-Third. *To address Project impacts to the T-Third, prior to issuance of a grading permit for Development Phase ~~1~~1, the Project Applicant in cooperation with SFMTA …*

- …

Implementation of the ~~intersection~~ roadway reconfiguration shall be the responsibility of SFMTA, and shall be implemented when the results of the study described above indicate transit improvements are necessary. The Project Applicant shall fully fund the costs of implementing the transit priority improvements prior to approval of subsequent phases of development.

Page III.D-114, third full paragraph

Implementation of mitigation measure MM TR-26.1~~2~~ would also exacerbate automobile LOS F conditions at intersections along Third Street that were identified as significant and unavoidable impacts. …

Page III.D-117, fifth full paragraph

Outside of the Project site, street improvements would include striping of bicycle lanes on Innes Avenue, ~~Gilman Avenue,~~ Jamestown Avenue and on Harney Way. As noted in Section III.D.3 (Regulatory Framework), the *San Francisco Bicycle Plan* includes a near-term project on Innes Avenue (Bicycle Route #68) between Donahue Street and Hunters Point Boulevard; however, a preferred option was not identified in the Final EIR for the Bicycle Plan. The Project proposes to provide a bicycle lane in both directions on Innes Avenue between Donahue Street and Hunters Point Boulevard, which would require removal of on-street parking on the south side of Innes Avenue between Earl Street and Hunters Point Boulevard. The Project proposal is consistent with Option 1 in the Bicycle Plan, however, it would not preclude implementation of Option 2 (sharrows added to the existing Class III facility), if that option were determined to be preferable by SFMTA. The Project would improve Gilman Avenue, and a Class III bicycle route with sharrow designations would be provided between Arelious Walker Drive and Third Street.

Page III.D-118, mitigation measure MM TR-32

MM TR-32 Determine the feasibility of relocating Bicycle Routes #70 and #170. *Prior to issuance of the grading permit for Development Phase ~~I~~1, the Project Applicant shall fund a study to determine the feasibility of relocating Bicycle Routes #70 and #170. The study of the bicycle route relocation, necessary environmental clearance documentation, and implementation shall be the responsibility of SFMTA. ~~Since the feasibility of the relocation of the routes is uncertain at this time, the Project impact on bicycle circulation on Palou Avenue would remain significant and unavoidable.~~*

Page III.D-128, Figure III.D-13 (Stadium Game Day Traffic Control Plan) has been revised

[NOTE: The figure was revised to correct the disconnected transit-only lane on the figure.]

Page III.D-129, Figure III.D-14 (Stadium Game Day Ingress Routes) has been revised

[NOTE: The figure was revised to correct the second western "Muni service" on the figure.]

SOURCE: Fehr & Peers, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE III.D-13

Candlestick Point — Hunters Point Shipyard Phase II EIR

STADIUM GAME DAY TRAFFIC CONTROL PLAN [REVISED]

SOURCE: Fehr & Peers, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE III.D-14

Candlestick Point — Hunters Point Shipyard Phase II EIR

STADIUM GAME DAY INGRESS ROUTES [REVISED]

Page III.D-136, mitigation measure MM TR-39

MM TR-39 Transit Service during Game Days. *SFMTA shall increase frequency …*

Page III.D-144, mitigation measure MM TR-46

MM TR-46 Traffic Control Officers. *The stadium operator shall develop …*

Page III.D-145, mitigation measure MM TR-47

MM TR-47 Transit Service during Secondary Events. *SFMTA shall increase …*

Page III.D-146, mitigation measure MM TR-49

Impact TR-49 **With implementation of the Project, pedestrian circulation would not be impeded during ~~arena~~ secondary events at the stadium. (Less than Significant) *[Criterion D.j]***

Pages III.D-148 and -149, mitigation measure MM TR-51

MM TR-51 Transportation Management Plan (TMP). *The arena operator shall develop a Transportation Management Plan (TMP) for coordinating with representatives of SFMTA and the SF Police Department for deploying traffic control officers in the Project vicinity to increase efficiency of pre- and post- event traffic, and for developing incentives to increase transit ridership to the arena. If Variants 1, 2, or 2A are implemented the TMP shall provide for SFMTA to increase the frequency on regularly scheduled Muni routes (primarily the CPX-Candlestick Express) serving the arena area prior to large events at the arena and for the arena operator to provide additional shuttle service to key regional transit destinations, such as BART, Caltrain, and the T-Third light-rail route. Implementation of this mitigation measure would likely speed vehicle entrance and exit to the arena site as well as maintain orderly traffic and transit operations and reduce intrusion onto minor routes to and from the arena. Traffic control officers would facilitate traffic flow at the intersection of Harney/Jamestown which would operate at LOS F conditions with a sell-out arena event. The final arena TMP shall be approved by SFMTA. Preparation of the TMP Plan shall be fully funded by the arena operator, and shall be completed in time for implementation on opening day of the arena.*

Page III.D-149, Impact TR-52: Transit Impacts from Arena Uses

Impact TR-52 **With implementation of the Project, sell-out weekday evening events at the arena could ~~be accommodated within the~~ impact existing and proposed transit service. (Significant and Unavoidable with Mitigation) *[Criteria D.f, D.i]***

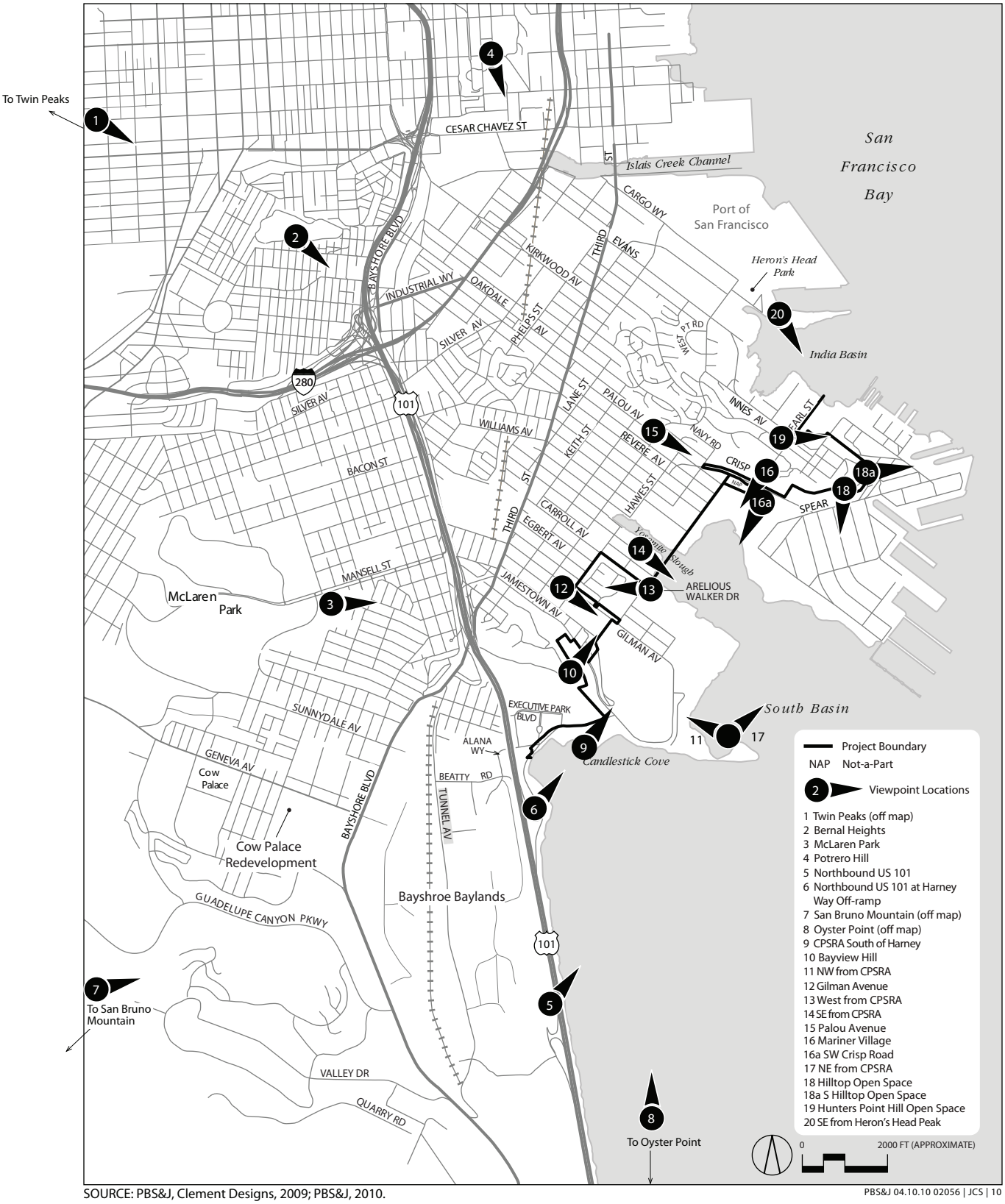
F.8 Changes to Section III.E (Aesthetics)

Page III.E-13, "Yosemite Slough"

The Yosemite Slough is a slow-moving tidal channel that winds through a marsh between Hunters Point and Candlestick Point. Except for the mouth of the slough across which the bridge would be constructed, t~~T~~he Slough is not within the Project site. …

Page III.E-23, Figure III.E-10 (Viewpoint Locations) has been revised

[NOTE: The figure has been revised to add viewpoint locations #16a and #18a.]



SOURCE: PBS&J, Clement Designs, 2009; PBS&J, 2010.

PBS&J 04.10.10 02056 | JCS | 10

FIGURE III.E-10

Candlestick Point — Hunters Point Shipyard Phase II EIR

VIEWPOINT LOCATIONS [REVISED]

Page III.E-47, under "San Francisco Bay Plan" after Policy 4

Policy 6 Additional bridges over the Bay should be avoided, to the extent possible, to preserve the visual impact of the large expanse of the Bay. The design of new crossings deemed necessary should relate to others nearby and should be located between promontories or other land forms that naturally suggest themselves as connections reaching across the Bay (but without destroying the obvious character of the promontory). New or remodeled bridges across the Bay should be designed to permit maximum viewing of the Bay and its surroundings by both motorist and pedestrians. Guardrails and bridge supports should be designed with views in mind.

Page III.E-50, first paragraph after Impact AE-1

Construction activities would occur throughout the 702-acre Project site over the ~~19~~20-year ~~build-out~~ construction period of the Project (ending in ~~2029~~2031). During construction, four basic types of activities would be expected, and some activities could occur simultaneously.

Page III.E-51, second paragraph after Impact AE-2

Although these activities would take place primarily on site, these visual impacts could affect surrounding land uses. … Although the Project would be constructed through the year ~~2029~~2031, construction activity would not occur all at once and would be phased, as described Chapter II. …

Page III.E-58, first full paragraph

The Yosemite Slough bridge would change the appearance of a portion of the ~~S~~slough, with the addition of a bridge structure and roadway approaches (refer to Figure III.E-8). The bridge would replace some views of open water as seen from nearby locations. The bridge would contain "green" auto lanes, with plantings in the middle providing a green boardwalk. The bridge would be low profile and integrated into the open space on either side of the ~~S~~slough, and would contain piers and lookout points for a pedestrian viewing experience. Yosemite Slough would continue as a waterway bordered by open space opening from a narrow channel to the west to the wider South Basin to the east and would remain a scenic resource on the site. The Project would complete the Bay Trail along the waterfront, make shoreline improvements, and provide substantial areas of parks and open space that would complement the slough restoration. The Project's proposed roadway and bridge through an otherwise entirely recreational open space area would have some adverse impact on the aesthetic experience, when compared to a natural open space area with no roadway or bridge running through it. The introduction of a roadway and bridge, together with activity on and use of those features, would adversely affect the natural feel of this portion of the park. Nevertheless, the EIR does not consider the proposed roadway and bridge to result in a significant adverse impact on the proposed improved recreation area for a variety of reasons. The slough is presently, and would continue to be, located within an urban environment, bordered in part by developed lots and roads. Hence, even without the proposed roadway and bridge, park users would be aware of and in close proximity to the roads and developed areas bordering the park. While the proposed road and bridge would cut through the open space in one location, the majority of the restored slough

area would remain unaffected and available for its intended use. In addition, the proposed road and bridge would provide some benefits to the restored park in terms of access and new vantage points for views. Overall, the bridge would not substantially damage a resource that contributes to a scenic public setting.

Page III.E-59, first partial paragraph on page

… reducing erosion, including marsh plantings where appropriate, and removing debris. These improvements would represent a beneficial impact of the development, improving the overall visual character of the shoreline. The Project would complete the Bay Trail along the waterfront and provide substantial areas of parks and open space that would complement the slough restoration. While the Yosemite Slough bridge would alter the visual character of the slough by placing a structure across the neck of the slough, this change would not be substantially adverse. The bridge would be designed to be low in height and blend as much as possible into the environment through the use of openwork, materials, and color. The Project's proposed roadway and bridge through an otherwise entirely recreational open space area would have some adverse impact on the aesthetic experience, when compared to a natural open space area with no roadway or bridge running through it. The introduction of a roadway and bridge, together with activity on and use of those features, would adversely affect the natural feel of this portion of the park. Nevertheless, the EIR does not consider the proposed roadway and bridge to result in a significant adverse impact on the proposed improved recreation area for a variety of reasons. The slough is presently, and would continue to be, located within an urban environment, bordered in part by developed lots and roads. Hence, even without the proposed roadway and bridge, park users would be aware of and in close proximity to the roads and developed areas bordering the park. While the proposed road and bridge would cut through the open space in one location, the majority of the restored slough area would remain unaffected and available for its intended use. In addition, the proposed road and bridge would provide some benefits to the restored park in terms of access and new vantage points for views. Therefore, development at the HPS Phase II site would not have significant adverse impacts on scenic resources or other features that contribute to a scenic public setting, and the impact would be less than significant. No mitigation is required.

Page III.E-59, first paragraph after Impact AE-5

As shown by the various photographs and simulations and the discussions provided in Impact AE-5(a) and Impact AE-5b, above, development of the Project would not damage or remove any identified scenic resources that contribute to a scenic public setting. The Project would complete the Bay Trail along the waterfront and provide substantial areas of parks and open space. While the Yosemite Slough bridge would alter the visual character of the slough by placing a structure across the neck of the slough, this change would not be substantially adverse. The bridge would be designed to be low in height and blend as much as possible into the environment through the use of openwork, materials, and color. The change would not be considered adverse, as the bridge would be part of an overall urban setting on either side of the slough. The Project's impact would be less than significant. No mitigation is required.

Page III.E-64, third full paragraph

The Project would alter the scenic nature of the Project site in that it would create a dense urbanized setting where one does not currently exist. On the north side, the bridge would cross the extreme eastern edge of the CPSRA area and would cross a small portion of the CPSRA on the south side. The bridge would be designed to integrate with the environment to the maximum extent feasible through openwork, materials, and color, in addition to being designed as a low structure. While the bridge would insert a structure into an improved open space area, it would connect two urbanized areas immediately adjacent. Taking into consideration the context of the entire site, not just the slough, the bridge would not be an element that is substantially out of character or scale with surrounding development. ~~However~~Therefore, this change in character would not represent a degradation of scenic quality. …

Page III.E-68, between the second and third paragraphs, the following paragraph is inserted

The Project would alter the scenic nature of the Project site in that it would create a dense urbanized setting where one does not currently exist. On the north side, the bridge would cross the extreme eastern edge of the CPSRA area and would cross a small portion of the CPSRA on the south side. The bridge would be designed to integrate with the environment to the maximum extent feasible through openwork, materials, and color, in addition to being designed as a low structure. While the bridge would insert a structure into an improved open space area, it would connect two urbanized areas immediately adjacent. Taking into consideration the context of the entire site, not just the slough, the bridge would not be an element that is out of character or scale with surrounding development. Therefore, this change in character would not represent a substantial degradation of scenic quality.

Page III.E-69, first paragraph after Impact AE-6

As shown by the various photographs and simulations and the accompanying discussions, above, … The Project would provide extensive areas of open space integrated with new development and existing open space that would enhance the positive features of Bayview Hunters Point, with its immediate proximity to the shoreline, and would not substantially obstruct views of the Bay, the East Bay hills, and the San Bruno Mountains from adjacent neighborhoods. On the north side, the bridge would cross the extreme eastern edge of the CPSRA area and would cross a small portion of the CPSRA on the south side. The bridge would be designed to integrate with the environment to the maximum extent feasible through openwork, materials, and color, in addition to being designed as a low structure. While the bridge would insert a structure into an improved open space area, it would connect two urbanized areas immediately adjacent. Taking into consideration the context of the entire site, not just the slough, the bridge would not be an element that is substantially out of character or scale with surrounding development. Although the Project would replace the existing conditions …

Page III.E-71, third paragraph

Area lighting would illuminate larger areas that are well-traveled so as to promote way-finding and provide for a safe environment. … this increase in ambient light would be consistent with the urban character and associated ambient lighting of the City as a whole. Because the Project site is located immediately adjacent to a developed urban area, existing views of the night sky are diminished as is typical in all urban areas. Nighttime lighting would not affect users of the Yosemite Slough/CPSRA, as

the CPSRA is closed after dark. Therefore, ~~and~~ the light and glare as a result of the Project would not substantially interfere with these currently limited views.

Page III.E-72, mitigation measure MM AE-7a.3

MM AE-7a.3 Lighting Plan. *The ~~Project Applicant~~ Developer shall prepare a lighting plan for each sub-phase of the Project and submit it ~~for review and approval~~ to the ~~San Francisco Police Department and the~~ Agency prior to ~~the issuance~~ approval of ~~building permits~~ a sub-phase. Outdoor lighting shall maintain a minimum required illumination, as determined appropriate by the ~~San Francisco Police Department and the Planning Department,~~ Agency for all parking and pedestrian areas. In addition, the plan shall include details such as beam spreads and/or photometric calculation, location and type of fixtures, exterior colors, details on foundations, and arrangement of exterior lighting such that it does not create glare, hazardous interference on adjacent streets, or properties or result in spill light that would adversely impact sensitive receptors in the project area.*

Page III.E-74, first partial paragraph

… off from the maximum light intensity levels on the playing field. Field lighting would only be required for large events during evening hours … the lighting would not spill over or directly impact residences in the neighborhoods west and northwest of the HPS Phase II site or the residences within the Project itself. Users of the Yosemite Slough/CPSRA would not be affected by nighttime lighting, as the CPSRA is closed after dark.

Pages III.E-74 to III.E-75, beginning with last paragraph

Information on lighting effects for the San Francisco Giants Ballpark … Light levels from the stadium at other locations, such as Mariner Village, approximately 1,250 feet away, and the proposed HPS Phase I development along Crisp Road, and residential development within HPS Phase II, each approximately 1,500 feet or more away, also would not be substantial. As noted, users of the Yosemite Slough/CPSRA would not be affected by stadium lighting, as the CPSRA is closed after dark. Nonetheless, …

Page III.E-76, last paragraph

The geographic context for an analysis of construction impacts is the same limited geographic area as the Project, as visual construction impacts are generally site-specific. The past and present development in the City is described in the Setting section of this chapter, representing the baseline conditions for evaluation of cumulative impacts. Reasonably foreseeable future development includes existing development at Candlestick Point and Hunters Point, extending generally to the east of US-101 between Candlestick Cove and India Basin, which includes Executive Park, as well as the Yosemite Slough Restoration Project, which has been approved and will restore tidal wetlands in a 34-acre parcel of the CPSRA.

Page III.E-77, first full paragraph

Construction impacts on aesthetics are site-specific, as construction activities are temporary. Therefore, the geographic context for an analysis of cumulative construction impacts to aesthetics would be limited to projects in the immediate vicinity of the Project that could be seen together with the Project, assuming that construction activities were to be concurrent. These projects would include the Yosemite Slough

Restoration Project, Executive Park, and HPS Phase I, which have been approved and/or are under construction.

Pages III.E-77 through III.E-78, beginning with last paragraph

The geographic context for an analysis of cumulative impacts on scenic vistas is the area covered by the BVHP Redevelopment Plan, the HPS Redevelopment Plan, and the BVHP Area Plan (of the City's General Plan), as development in these Plan areas could affect the same scenic vistas analyzed for the Project as identified in Figure III.E-11 through Figure III.E-18. … Reasonably foreseeable future development includes ~~existing~~ development at Candlestick Point and Hunters Point, extending generally to the east of US-101 between Candlestick Cove and India Basin, which includes the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters Point Shipyard Phase I, Hunters View, and India Basin Shoreline Area C.

The areas described by these plans contain a mixture of land uses, including open space, residential, commercial, and industrial. The past and present …

…

Overall, development of the Project would not substantially block publicly accessible views of the Bay or other scenic areas. The Project would provide a continuation of the existing street grid, thereby maintaining existing view corridors to the Bay and East Bay hills. The Project would also provide new parks and open space facilities. Public access areas (City and State parks) would provide views from the Project site toward the East Bay and the Bay. The Yosemite Slough Restoration Project would restore tidal wetlands in a 34-acre parcel of the CPSRA immediately adjacent to the Project site and would include continuation of the Bay Trail and viewpoints/interpretative signage. The bridge component of the Project would place a low bridge structure across the neck of the slough that would partially obstruct a scenic view from the slough toward the Bay from some vantage points. Views of the Bay and the remainder of the slough would be retained from numerous other vantage points, including along the shoreline, from the view corridors within the Project site, the CPSRA, and the proposed bridge itself. The Project would improve access to the entire area, allowing a greater number of people to take advantage of the scenic resources at CPSRA and the slough. The General Plan Urban Design Element … the Project's incremental contribution would not be cumulatively considerable, as the Project would not result in a~~n~~ substantial adverse impact on any scenic vista. Therefore, the Project's cumulative impact would be less than significant.

Pages III.E-78 to III.E-79, beginning with last paragraph

The geographic context for an analysis of cumulative impacts on scenic resources is the area covered by the BVHP Redevelopment Plan, the HPS Redevelopment Plan, and the BVHP Area Plan (of the City's General Plan), as development in these Plan areas could affect the same scenic vistas analyzed for the Project as identified in Figure III.E-11 through Figure III.E-18. The past and present development in the City is described in the Setting section of this chapter, representing the baseline conditions for evaluation of cumulative impacts. Reasonably foreseeable future development includes ~~existing~~ the Yosemite Slough Restoration Project and development at Candlestick Point and Hunters Point, extending generally to the

east of US-101 between Candlestick Cove and India Basin, which includes Executive Park, Jamestown, Hunters Point Shipyard Phase I, Hunters View, and India Basin Shoreline Area C.

Damage to scenic resources would occur if a project would directly affect environmental features, such as topographic features, landscaping, or a built landmark, that contribute to a scenic public setting. There are no identified built landmarks, topographic features, or landscaping that contributes to a scenic public setting in the Plan area except for Double Rock, Bayview Hill, Hunters Point Hill, the Re-gunning crane, CPSRA, and the Yosemite Slough. … Overall, the bridge would not substantially damage a resource that contributes to a scenic public setting. On completion of the Yosemite Slough Restoration Project, publicly held views from the proposed bridge would include the improved slough area, as well as the Bay, and provide additional viewing opportunities that would not exist without the Project. The Project would retain structures …

Pages III.E-79 to III.E-80, beginning with last paragraph

The geographic context for an analysis of cumulative impacts on visual character … Reasonably foreseeable future development includes ~~existing~~ development under the Yosemite Slough Restoration Project and at Candlestick Point and Hunters Point, extending generally to the east of US-101 between Candlestick Cove and India Basin, which includes Executive Park, Jamestown, Hunters Point Shipyard Phase I, Hunters View, and India Basin Shoreline Area C.

Page III.E-80, last paragraph

The proposed shoreline improvements would improve the aesthetic quality of the shoreline along the Project frontage, reducing erosion, including marsh plantings where appropriate, and removing debris. These improvements would complement the improvements to the tidal wetlands planned under the Yosemite Slough Restoration Project to provide expanded open space opportunities, including recreational trails linked to other regional trails and wildlife viewing. These improvements would represent a beneficial impact of the development, improving the overall visual character of the shoreline.

Page III.E-81, third paragraph

The geographic context for an analysis of cumulative impacts on light and glare … Reasonably foreseeable future development includes ~~existing~~ development under the Yosemite Slough Restoration Project and at Candlestick Point and Hunters Point, extending generally to the east of US-101 between Candlestick Cove and India Basin, which includes Executive Park, Jamestown, Hunters Point Shipyard Phase I, Hunters View, and India Basin Shoreline Area C.

F.9 Changes to Section III.F (Shadow)

Page III.F-5, fourth full paragraph

In addition, shadow effects would be significant if they would affect, in an adverse manner, the use of any park ~~of~~ or open space under the jurisdiction of the SFRPD, or significantly detract from the usability of other existing publicly accessible open space.

Page III.F-8, first full paragraph

For parks and open space that are not subject to the review requirements of *Planning Code* Section 295, only ~~provides~~ a qualitative assessment of shadow effects is provided, to determine whether enjoyment of the park or public space by users would be substantially and adversely affected by shadow effects. …

Page III.F-43, first and fourth paragraphs

The geographic context for an analysis of cumulative new shadow impacts on outdoor recreation facilities or other public space is limited to the immediate Project site and vicinity. … Reasonably foreseeable future development in this geographic area includes approved or under construction development as part of the Yosemite Slough Restoration Project, at Hunters Point Phase I, proposed development at Executive Park, and future development at India Basin Shoreline Area C. …

…

The shadow analysis has determined that the extent and duration of new shadow cast by the Project on public open space would not substantially affect outdoor recreation facilities or other public facilities, including the newly restored Yosemite Slough when that project is completed. The analysis did not identify potential cumulative shadow effects from other potential development. …

F.10 Changes to Section III.G (Wind)

Page III.G-7, mitigation measure MM W-1a

MM W-1a Building Design Wind Analysis. *Prior to design approval of Project buildings, ~~if recommended by Agency staff~~ for high-rise structures above 100 feet, the Project Applicant shall retain a qualified wind consultant to provide a wind review to determine if the exposure, massing, and orientation of the building would result in wind impacts that could exceed the threshold of 26-mph-equivalent wind speed for a single hour during the year. …*

F.11 Changes to Section III.H (Air Quality)

Page III.H-1, second paragraph

The analyses includes an (1) evaluation of criteria air pollutant mass emissions including emissions by construction workers and equipment (refer to Appendix H~~1~~2 [Construction Workers and Equipment]) using methodology provided in Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines; (2) operational emissions from project-related and mobile sources; and (3) ambient carbon monoxide concentration from mobile sources (refer to Appendix H~~1~~2 [Air Quality Model Input/Output]).[168,169] …

[169] BAAQMD. 2009. California Environmental Quality Act, Draft Air Quality Guidelines. September & ~~October~~ November Drafts.

Page III.H-7, Table III.H-2 (San Francisco Bay Area Air Basin and San Francisco County Criteria Pollutant Emissions Inventory and Projections, 2008 [Tons/Day—Annual Average]) has been revised

[NOTE: Table III.H-2 has been revised to reflect the amount of criteria pollutants that were emitted from mobile sources, rather than exclusively on-road motor vehicle sources.]

Table III.H-2 San Francisco Bay Area Air Basin and San Francisco County Criteria Pollutant Emissions Inventory and Projections, 2008 (Tons/Day—Annual Average) [Revised]

	CO	ROG	NO_X	SO_X	PM_{10}	$PM_{2.5}$
SFBAAB						
2008 Estimated						
Total Emissions	1,748	378	448	62	212	81
~~On-Road Motor Vehicle~~Mobile Source Emissions	1,542	183	381	15	20	16
San Francisco						
2008 Estimated						
Total Emissions	148	34	79	15	17	7.5
~~On-Road Motor Vehicle~~Mobile Source Emissions	142	18	74	15	4.6	4.1

SOURCE: California ARB, Almanac Emission Projection Data, http://www.arb.ca.gov/app/emsinv/emssumcat.php (accessed October 2009).

Natural source are excluded from this inventory.

Page III.H-8, first paragraph

The BAAQMD operates many air quality monitoring stations throughout the Bay Area. While the monitoring network is designed to measure air quality on a regional level, the locations of the monitors may not capture variations in air quality conditions on the sub-regional level. The closest monitoring station to the Project operated by the BAAQMD is the San Francisco-Arkansas Street monitoring station, which is located approximately three miles to the north of the Project on Potrero Hill. ….

The Bayview Community Air Monitoring Project (BayCAMP) was a joint project conducted by the San Francisco Department of the Environment, the California ARB, and the BAAQMD to measure air pollutants (i.e., criteria pollutants and air toxics) for a one-year period in the Bayview Hunters Point community and compare them to measurements collected at Arkansas Street in San Francisco and the Cities of San Jose and Fremont.[173a] Measurements were collected from mid-2004 to mid-2005 from a monitoring station located at the Earl P. Mills Community Center on Whitney Young Circle. Criteria pollutants measured in the Bayview-Hunters Point neighborhood were below federal and state standards and similar to or less than those collected in at other locations, with the exception of $PM_{2.5}$ and ozone. Peak ozone concentration (0.096 ppm) in the Bayview-Hunters Point neighborhood were slightly above state standards but were comparable to the other sites. The maximum 24-hour average $PM_{2.5}$ concentration (~50 $\mu g/m^3$) was comparable to the other sites, but exceeded the federal standard. Conversely, the annual average $PM_{2.5}$ (10.3 $\mu g/m^3$) concentration was well below the federal and state standards and was much lower than the concentrations reported for the other sites.

In 2005 and 2006, air quality monitoring associated with the San Francisco Electric Reliability Project[173b] was conducted to compare the BAAQMD air quality monitoring data, as noted above, to several community stations located in the Potrero Hill and Bayview Hunters Point neighborhoods. This study involved measuring annual average concentrations of PM_{10} and $PM_{2.5}$ at five locations including Arkansas Street, the Southeast Community Center, the Muni Maintenance Yard, Potrero Recreation Center, and Malcolm X Academy. The measured annual average PM_{10} concentrations at these five locations ranged from 16.9 to 20 $\mu g/m^3$, with the minimum and maximum measurements reported at the Potrero Recreation Center and Muni Maintenance Yard, respectively. The measured annual average $PM_{2.5}$ concentrations ranged from 7.6 to 9.3 $\mu g/m^3$, with the minimum and maximum measurements reported at the Potrero Recreation Center and Southeast Community Center, respectively.

Toxic Air Contaminants and $PM_{2.5}$

TACs are a regulatory designation that includes a diverse group of air pollutants that can adversely affect human health. …

[173a] Sierra Research, Inc. 2006. *State of the Air* In *Bayview/Hunters Point, Results of the Bayview Community Air Motoring Project (BayCAMP)*. November.
[173b] Rajiv Bhatia and Thomas Rivard. 2008. Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review.

Page III.H-10, new text following first paragraph

Fine Particulate Matter ($PM_{2.5}$)

Though $PM_{2.5}$ is a criteria pollutant, as discussed above, its human health impacts are also of concern as these particles can deposit deep in the lungs and can contain substances that are particularly harmful to human health. Extended exposure to particulate matter can reduce lung function, aggravate respiratory and cardiovascular disease, increase mortality rate and reduce lung function growth in children. Motor vehicles are currently responsible for about half of the particulates in the SFBAAB and wood burning in fireplaces and stoves is another large source.[178a] Many scientific studies link fine particulate matter and traffic-related air pollution to respiratory illness. California ARB has established that $PM_{2.5}$ is associated with dose-dependent adverse health effects below existing federal and state air quality standards and in a 2008 study that a 10 percent increase in $PM_{2.5}$ concentrations increased the non-injury mortality by 10 percent.[178b]

[178a] BAAQMD. 2009. *Draft California Environmental Quality Act, Air Quality Guidelines*. December.
[178b] BAAQMD. 2009. *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. December 7.

Pages III.H-11 to -12, Table III.H-4 (Ambient Concentrations of Carcinogenic TACs in the Bay Area Air Basin) and the following text have been revised

[NOTE: Table III.H-4 has been revised to add footnote "a" and to further clarify footnote "b" with respect to cancer risk estimates.]

Table III.H-4 Ambient Concentrations of Carcinogenic TACs in the Bay Area Air Basin [Revised]

Compound	Concentration[a] (ppb)	Concentration[a] (µg/m³)	Unit Risk (per µg/m³)	Cancer Risk*[b] (Chances in one million)
1,3-Butadiene	0.09	0.21	1.7×10^{-4}	36.0
Benzene	0.40	1.30	2.9×10^{-5}	37.7
Carbon tetrachloride	0.11	0.70	4.2×10^{-5}	29.1
Formaldehyde	2.18	2.72	6.0×10^{-6}	16.3
Acetaldehyde	0.72	1.32	2.7×10^{-6}	3.6
Perchloroethylene	0.03	0.18	5.9×10^{-6}	1.1
Methylene chloride	0.36	1.27	1.0×10^{-6}	1.3
Methyl tert-butyl ether (MTBE)	0.53	1.95	2.6×10^{-7}	0.5
Chloroform	0.02	0.12	5.3×10^{-6}	0.6
Trichloroethylene	0.02	0.12	2.0×10^{-6}	0.2
Particulate TACs				
Chromium (hexavalent)	0.10	1.00×10^{-4}	1.5×10^{-1}	14.4
Dioxin	0.000025	2.50×10^{-8}	38	1.0
Nickel	3.30	3.30×10^{-3}	2.6×10^{-4}	0.8
Polycyclic aromatic hydrocarbons (PAHs)	0.47	4.70×10^{-4}	1.1×10^{-3}	0.5
Lead	7.80	7.8×10^{-3}	1.2×10^{-5}	0.1
Total for all TACs (excluding DPM)				***143***

SOURCE: BAAQMD, Toxic Air Contaminants 2003 Annual Report, August 2007.

ppb = parts per billion; µg/m³ = micrograms per cubic meter.

*a. The concentration used in the risk calculation is the mean of all daily samples taken for the BAAQMD monitoring network in 2003; however, for some compounds the concentration represents data collected at a subset of the stations in the network. See the BAAQMD Toxic Air Contaminants 2003 Annual Report (issued August 2007) for more details.

b. Cancer risks are calculated for the inhalation pathway using the Unit Risk Factors adopted by OEHHA for the Air Toxics Hot Spots Program, and assuming 70-year continuous exposure. While this risk estimate is representative of the average measured concentrations in urban areas of the Air District, this value does not reflect the potential spatial variation of TAC emissions and/or exposure. Localized TAC "hot spots" can occur.

Cancer risks were also estimated in the Bayview Hunters Point neighborhood as part of the monitoring efforts in the BayCAMP project (Sierra Research, Inc. 2006). The reported cancer risks from TACs based on the monitoring results were estimated to be 219 in one million. However, the authors of the report noted that "more than half of the measured risk (113 in a million out of 219 in a million) is due to acrylonitrile.[178c] However, this estimate is probably not very accurate because most of the measurements were below the limit of detection." This means that the risk estimates were calculated using the high detection limit, not measured concentrations. As explained by the authors, "most of the estimated risk comes from this assumed (not measured) concentration." Thus, "the estimated risk would be 106 in a

million from the remaining compounds," which is lower than the cancer risk estimates reported for the Bay Area Basin in Table III.H-4.

[178c] "Acrylonitrile is primarily used in the manufacture of acrylic and modacrylic fibers, which may be used in products such as apparel and carpets. Acrylonitrile may be released to the ambient air during its manufacture and use." The source of acrylonitrile detected is not known as there are no permitted sources. http://www.epa.gov/ttn/atw/hlthef/acryloni.html.

Page III.H-13, last paragraph

The *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides California ARB recommendations for the siting of new sensitive land uses (i.e., residences, schools, daycare centers, playgrounds, and medical facilities) near recognized major sources of TACs (e.g., freeways, large warehouses/distribution centers, rail yards, etc.), as shown in Table III.H-4a (Recommendations on Siting New Sensitive Land Uses Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities [from CARB 2005]).

Table III.H-4a Recommendations on Siting New Sensitive Land Uses Such As Residences, Schools, Daycare Centers, Playgrounds, or Medical Facilities (from CARB 2005) [New]

Source Category	*Advisory Recommendations*
Freeways and High-Traffic Roads	■ Avoid siting new sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles/day, or rural roads with 50,000 vehicles/day. ■ Avoid siting new sensitive land uses within 1,000 feet of a distribution center (that accommodates more than 100 trucks per day, more than 40 trucks with operating transport refrigeration units (TRUs) per day, or where TRU unit operations exceed 300 hours per week). ■ Take into account the configuration of existing distribution centers and avoid locating residences and other new sensitive land uses near entry and exit points.
Rail Yards	■ Avoid siting new sensitive land uses within 1,000 feet of a major service and maintenance rail yard. Within one mile of a rail yard, consider possible siting limitations and mitigation approaches.
Ports	■ Avoid siting of new sensitive land uses immediately downwind of ports in the most heavily impacted zones. Consult local air districts or the ARB on the status of pending analyses of health risks.
Refineries	■ Avoid siting new sensitive land uses immediately downwind of petroleum refineries. Consult with local air districts and other local agencies to determine an appropriate separation. ■ Chrome Platers: Avoid siting new sensitive land uses within 1,000 feet of a chrome plater.
Dry Cleaners Using Perchloroethylene	■ Avoid siting new sensitive land uses within 300 feet of any dry cleaning operation. For operations with two or more machines, provide 500 feet. For operations with 3 or more machines, consult with the local air district. ■ Do not site new sensitive land uses in the same building with perc dry cleaning operations.
Gasoline Dispensing Facilities	■ Avoid siting new sensitive land uses within 300 feet of a large gas station (defined as a facility with a throughput of 3.6 million gallons per year or greater). A 50-foot separation is recommended for typical gas dispensing facilities.

These recommendations are advisory. Land use agencies have to balance other considerations, including housing and transportation needs, economic development priorities, and other quality-of-life issues.

Page III.H-14, first paragraph

The BAAQMD is the primary agency responsible for ~~comprehensive~~ air pollution control in the SFBAAB. To that end, the BAAQMD works directly with the Association of Bay Area Governments

(ABAG), the Metropolitan Transportation Commission (MTC), and local governments and cooperates actively with all federal and state government agencies. The BAAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

The BAAQMD is directly responsible for reducing emissions from stationary (area and point) sources and for assuring that state controls on mobile sources are effectively implemented, although BAAQMD has no direct authority to regulate mobile source emissions. It has responded to these requirements by preparing a series of Ozone Attainment Plans and Clean Air Plans that comply with the federal CAA and the CCAA to accommodate growth, reduce the pollutant levels in the SFBAAB, meet NAAQS and CAAQS, and minimize the fiscal impact that pollution control measures have on the local economy. …

Page III.H-15, first full paragraph

As of the date of this ~~Draft~~ Final EIR, the BAAQMD is in the process of revising their CEQA guidelines and ~~expects the draft to be approved by their~~ is currently planning for the Board of Directors to consider the draft ~~by the end of 2009~~in June 2010. ~~On October 7, 2009~~In December 2009, the BAAQMD released ~~a~~ its most recent draft table of Staff-Recommended CEQA Thresholds of Significance which indicates a number of modifications to existing guidelines, including changes to the maximum daily emissions thresholds for criteria pollutants emissions from operational sources as well as requirements for the quantification of criteria pollutant and TAC emissions from construction activities and comparison to mass emission or risk thresholds, respectively. As these draft guidelines have not been adopted by the BAAQMD's Board of Directors, the Project is not subject to the draft requirements; however, a brief analysis of these proposed guidelines in relation to the Project emissions is included at the end of the impact analysis.

Page III.H-15, following last bullet

- …
- Link the positive effects of energy conservation and waste management to emission reductions
- Exercise air quality modeling in building design for sensitive land uses, such as residential developments that are located near the sources of pollution such as freeways and industries

Page III.H-16, second paragraph

As explained earlier, exposure to $PM_{2.5}$ can result in adverse health effects. SFDPH has developed a strategy for addressing exposures in the siting of new residential buildings.[179a] ~~The~~ *San Francisco Health Code* Article 38 requires an air quality assessment to evaluate the concentration of $PM_{2.5}$ from local roadway traffic sources that may impact ~~a~~new residential development containing 10 or more dwelling units on a site. If the air quality assessment indicates that the estimated concentration of $PM_{2.5}$ at the site attributable to all roadway vehicle emissions within 500 feet (approximately 150 meters) of the site would be greater than 0.2 $\mu g/m^3$ (micrograms per cubic meter), Section 3807 requires development on the site to be designed or relocated to avoid exposure greater than 0.2 $\mu g/m^3$, or a ventilation system to be installed that would be capable of removing 80 percent of ambient $PM_{2.5}$ from habitable areas of the residential units. An Article 38 analysis done for the Project area identified three locations along Arelious Walker between Harney Way and Carroll Avenue, within 50 to 100 feet from the roadway, where total

$PM_{2.5}$ roadway concentrations would be expected to exceed 0.2 $\mu g/m^3$ assuming 2030 traffic conditions.[179b] Residential structures planned in these locations will be required to comply with Article 38 provisions, which could include redesign or setback of structures to avoid residential exposure or installation of a ventilation system in new residential units, all of which would reduce exposures below the 0.2 $\mu g/m^3$ level.

[179a] San Francisco Department of Public Health. 2008. *Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review*. May 6.
[179b] ENVIRON, Community Hazards and San Francisco Health Code Article 38 Analyses, May 2010 (also contained in Appendix H4 of the EIR).

Page III.H-17, first bullet

- 80 pounds per day (ppd) or 15 tons per year (tpy) of ROG~~;~~

Page III.H-18, second paragraph

BAAQMD does not currently recommend a threshold of significance for determining impacts associated with ~~PM_{25}. The San Francisco Department of Public Health (SFDPH) is concerned that individuals who live in the proximity of heavily travelled roads or freeways could incur adverse health effects as a result of exposure to vehicle emissions. To minimize contributions to health impacts associated with locating new residential projects near roadway "hot spots," the SFDPH developed a strategy to assess and mitigate air pollution at these locations.[183] Their strategy is based on the use of an annual average threshold concentration of $PM_{2.5}$ (0.2 $\mu g/m^3$) within a 150-meter zone (about 500 feet) of a new project as a means of assessing the potential for concern.[184] The threshold concentration of $PM_{2.5}$ is meant to serve as a health-protective "proxy" or surrogate for pollutant exposures from vehicles, i.e., $PM_{2.5}$ is not the only pollutant of concern.[185] The $PM_{2.5}$ threshold serves as a concentration meant to protect the health of residents from all vehicle-associated emissions from a project.[186]~~localized exposures to $PM_{2.5}$, but is addressing this issue in its draft CEQA guidelines. California ARB also has not established a health-protective threshold for $PM_{2.5}$. In the absence of an agency-recommended health-based $PM_{2.5}$ standard, annual average exposures from roadway vehicles within a 150-meter buffer of a sensitive receptor below an action level (0.2 $\mu g/m^3$) identified by SFDPH[186a] were considered less than significant for CEQA purposes. The rationale provided by SFDPH for the 0.2 $\mu g/m^3$ action level included studies suggesting that "a change in ambient concentrations of $PM_{2.5}$ by 0.2 $\mu g/m^3$, independent of other vehicle pollutants would result in significant forecasted health impacts" (2008).

The 0.2 $\mu g/m^3$ identified level is in accord with proposed CEQA guidelines developed by BAAQMD for $PM_{2.5}$.[186b] According to BAAQMD, "emissions from a new source or emissions affecting a new receptor would be considered significant where ground-level concentrations of $PM_{2.5}$ from any source would result in an average annual increase greater than 0.3 $\mu g/m^3$."[186c] This determination is based on the lower range of a US EPA proposed Significant Impact Level (SIL) for stationary sources, which is interpreted by the US EPA as the level of ambient impact that is considered to represent a "significant contribution" to regional nonattainment. The BAAQMD goes on to indicate that the US EPA did not design this threshold for addressing community risks and hazards, but it was designed to protect human public health at a regional level by helping an area to maintain the NAAQS. The BAAQMD determined this SIL to be a reasonable goal at the local scale and, therefore, a useful reference for comparison. The

BAAQMD states that this proposed threshold (0.3 $\mu g/m^3$) is consistent with the SFDPH threshold of 0.2 $\mu g/m^3$. The BAAQMD reached that conclusion based on an ARB report that determined an increase in mortality from a 0.3 $\mu g/m^3$ increment of $PM_{2.5}$ was consistent with the estimated increase in mortality assumed by SFDPH in identifying the 0.2 $\mu g/m^3$ increment. BAAQMD further states that "On balance, the Air District estimates that the SFDPH threshold and the [District proposed threshold of 0.3 $\mu g/m^3$], in combination with the cumulative threshold for $PM_{2.5}$, will afford similar levels of health protection." BAAQMD is recommending a cumulative threshold for $PM_{2.5}$ of 0.8 $\mu g/m^3$, which is the mid-range US EPA proposed SIL.

~~183 San Francisco Department of Public Health (SFDPH). 2008. Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review. May 6.~~
~~184 Ibid.~~
~~185 Ibid.~~
~~186 Ibid.~~
186a San Francisco Department of Public Health. 2008. *Assessment and Mitigation of Air Pollutant Health Effects from Intra-urban Roadways: Guidance for Land Use Planning and Environmental Review*. May 6.
186b BAAQMD. 2009. *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. December 7.
186c BAAQMD. 2009. *California Environmental Quality Act Guidelines Update: Proposed Thresholds of Significance*. December 7. page 43.

Page III.H-19, fourth paragraph

The Project, at full build-out (2032~~9~~), would also generate 78,109 daily external motor vehicle trips. …

Page III.H-21, third full paragraph

Since the HRAs for DPM or TACs bound to soil-PM_{10} emitted during construction activities were completed, changes were made to the Project Description including the addition of roadway improvements on Ingerson and Jamestown Avenues, ~~compaction of~~change in the Candlestick Point construction schedule (completion in ~~2026~~2031), and slight changes to the Candlestick Point phasing boundaries. These changes to the Project Description were found not to change the HRA conclusions significantly, as documented in a technical memorandum included in Appendix H3, Attachment VI.

Page III.H-21, fourth full paragraph

… regarding this assessment can be found in Appendix H3, Attachment III.[193]

193 ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, ~~September 28, 2009~~ May 4, 2010. See Appendix H3.

Pages III.H-21 to A-22, last bullet

- In order to approximate the maximum potential number of facilities with TAC emitting sources, the area designated for proposed R&D development would be divided into one-acre plots, which is generally consistent with the minimum size of a parcel based on the expected land uses within the R&D parcels.

Page III.H-22, third paragraph

~~The potential health impacts from traffic-related $PM_{2.5}$~~ Although not required as part of the criteria pollutant analysis, the incremental increase in the concentration of vehicular emissions of $PM_{2.5}$ associated with the Project that would occur along selected roadways were ~~evaluated by comparing predicted concentrations of $PM_{2.5}$~~ compared to the ~~SFDPH $PM_{2.5}$ threshold of~~ 0.2 $\mu g/m^3$~~. The analysis of $PM_{2.5}$ emissions from Project-related traffic was consistent with methodologies recommended by SFDPH~~ identified action level. The details of the HRA for $PM_{2.5}$ can be found in Appendix H3, Attachment IV.[194]

~~[194] ENVIRON, Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan, Appendix IV, September 28, 2009.~~

Pages III.H-22 to -23, last partial paragraph

The concentration of $PM_{2.5}$ from vehicular emissions was characterized by developing exposure point concentrations at residential receptors surrounding the thoroughfares and roadways evaluated: Third Street; Innes Avenue/Hunters Point Boulevard/Evans Avenue; Palou Avenue; Gilman Avenue/Paul Avenue; Jamestown Avenue; Ingerson Avenue; and Harney Way. Those thoroughfares would connect the Project and major arterials to US-101 or downtown San Francisco. In addition, Innes Avenue/Hunters Point Boulevard/Evans Avenue and Harney Way were identified as streets with ~~substantial~~ truck traffic and thus would be expected to yield more $PM_{2.5}$ compared to other roads. Palou Avenue and Gilman Avenue/Paul Avenue were evaluated quantitatively as there are residences in the vicinity of these roads where individuals may incur exposure to $PM_{2.5}$, while Jamestown and Ingerson Avenues were evaluated in a semi-quantitative manner as they are immediately adjacent to residences; however, have much lower expected Project-related vehicle traffic than Pal~~a~~ou and Gilman/Paul.

Annual average airborne concentrations of $PM_{2.5}$ attributable to Project-related traffic emissions were estimated by applying a Gaussian air dispersion model, CAL3QHCR, which has been approved by the US EPA and California ARB for use in the environmental documentation of transportation projects. Both free flowing traffic and queuing at intersections were evaluated.

Page III.H-24, second full paragraph

As described earlier, an HRA[199] evaluated potential human health effects due to exposure to DPM from heavy equipment exhaust that may be emitted during Project-related construction activities including abatement, demolition, grading, excavation, and foundation and structure construction. … :

- Construction equipment used for the Project ~~will~~ would utilize a phased-in emission control technology in advance of a regulatory requirement such that 50 percent of the fleet will meet US EPA Tier ~~4 engine~~2 standards outfitted with California ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) during ~~2010 and 2011~~ the first two years of construction activities, increasing to 75 percent of the fleet in ~~2012~~ the third year and 100 percent of the fleet starting in ~~2013~~ the fourth year and for the duration of the Project
- Construction equipment used in the Alice Griffith parcels (CP01 through CP06) would utilize equipment which meets the US EPA Tier ~~4 engine~~2 standards outfitted with California ARB

Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) throughout the entire duration of construction activities on those parcels.

[199] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, ~~September 28, 2009~~ May 4, 2010. See Appendix H~~1~~3.

Pages III.H-25 through -27, beginning with first paragraph

As noted earlier, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks. The HRA, which took into account the mitigation measures described above, concluded that the cancer risk at the MEI would be 3.3 in one million. This represents the maximum level of DPM experienced by all off-site sensitive receptors during Candlestick Point construction activities. Exposure to DPM from construction activities associated with Candlestick Point would not exceed the threshold. In addition, the HRA concluded the maximum chronic noncancer HI to be 0.007, which is below the BAAQMD's significance threshold of 1.0. ~~An analysis was not conducted to determine the impact of Candlestick Point construction activities without the mitigation described above; however, due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant.~~

The impact of Candlestick Point construction activities without the mitigation described above would result in an estimated cancer risk at the MEI of 11 in one million, above the significance threshold of 10 in one million and, therefore, significant without mitigation. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.027, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would, therefore, be potentially significant.

As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of Candlestick Point have been determined to be below established thresholds with mitigation, this impact is less than significant with mitigation measure MM AQ-2.1:

MM AQ-2.1 Implement Emission Control Device Installation on Construction. *To reduce DPM emissions during Project construction, the Project Applicant shall require construction equipment used for the Project to utilize emission control technology such that 50% of the fleet will meet US EPA Tier 2 standards outfitted with California ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) during ~~2010 and 2011~~the first two years of construction activities, increasing to 75% of the fleet in ~~2012~~the third year and 100% of the fleet starting in ~~2013~~the fourth year and for the duration of the Project.*

Impact of Hunters Point Shipyard Phase II

Impact AQ-2b **Construction at HPS Phase II would not result in impacts to off-site populations from Project-generated emissions of DPM. (Less than Significant with Mitigation)** ***[Criterion H.d]***

As noted above, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks; the HRA which took into account the mitigation measures described above concluded that the cancer risk at the MEI would be 3.8 in one million. This represents the maximum level of DPM experienced by all off-site sensitive receptors during HPS-Phase II construction activities. Construction activities associated with HPS- Phase II would not exceed the threshold. In addition, the HRA concluded the maximum chronic non-cancer HI to be 0.01, which is below the BAAQMD's significance threshold of 1.0. ~~An analysis was not conducted to determine the~~The impact of ~~Candlestick Point~~HPS Phase II construction activities without the mitigation described above~~; however, due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts~~ would ~~be potentially above the BAAQMD's~~ result in an estimated cancer risk at the MEI of 8.4 in one million, which is below the significance threshold of 10 in one million and ~~would be potentially~~, therefore, less than significant without mitigation. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.024, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would, therefore, be potentially significant.

As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of HPS- Phase II have been determined to be below established thresholds with and without mitigation, this impact is less than significant with implementation of mitigation measure MM AQ-2.1.

Impact of Alice Griffith Public Housing

Impact AQ-2c **Construction activities associated with the Project would not result in impacts to the existing Alice Griffith Public Housing from Project-generated emissions of DPM. (Less than Significant with Mitigation)** ***[Criterion H.d]***

As noted earlier, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks; the HRA which took into account the mitigation measures described above concluded that the cancer risk at the MEI inside Alice Griffith would be 4.5 in one million. This represents the maximum level of DPM experienced by all on-site sensitive receptors during Project construction activities. Exposure to DPM from construction activities associated with the Project would not exceed the threshold. In addition, the HRA concluded the maximum chronic non-cancer HI to be 0.02, which is below the BAAQMD's significance threshold of 1.0. ~~An analysis was not conducted to determine the impact of Candlestick Point construction activities without the mitigation described above; however, due to the scale of the construction activities and proximity to adjacent receptors, without~~

~~mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant.~~

The impact of Candlestick Point and HPS Phase II construction activities without the mitigation described above would result in an estimated cancer risk at the on-site MEI (sensitive receptors inside Alice Griffith) of 20 in one million, above the significance threshold of 10 in one million and therefore significant without mitigation. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.09, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant.

As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of the Project have been determined to be below established thresholds with mitigation, this impact is less than significant with implementation of mitigation measure MM AQ-2.1 and mitigation measure MM AQ-2.2:

MM AQ-2.2 Implement Accelerated Emission Control Device Installation on Construction Equipment Used for Alice Griffith Parcels. *In addition to mitigation measure MM AQ-2.1, in order to minimize the potential impacts to residents living in Alice Griffith from the construction activities in that area, the Project Applicant will require that all construction equipment used in the Alice Griffith parcels (CP01 though CP06) ~~would~~ utilize equipment which meets the US EPA Tier ~~4 engine~~2 standards outfitted with California ARB Level 3 VDECS (Verified Diesel Emission Control Strategies) for particulate matter control (or equivalent) throughout the entire duration of construction activities on those parcels.*

Combined Impact of Candlestick Point and Hunters Point Shipyard Phase II

Impact AQ-2 **Construction activities associated with the Project would not result in impacts to on-site and off-site populations from Project-generated emissions of DPM. (Less than Significant with Mitigation) *[Criterion H.d]***

As noted earlier, BAAQMD CEQA Guidelines has an established threshold of 10 in one million for carcinogenic health risks; the HRA which took into account the mitigation measures described above concluded that the inhalation cancer risk at the on-site and off-site MEI would be 4.5 in one million. This represents the maximum level of DPM experienced by all off-site and on-site (i.e., Alice Griffith) sensitive receptors during Project construction activities. Exposure to DPM from construction activities associated with the Project would not exceed the threshold. In addition, the HRA concluded the maximum chronic noncancer HI to be 0.01, which is below the BAAQMD's ~~significance threshold of 1.0. An analysis was not conducted to determine the impact of Candlestick Point construction activities without the mitigation described above; however, due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would therefore be potentially significant~~noncancer HI significance threshold of 1.0.

The impact of Candlestick Point and HPS Phase II construction activities without the mitigation described above would result in an estimated cancer risk at the on-site and off-site MEI of 20 in one million, above the significance threshold of 10 in one million and therefore significant without mitigation. This represents the maximum level of DPM experienced by all off-site and on-site (i.e., Alice Griffith) sensitive receptors during Project construction activities. The corresponding chronic noncancer HI for the unmitigated emissions was estimated to be 0.09, which is below the BAAQMD's noncancer HI significance threshold of 1.0.

Due to the scale of the construction activities and proximity to adjacent receptors, without mitigation the impacts would be potentially above the BAAQMD's significance threshold and would, therefore, be potentially significant.

As the carcinogenic and noncarcinogenic health risks posed by DPM emissions during construction activities associated with development of HPS Phase II have been determined to be below established thresholds with mitigation in place, this impact is less than significant with implementation of mitigation measure MM AQ-2.1 and mitigation measure MM AQ-2.2.

Page III.H-29, second full paragraph

As the carcinogenic and noncarcinogenic health risks posed by soil-PM_{10} emissions during construction activities associated with development of Candlestick Point have been determined to be below established thresholds, this impact is less than significant with mitigation measure MM HZ-15 discussed above. An analysis was not conducted to determine the impact of Project construction activities without the dust control mitigation measures described in MM HZ-15~~; however,~~ because the dust controls described in MM HZ-15 are required by *San Francisco Health Code* Article 22B or BAAQMD regulations. ~~d~~Due to the scale of the construction activities and proximity to adjacent receptors, without these dust control measures, the impacts from TACs bound to soil PM_{10} would likely be above the BAAQMD's significance threshold and would, therefore, be potentially significant.

Page III.H-29, last paragraph

As the carcinogenic and noncarcinogenic health risks posed by soil-PM_{10} emissions during construction activities associated with development of HPS Phase II have been determined to be below established thresholds, this impact is less than significant with mitigation measure MM HZ-15 discussed above. An analysis was not conducted to determine the impact of Project construction activities without the dust control mitigation measures described in MM HZ-15~~; however,~~ because the dust controls described in MM HZ-15 are required by *San Francisco Health Code* Article 22B or BAAQMD regulations. ~~d~~Due to the scale of the construction activities and proximity to adjacent receptors, without these dust control measure, the impacts from TACs bound to soil $PM~~10~~_{10}$ would likely be above the BAAQMD's significance threshold and would, therefore, be potentially significant.

Page III.H-30, fourth paragraph

As the carcinogenic and noncarcinogenic health risks posed by soil-PM_{10} emissions during construction activities associated with development of HPS Phase II have been determined to be below established thresholds, this impact is less than significant with mitigation measure MM HZ-15 discussed above. An

analysis was not conducted to determine the impact of Project construction activities without the dust control mitigation measures described in MM HZ-15~~; however,~~ because the dust controls described in MM HZ-15 are required by *San Francisco Health Code* Article 22B or BAAQMD regulations. ~~d~~Due to the scale of the construction activities and proximity to adjacent receptors, without these dust control measure, the impacts from TACs bound to soil PM_{10} would likely be above the BAAQMD's significance threshold and would, therefore, be potentially significant.

Page III.H-30, Impact AQ-4 and the following paragraph

Impact AQ-4 **Operation of the Project would violate BAAQMD CEQA significance thresholds for mass criteria pollutant emissions from mobile and area sources and contribute substantially to an existing or projected air quality violation at full build-out ~~in the year 2029~~. (Significant and Unavoidable)** ***[Criteria H.a and H.c]***

The proposed Project's design incorporates a dense, compact development plan that includes a diverse mix of land uses that are well connected with regional mass transit systems. … With these features included, the proposed Project at full buildout ~~(2029)~~ is expected to generate 78,109 daily external motor vehicle trips. …

Page III.H-33, Impact AQ-6

Impact AQ-6 **Implementation of HPS Phase II would not expose nearby receptors to an increase in local concentrations of toxic air contaminants due to the operation of Research and ~~Implementation~~ Development uses. (Less than Significant with Mitigation)** ***[Criterion H.d]***

Pages III.H-34 and -35, beginning with first paragraph

Using the assumptions discussed in the Analytic Method section, the HRA[202] estimated the excess lifetime cancer risk and chronic noncancer HI due to the combined TAC emissions from the R&D areas at any surrounding receptor location. All receptors were initially evaluated as residential receptors. The estimated excess lifetime cancer risks and HIs within areas designated for residential use were found not to exceed the BAAQMD's significance thresholds of an incremental residential cancer risk of 10 in one million for carcinogenic and a chronic noncancer HI of 1.0 for noncarcinogenic health risks. An analysis was not conducted to determine the impact without the assumptions discussed earlier (such as the assumptions that each lot would be 1 acre in size and have one source of TAC emissions); however, due to the potential number of R&D facilities with sources of TAC emissions capable of locating in the R&D areas and their proximity to adjacent receptors, without mitigation, the impacts would potentially be above the BAAQMD's significance threshold and therefore potentially significant.

… Due to the decrease in the frequency and duration of potential exposures, the chronic HI would also be reduced below the HI threshold of 1.0.

The estimated health risks would be below BAAQMD thresholds for all residential receptor locations as a result of implementation of the Project, including implementation of the following mitigation measures. ~~Impacts would be less than significant.~~The mitigation measures would require TAC emitting facilities

that are located on a lot 1 acre or larger in size to establish that their TAC emissions are below the BAAQMD thresholds. If they exceed these thresholds, or if a TAC emitting facility locates on a lot smaller than 1 acre in size, the facility would further need to analyze the effect of its emissions in combination with other TAC emitting facility emissions to establish that the combined emissions would be below the BAAQMD thresholds. Impacts would be less than significant.

MM AQ-6.1 ~~*In accordance with the approach used to evaluate this impact, the minimum plot size for facility with sources of TAC emissions in R&D areas will be no smaller than 1 acre.*~~ *If a facility with sources of TAC emission wishes to locate on a plot size smaller than 1 acre, an analysis will be required to show the facility, in conjunction with all other TAC emitting facilities in the R&D areas, will not cause these thresholds of a residential cancer risk of 10 in one million and a chronic noncancer HI of 1.0 to be exceeded at the nearest residential locations.*

MM AQ-6.2 *Each facility with sources of TAC emissions on a plot of 1 acre or larger will limit their emissions such that residential cancer risk and chronic non-cancer hazard index evaluated at the facility boundary does not exceed 10 in one million or 1.0, respectively. If these thresholds are exceeded at the boundary, an analysis will be required to show the facility, in conjunction with all other TAC emitting facilities in the R&D areas, will not cause these thresholds to be exceeded at the nearest residential locations.*

Impact AQ-7: Traffic $PM_{2.5}$

Impact AQ-7 **Operation of the Project would not ~~exceed SFDPH thresholds or otherwise~~expose receptors to concentrations of $PM_{2.5}$ above a 0.2 µg/m^3 action level for $PM_{2.5}$ and, therefore, would not substantially affect the health of nearby receptors as a result of an increase in local concentrations of vehicle emissions ($PM_{2.5}$) associated with vehicle use attributable to operation of the Project. (Less than Significant)** ***[Criterion H.d]***

With development of the Project, vehicle trips and thereby vehicle emissions along local roadways would increase. The exposure of residential receptors to increased vehicle emissions could affect human health. As a result, and as discussed above, potential $PM_{2.5}$ concentrations at select roadways with the addition of Project traffic were estimated compared against ~~SFDPH thresholds to determine the potential health risks~~an identified 0.2 µg/m^3 action level to determine whether sensitive receptors would be exposed to a substantial increase in $PM_{2.5}$ concentrations attributed to vehicle emissions that would be associated with the Project. Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of San Francisco and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of Project-related traffic, no receptors along the streets listed above would experience and increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's 0.2 µg/m^3 threshold.[203]~~the identified 0.2 µg/m^3 action level. The details of the HRA for $PM_{2.5}$ can be found in Appendix H3, Attachment IV. As concentrations of $PM_{2.5}$ at sensitive receptor locations would not exceed the identified 0.2ug/m^3 action level, impacts would be less than significant. No mitigation is required.

~~Concentrations would not exceed SFDPH's threshold, or the BAAQMD's proposed threshold, and as such, impacts would be less than significant. No mitigation is required.~~

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[202] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Attachment III, ~~September 28, 2009~~ May 4, 2010. See Appendix H3.
~~[203] ENVIRON, Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan, Appendix IV, September 28, 2009.~~

Page III.H-37, new first bullet

- Yosemite Slough Restoration Project: Re-vegetation, recreational and trails only; no structures
- Hunters View: 550 new homes
- …

Pages III.H-37 and -38, last paragraph

When evaluating combined impacts, the relative location of the other proposed project to the Project is a critical factor to consider as local wind patterns affect the transport of pollutants from each location. As shown in Figure 1 of the HHRA Appendix V,~~–~~[205] the winds in the vicinity of the Project are predominantly from the west, blowing directly east. As such, only construction activities on other projects directly west of the Project are likely to combine with Project-related construction activities. As the Project is on the San Francisco Bay shoreline, there are no additional project**s** immediately east. … The Project will not substantially impact HPS Phase I; the impacts of Project-related construction activities on HPS Phase I were explicitly evaluated in Impact AQ-2 and Impact AQ-3, as discussed above. Depending on the construction schedule for the Yosemite Slough Restoration Project, air quality impacts from construction equipment could combine with construction emissions of the Project. However, construction emissions from the Yosemite Slough Restoration Project would be predominantly blown east over the Bay and would not be anticipated to combine with construction emissions of the Project to cause a significant impact on sensitive receptors.

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[205] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix V, ~~September 28, 2009~~ May 4, 2010. See Appendix H3.

Page III.H-38, third full paragraph

Project operational emissions of the ozone precursors, ROG and NO_X, and of the criteria pollutants PM_{10} ~~and $PM_{2.5}$~~ ~~–~~would exceed the BAAQMD project-specific significance thresholds. Therefore, as discussed earlier, these emissions would be considered to have a significant and unavoidable cumulative impact. However, these emissions are typically addressed th**r**ough the BAAQMD Clean Air Plan so that Project emissions, in combination with all adjacent projects, will be addressed at a regional level.

Pages III.H-38 and -39, last partial paragraph

Project stationary-source TACs ~~and the $PM_{2.5}$ from motor vehicles on site access roads~~, which could present human health risks to nearby receptors as a result of operation of the Project, would not exceed ~~current or proposed~~ BAAQMD thresholds. ~~In addition, the analysis of potential health hazards resulting from mobile emissions took into account future (including all existing) traffic, including that attributed to future growth within the cumulative context, and the relative health risks future motor vehicle traffic would impose would not exceed BAAQMD thresholds.~~ Therefore, in accordance with BAAQMD guidelines, TAC ~~and $PM_{2.5}$~~ emissions would be considered to have a less-than-significant cumulative impact.[206]

No guidance is currently available for the assessment of $PM_{2.5}$ cumulative impacts from Project operations. $PM_{2.5}$ cumulative effects are assessed below based on the proposed BAAQMD CEQA guidelines.

F.12 Changes to Section III.I (Noise)

Page III.I-1, second paragraph

Data used to prepare this analysis were obtained from the *San Francisco General Plan* (General Plan) *Environmental Protection Element*; the *Bayview DEIR San Francisco 49ers Stadium Operational Noise Study*, prepared by Wilson, Ihrig & Associates (included as Appendix I1); the Federal Transit Administration's *Transit Noise and Vibration and Impact Assessment* methodology; and by measuring and modeling existing and future noise levels within the Project site and at surrounding land uses. … All construction activity estimates were based on the September 2009 and March 2010 MACTEC Engineering Construction Phasing Plan.

Page III.I-6, second paragraph

The Project site is located in the southeastern area of San Francisco and extends east to San Francisco Bay (refer to Figure II-1 [Project Location]). This promontory is bounded on the south and west by the Bayview Hunters Point neighborhood and on the north and east by San Francisco Bay. The ground surface across the entire Project site is relatively flat with elevations ranging from approximately 0 feet to +20 feet (San Francisco City Datum [SFCD]).[210] …

[210] San Francisco City Datum (SFCD) is a local vertical geodetic reference system specific to the City and County of San Francisco and formally established in 1964 as 8.616 feet above the National Geodetic Vertical Datum of 1929 (NGVD29), making it about 8.13 feet above mean sea level. The North American Vertical Datum ~~was established in 1988~~ (NAVD88) ~~and~~ generally has replaced NGVD29 as a standard reference. Elevations expressed in NGVD29 may be converted to NAVD88 by adding 2.69 feet.

Page III.I-24, first paragraph

It is anticipated that the Project would be constructed beginning in ~~2010~~2011, with full build-out by ~~2029~~ 2031 and full occupancy in 2032, which represents an approximately ~~19~~20-year construction period. …

Page III.I-26, Figure III.I-5 (Existing and Future Noise-Sensitive Land Use in Project Site and Vicinity) has been revised

[The figure has been modified to more accurately depict land uses identified as noise sensitive by the City of San Francisco's General Plan or Municipal Code. The figure also identifies Yosemite Slough as a noise-sensitive land use.]

SOURCE: Lennar, 2009; CCSF, 2007; PBS&J, 2010. PBS&J 04.21.10

FIGURE III.I-5 Candlestick Point - Hunters Point Shipyard Phase II EIR

EXSITING AND FUTURE NOISE SENSITIVE LAND USES IN PROJECT SITE AND VICINITY [REVISED]

Page III.I-27, third paragraph

Off-site roadway improvements would utilize a pavement crusher (similar in noise levels to a grader), loaders and graders, as well as water and haul trucks. Based on the noise levels presented in Table III.I-11, the approximate noise levels experienced by adjacent noise-sensitive uses due to construction activities occurring during off-site roadway improvements, which are conservatively assumed to be ~~50~~25 feet from the proposed improvement activity, would be approximately ~~85~~92 dBA during the loudest off-site activities (noise from a grader).

Page III.I-28, first paragraph

Residential uses that would be developed as part of the Project in Candlestick Point would be occupied starting in ~~2017~~2019, as shown in Table II-15 (Building Construction Completion Dates) in Chapter II (Project Description). These residential uses would be located in the Alice Griffith district. Subsequent residential uses in Candlestick Point are scheduled for occupancy in ~~2021~~2023, ~~2025~~2027, and ~~2029~~2032 in the CP North, CP South, CP Center, and Jamestown districts as shown in Figure II-16 (Proposed Site Preparation Schedule) and Figure II-17 (Proposed Building and Parks Construction Schedule). As shown in Table II-15, the commercial, neighborhood and regional retail, hotel and performance venue associated with Candlestick Point would be completed by ~~2021~~2023.

Page III.I-30, second paragraph

While the construction activities would occur over an approximately ~~19~~20-year timeline, the activities that impact individual receptors would be temporary. …

Page III.I-31, last paragraph

At HPS Phase II, new development would begin with the construction of the 49ers stadium, scheduled for completion during the 2014–2017 time period. HPS North district residential development would begin during 2011–2015 and is planned for completion by ~~2017~~2019. Build-out of the R&D district is planned by ~~2017~~2027. The mixed-use, neighborhood retail, and residential development at the HPS Village Center district would be completed in ~~2021~~2023. …

Page III.I-33, first paragraph

Construction activities for the Project would create a substantial temporary increase in ambient noise levels on the site and in existing residential neighborhoods adjacent to the site. While construction activities would occur over a ~~19~~20-year timeline, the conditions under which noise levels would be considered excessive during construction activities, such as excavation or pile driving, would only occur for the duration of the specified and would only impact receptors located within 150 feet or closer of the noise producing activity. …

Page III.I-39, last paragraph

Mitigation measures MM NO-1a.1, MM NO-1a.2, and MM NO-2a have been identified to minimize or reduce construction related noise levels to the extent feasible. … However, pile-driving and excavation

activities would last throughout the ~~18~~20-year construction phasing, and, therefore, this temporary increase in ambient noise levels would be noticeable and would likely be cause for human annoyance. …

Page III.I-43, Figure III.I-6 (Project-Related Roadway Noise Level Increases) has been revised

[NOTE: This figure has been corrected to show a less-than-3 dBA increase along Harney Way instead of the 5 dBA increase shown in the Draft EIR.]

SOURCE: PBS&J, 2010.

PBS&J 04.28.10

FIGURE III.I-6

Candlestick Point - Hunters Point Shipyard Phase II EIR

PROJECT-RELATED ROADWAY NOISE LEVEL INCREASES [REVISED]

Page III.I-51, mitigation measures MM NO-7.1 and Mm NO-7.2

MM NO-7.1 …

- *After ~~certification of the EIR~~ Stadium Operator enters into lease agreement with Agency, send notification of the establishment of a stadium noise mitigation program (SNMP) to the residential property owners in the identified neighborhood potentially affected by noise from the proposed Stadium*
- …

MM NO-7.2 Residential Use Plan Review by Qualified Acoustical Consultant. *To ensure that stadium game-and event-induced interior L_{max} noise levels do not exceed an interior noise level of 60 dBA and interfere with speech and other indoor activities in the proposed on-site residential uses closest to the proposed Stadium, the ~~Stadium Operator~~ Project Applicant shall choose a qualified acoustical consultant to review plans for the new residential uses planned for areas closest to the proposed Stadium and follow their recommendations to provide acoustic insulation or other equivalent measures to ensure that interior peak noise events would not exceed 60 dBA L_{max}.*

Page III.I-54, Table III.I-18 (Modeled Cumulative Traffic Noise Levels along Major Project Site Access Roads) has been revised

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table III.I-18 Modeled Cumulative Traffic Noise Levels along Major Project Site Access Roads [Revised]

Roadway	Land Use	Existing Noise Level	2030 Without Project	2030 With Project	Cumulative Increase	Allowable Increase	Significant Cumulative Impact?
…							
Ingalls Street north of Carroll Avenue	Residential	56.7	61.7	63.1	6.4	3	**Yes**
Carroll Avenue east of 3rd Street	~~Residential~~ Commercial	**52.6**	**53.8**	**58.1**	**5.5**	5	**Yes**
Gilman Avenue east of 3rd Street	Residential	**57.7**	**60.6**	**64.6**	**6.9**	3	**Yes**
…							

F.13 Changes to Section III.J (Cultural Resources)

Page III.J-1, second paragraph

The cultural resources section is based on the following technical studies: *Historical Context for the Archaeology of the Bayview Waterfront Project*,[225] San Francisco, California, ~~July~~ November 2008;[226] *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project*, San Francisco, California, ~~October~~ November 2009, and Addendum, March 2010;[227] *Historic Context for the Bayview Waterfront Plan*, ~~December 2008~~ July 2009~~,~~;[228] ~~and~~ the *Bayview Waterfront Plan Historic Resources Evaluation, Volume II: Historic Resources Survey and Technical Report*, October 2009~~,~~;[229] *Historic Resource Evaluation for Candlestick Park Sports Stadium, San Francisco*, April 2010;[229a] and *Memorandum on Comparative Rarity of World-War-II Era Buildings at Hunters Point Shipyard*, April 2010.[229b] …

[226] Archeo-Tec, *Historical Context for the Archaeology of the Bayview Waterfront Project, San Francisco, California*, ~~July~~ November 2008. Archaeological reports are on file with the City, but are not available to the public.
[227] Archeo-Tec, *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California*, ~~October~~ November 2009, and *Addendum*, March 2010. Archaeological reports are on file with the City, but are not available to the public.
[228] Circa Historic Property Development, *Historic Context for the Bayview Waterfront Plan*, December 2008~~. This report is on file at the City and is available for review upon request~~ (refer to Appendix J1 [CIRCA, Historic Context Statement, July 2009]).
[229] Circa Historic Property Development, *Bayview Waterfront Plan Historic Resources Evaluation, Volume II: Draft Historic Resource Survey and Technical Report*, ~~July~~ October 2009~~. This report is on file at the City and is available for review upon request~~ (refer to Appendix J2 [CIRCA, Historic Resources Survey, October 2009]).
[229a] Circa: Historic Property *Development, Historic Resource Evaluation for Candlestick Park Sports Stadium, San Francisco, CA*, April 2010 (refer to Appendix J3 [CIRCA, Historic Resources Evaluation for Candlestick, April 2010]).
[229b] Circa: Historic Property Development, *Memorandum on Comparative Rarity of World-War-II Era Buildings at Hunters Point Shipyard*, April 2010 (refer to Appendix J4 [CIRCA, Rarity of HPS Military/Industrial Buildings, April 2010]).

Page III.J-18, third paragraph and new fourth paragraph

Based on archival research, the following indigenous sites are known or are believed to be located within the boundaries of the Project site. ~~Those~~ Some sites have not been evaluated for eligibility for listing on the California Register of Historic Resources (CRHR) or National Register of Historic Places, since most are under fill or on areas that have been developed. However, if a site or portion of a site contains intact archaeological deposits it would be considered a significant archaeological resource.[238]

CA-SFR-7

Site CA-SFR-7, as described above, has been determined to the eligible for the National Register of Historic Places (NRHP). The site is at the western end of Candlestick Point.

Pages III.J-18 and III.J-19, beginning with last partial paragraph

CA-SFR-12

Site CA SFR 12 is a shellmound, recorded by Nelson as Site #391 on the south side of Hunters Point. More recently, Hamusek-McGann et al. used an archaeological predictive model ~~identified~~ to identify the likely location of the site in HPS.[241]

CA-SFR-13

Recorded by Nelson as Site #392, site CA-SFR-13 may be located at the eastern end of Hunters Point.[242] More recently, Hamusek-McGann et al. used an archaeological predictive model ~~have spotted~~ to identify the likely location of the site in HPS.[243] Hamusek-McGann et al. report that based on historical maps the probable location of this site would have placed it at the original shoreline where Drydock 4 was later built. Due to extensive excavations that occurred during construction of the drydock Hamusek-McGann et al. assume that CA-SFR-13 was destroyed; however, as with other sites that were later determined to be wholly or partially intact, such as CA-SFR-7, CA-SFR-17, and CA-SFR-140, this site might also present intact discoveries.

CA-SFR-14

Site CA-SFR-14 is probably a mound, recorded by Nelson as Site #392a on the northeast end of Hunters Point. More recently, Hamusek-McGann et al. used an archaeological predictive model ~~have identified~~ to identify the likely location of the site in HPS.[244]

CA-SFR-11

Site CA-SFR-11 is a shell midden recorded as Nelson's Site #390 on the south side of Hunters Point.[245] More recently, Hamusek-McGann et al. used an archaeological predictive model ~~have identified~~ to identify the likely location of the site inside HPS.[246]

Page III.J-19, fourth paragraph

However, the MEA Shellmound Archaeo GIS Project map also places the site at another location—one immediately northeast of the Project boundary. This appears to support Olmsted's original observation that the site Nelson designated as Mound #390 was situated on Palou Avenue near the shoreline. ~~Although these two alternative locations fall outside the Project site, their location and boundaries are not precisely known. Given the vagaries of overlaying historic and modern maps, the latter alternative location lies close to, and may extend into the Project site.~~ The site appears to be in the western part of Hunters Point Shipyard Phase II.

Page III.J-21, first paragraph

The Candlestick Point site does not contain historic resources. In 2007, Jones & Stokes completed a review of Candlestick Park stadium, built in 1960, for potential eligibility in the NRHP.[251] The evaluation determined that the stadium did not meet the criteria to qualify as an exceptional property less than 50 years old. The report noted extensive alterations since its construction, including the expansion and enclosure in 1970 and more recent modifications to convert the stadium into a football-only facility. ~~The stadium, if reviewed at the 50-year mark, would not meet criteria for listing on the NRHP or CRHR due to lack of physical integrity resulting from the extensive alterations discussed above.~~ A recent Historic Resource Evaluation (HRE) reviewed the stadium as a 50-year-old structure and the HRE concluded that, while the stadium would meet certain NRHP and CRHR criteria for association with events and persons, specifically the expansion of Major League Baseball to the West Coast and the career of Willie Mays with the San Francisco Giants, the stadium does not retain sufficient integrity to qualify as an historic resource under NRHP or CRHR criteria.[251a] …

[251a] Circa: Historic Property Development, *Historic Resource Evaluation for Candlestick Park Stadium, San Francisco, CA*, April 2010 (refer to Appendix J3 [CIRCA, Historic Resources Evaluation for Candlestick, April 2010]).

Page III.J-21, second paragraph

The HPS Phase II site contains buildings and structures identified historic significance. Since Shipyard decommissioning … inclusion in the NRHP.[253] The Navy is currently completing National Register nominations and Historic American Engineering Records documentation for the Hunters Point Commercial Dry Dock Historic District, pursuant to the Memorandum of Agreement with SHPO and the Advisory Council on Historic Preservation, discussed under "Regulatory Framework," below.

Page III.J-21, last paragraph

The Office of Historic Preservation Directory of Properties in the Historic Property Data File included Drydocks 2 and 3 and ~~associated wharves and seawalls,~~ pump houses (Buildings 205 and 140), the western portion of Drydock 1, the Gatehouse (Building 204), and the Paint and Tool Building (Building 207) as the only structures on HPS considered eligible for listing on the NRHP, consistent with the findings of the 1997 JRP report and the subsequent SHPO concurrence. No other buildings or structures had previously been evaluated for listing on the CRHR.

Page III.J-22, first paragraph, new third sentence

… The investigation evaluated the eligibility of buildings and structures for the NRHP, the CRHR, or local historic registers. …

Page III.J-25, second paragraph

A district can comprise both features that lack individual distinction and individually distinctive features that serve as focal points. While Buildings 208, 211, 224, 231, and 253 may not be individually eligible for listing on the CRHR, when combined with the historic drydocks and associated buildings, the district is a physical representation of the broad history of HPS. Figure III.J-3 (Potential Historic Structures) illustrates views of Buildings 211, 224, 231, and 253.

Page III.J-26, Figure III.J-3 (Potential Historic Structures) has been revised

[NOTE: The figure has been revised to add "North Elevation – Building 224."]

East Elevation — Building 231

East Elevation — Building 211

Northwest Elevation — Building 253

North Elevation — Building 224

SOURCE: Page and Turnbull Feasibility Study, 2009; (Building 224) CIRCA 2009; PBS&J, 2010.

PBS&J 04.10.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

POTENTIAL HISTORIC STRUCTURES [REVISED]

FIGURE III.J-3

Page III.J-33, first paragraph

The Project would demolish Candlestick Park stadium, and would demolish and redevelop the Alice Griffith public housing site. Neither Candlestick Park stadium, nor the Alice Griffith public housing sites are considered eligible for listing on the NRHP, CRHR, or City landmark registers. As discussed above, ~~Jones & Stokes completed a review of Candlestick Park stadium in 2007 and determined that the stadium did not meet the eligibility criteria for the NRHP~~ while the stadium would meet certain NRHP and CRHR criteria for association with events and persons, the stadium does not retain sufficient integrity to qualify as a historic resource. …

Page III.J-34, first full paragraph

Development at HPS Phase II would result in the demolition of Buildings ~~208,~~ 211, 224, 231, and 253, which have been determined eligible for the CRHR and are contributors to the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. … Therefore, the Project would have a significant and unavoidable impact on the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District, because of demolition of Buildings ~~208,~~ 211, 224, 231, and 253. Chapter VI (Alternatives) analyzes Alternative 4 (Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~No State Parks Agreement, and Without the~~ Marina, or Yosemite Slough Bridge). Alternative 4 would include rehabilitation and reuse of Buildings 211, 224, 231, and 253 in the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. Building 208 would be mothballed and maintained as an element of the cultural landscape. Chapter VI also contains an analysis of Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation), which would additionally include rehabilitation and/or reuse of Buildings 211, 224, 231, and 253, while keeping all other components of the Project the same.

Pages III.J-34 and -35, mitigation measures MM CP-1b.1 and MM CP-1b.2

MM CP-1b.1 …

All written and photographic documentation of the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District shall be approved by the ~~Historic Preservation Commission~~ SFRA, in consultation with the ERO, prior to any demolition and removal activities.

MM CP-1b.2 Interpretive Displays Depicting History of HPS. *Interpretive displays related to the history of HPS shall be installed at Heritage Park at Dry Dock Nos. 2 and 3. The number and type of displays shall be approved by the ~~Historic Preservation Commission~~ SFRA, in consultation with the ERO.*

Pages III.J-35 to -36, last paragraph

As discussed above, the Project would result in the demolition of Buildings ~~208,~~ 211, 224, 231, and 253, which are historic resources in the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. … Alternative 4 would include rehabilitation and reuse of Buildings 211, 224, 231, and 253 and retention of Building 208 as a cultural landscape element in the potential Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. Chapter VI also contains an analysis of Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation), which would

include rehabilitation and reuse of Buildings 211, 224, 231, and 253, while keeping all other components of the Project the same.

Page III.J-36, first full paragraph

The Project archaeological research has found that archaeological resources expected to be found on the Project … practices; *(vii)* prehistoric changes in social stratification; and *(viii)* the relationship between Hunters Point-Bayview and South of Market area prehistoric settlements. The Project could also disturb potential Native American burial sites of symbolic and cultural importance to present-day Native American tribes and representatives. Any potential archaeological resources, e.g., CA-SFR-9, fishing camps, that are covered by existing development will remain covered and unavailable unless the site is redeveloped.

Page III.J-40, second paragraph under Impact CP-2b

Moreover, previous archaeological investigations have shown that prehistoric archaeological sites in the HPS Phase II site tend to be located along the original shoreline. Therefore, it is possible that Project-related construction activities may encounter previously unknown archaeological resources. The Project could also disturb potential Native American burial sites of symbolic and cultural importance to present-day Native American tribes and representatives.

Page III.J-40, last partial paragraph

As discussed above, the Project site is expected to contain subsurface archaeological resources from the Native … unavailable unless the site is redeveloped. Construction activities associated with the Project could disturb those archaeological resources, and result in potentially significant impacts. The Project could also disturb potential Native American burial sites of symbolic and cultural importance to present-day Native American tribes and representatives. Refer to Impact CP-2a and Impact CP-2b and associated discussions, above. Mitigation measure MM CP-2a would reduce the Project potentially significant effects on archaeological resources to a less-than-significant level through implementation of the *Archaeological Research Design and Treatment Plan for the Bayview Waterfront Project, San Francisco, California.*

F.14 Changes to Section III.K (Hazards and Hazardous Materials)

Page III.K-2, first sentence

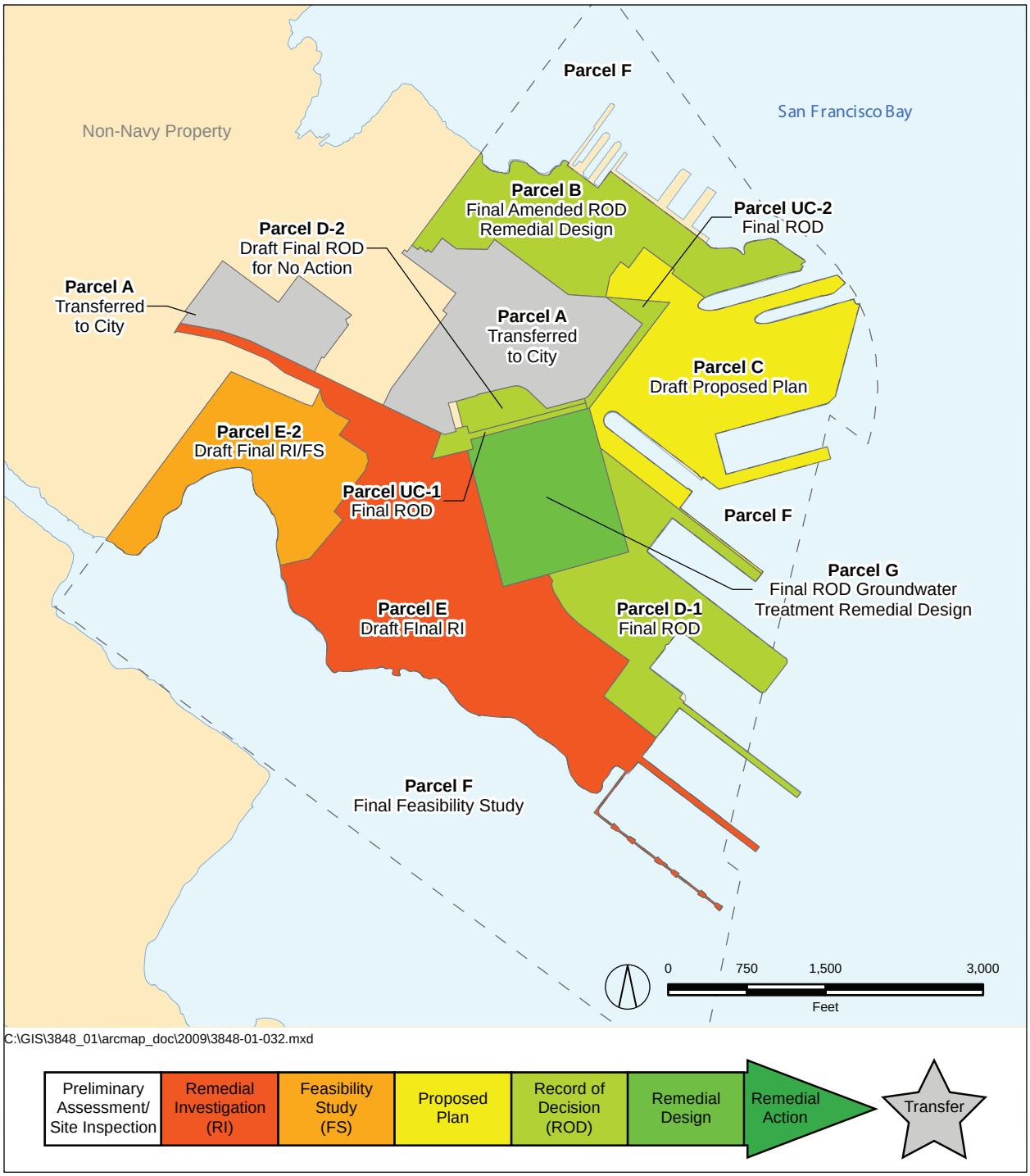
There are substantial ongoing remediation programs at known hazardous material release sites at portions of the Project site from former Navy operations, Triple A Machine Shop, Inc., and/or its lessees throughout HPS Phase II. …

Page III.K-11, last full paragraph

After the site identification process, the next step under the Navy's program is the preparation of Remedial Investigation (RI) reports for ~~all~~ the IR sites and other locations of concern in each parcel. …

Page III.K-26, new Figure III.K-6 (Status of CERCLA Process) is added

[NOTE: The figure has been added to illustrate the steps in the CERCLA process and the current status of the parcels in the process.]



SOURCE:PBS&J, 2010.

PBS&J 04.09.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

STATUS OF CERCLA PROCESS [NEW]

FIGURE III.K-6

Page III.K-33, last bullet

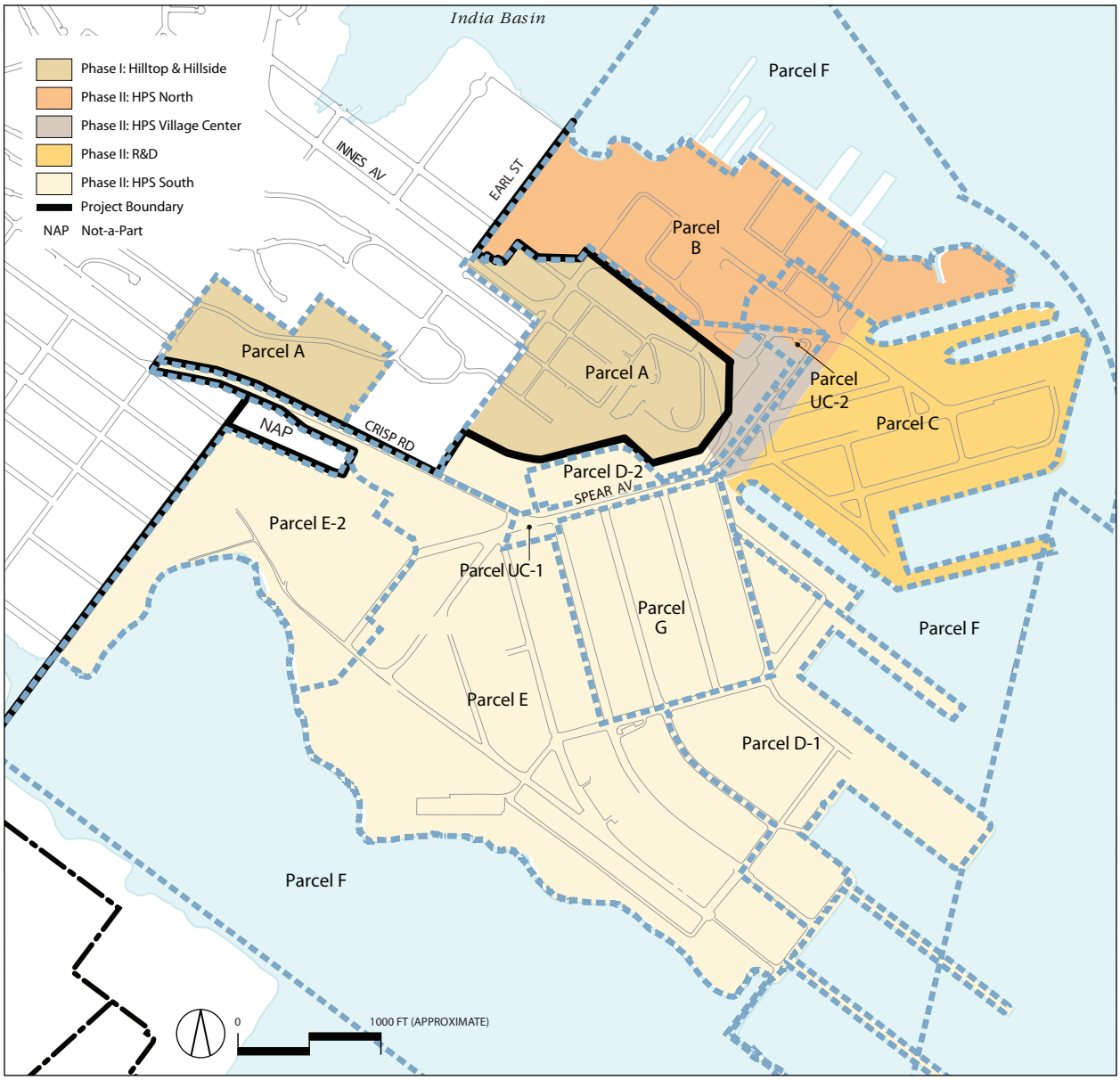
- All remedial investigations~~,~~ and response actions~~, and oversight activities~~ will be completed by the transferee notwithstanding the transfer of the property.

Page III.K-54, second full paragraph

The requirement for a site assessment prior to obtaining a grading permit for new construction would be triggered by Article 22A for sites at Candlestick Point located bayward of the 1851 high-tide line, which are the Candlestick Point North and Candlestick Point South districts, comprising the bulk of the area previously investigated in 1998. Compliance with Article 22A requirements would ensure current conditions are assessed in the area previously investigated in 1998, and that they are assessed in light of the specific planned depths of excavation. As stated below on page III.K-68, Hunters Point Shipyard soil shall not be used for grading adjustments within CPSRA, but may be reused on the Shipyard to the extent permissible under the Navy remedial program.

Page III.K-51, Figure III.K-5 (Hunters Point Shipyard Phase II Navy Parcel Overlay) has been revised

[The figure has been revised to show Parcel A' and Parcel A-3 as Parcel A; and a portion of Parcel B as Parcel C.]



SOURCE: Lennar Urban, 2009.

PBS&J 04.21.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

HUNTERS POINT SHIPYARD PHASE II NAVY PARCEL OVERLAY [REVISED]

FIGURE III.K-5

Pages III.K-54 to -55, mitigation measure MM HZ-1a

MM HZ-1a Article 22A Site Mitigation Plans. *(Applies only to Candlestick Point.) Prior to obtaining a site, building or other permit from the City for development activities involving subsurface disturbance at portions of Candlestick Point bayward of the high tide line, the Project Applicant shall comply with the requirements of San Francisco Health Code Article 22A. If the site investigation required by Article 22A (or, in the case of development activity in CPSRA, which is not subject to Article 22A, a comparable site investigation that is carried out to comply with this measure, and which involves notification to California State Parks if a site mitigation plan is prepared), indicates the presence of a hazardous materials release, a site mitigation plan must be prepared.* …

To the extent that Article 22A does not apply to state-owned land at CPSRA, prior to undertaking subsurface disturbance activities at CPSRA, the Agency and the California Department of Parks and Recreation shall enter into an agreement to follow procedures ~~comparable~~ equivalent to those set forth in Article 22A for construction and development activities conducted at Candlestick Point State Recreation Area.

Page III.K-56, mitigation measure MM HZ-1b

MM HZ-1b Compliance with Requirements Imposed by Cleanup Decision Documents and Property Transfer Documents. *(Applies only to HPS Phase II) Prior to obtaining a grading, excavation, site, building or other permit from the City for development activity at HPS Phase II involving subsurface disturbance, the Project Applicant shall submit documentation acceptable to the San Francisco Department of Public Health that the work will be undertaken in compliance with all notices, restrictions, and requirements imposed pursuant to a CERCLA ROD, Petroleum Corrective Action Plan, FOST, FOSET or FOSL, including notices, restrictions, and requirements imposed in deeds, covenants, leases, easements, and LIFOCs, and requirements set forth in Land Use Control Remedial Design Documents, Risk Management Plans, Community Involvement Plans, and health and safety plans.*

Pages III.K-58 and -59, mitigation measure MM HZ-2a.1

MM HZ-2a.1 Unknown Contaminant Contingency Plan. *(Applies to Candlestick Point, HPS Phase II, and off-site improvements.) Prior to obtaining the first site, building or other permit for development activities involving subsurface disturbance, the Project Applicant shall prepare and the San Francisco Department of Public Health shall approve a contingency plan to address unknown contaminants encountered during development activities. This plan, the conditions of which shall be incorporated into the first permit and any applicable permit thereafter, shall establish and describe procedures for implementing a contingency plan, including appropriate notification to nearby property owners, schools and residents and appropriate site control procedures, in the event unanticipated subsurface hazards or hazardous material releases are discovered during construction.* …

Page III.K-68, second full paragraph

Various construction activities at HPS Phase II, such as grading, trenching, compacting, and excavating, would result in soil being handled and moved. The excavated soil may be used as fill elsewhere at HPS Phase II, to the extent permissible under the restrictions discussed below, but would not be reused at CPSRA or any other off-site locations. …

Page III.K-77, after the first paragraph under Impact HZ-9

It is expected that construction of the bridge would occur in the early phase of the Project, likely before the Navy completes remediation of Parcels E and E-2. This section describes the impacts that could occur under such a scenario due to the presence of radiological materials and the actions that would be taken to address the presence of radiological materials within the bridge construction area.

Pages III.K-78 and -79, mitigation measure MM HZ-9

MM HZ-9 Navy-approved workplans for construction and remediation activities on Navy-owned property. *(Applies only to the portions of HPS Phase II on Navy-owned property). Construction activities and remediation activities conducted on behalf of the Agency or the Project Applicant, on Navy-owned property shall be conducted in compliance with all required notices, restrictions, or other requirements set forth in the applicable lease, easement, or license or other form of right of entry and in accordance with a Navy-approved workplan. This mitigation measure also requires that such activities be conducted in accordance with applicable health and safety plans, dust control plans, stormwater pollution prevention plans, community involvement plans, or any other documents or plans required under applicable law.* …

Page III.K-83, the last sentences of items a, b, c, and d

a. … ~~A~~ Review by the DMMO ~~permit~~ would likely be required.
b. … ~~A~~ Review by the DMMO ~~permit~~ would likely be required.
c. … ~~A~~ Review by the DMMO ~~permit~~ would likely be required.
d. … ~~a~~ review by the DMMO ~~permit~~ would likely be required.

Pages III.K-87 and -88, mitigation measure MM HZ-12

MM HZ-12 Compliance with Administrative Order on Consent at Early Transferred Parcels. *(Applies only at HPS Phase II.) Prior to undertaking any remediation activities at HPS Phase II on property that the Navy has transferred to the Agency as part of an early-transfer, the Agency or its contractor or Project Applicant shall comply with all requirements incorporated into remedial design documents, work plans, health and safety plans, dust control plans, community involvement plans, and any other document or plan required under the Administrative Order on Consent. This includes all notices, restrictions, and requirements imposed pursuant to a CERCLA ROD, Petroleum Corrective Action Plan, FOSET, including restrictions imposed in deeds, covenants, and requirements set forth in Land Use Control Remedial Design Documents, Risk Management Plans, community involvement plans, and health and safety plans.* …

Pages III.K-99 to -101, mitigation measure MM HZ-15

MM HZ-15 Asbestos Dust Mitigation Plans and Dust Control Plans. …

If required by the BAAQMD, air monitoring shall be implemented to monitor for off-site migration of asbestos dust during construction activities, and appropriate protocols shall be established and implemented for notification of nearby schools, property owners and residents when monitoring results indicate asbestos levels that have exceeded the standards set forth in the plan.

…

Page III.K-108, second full paragraph

Construction impacts associated with the potential to encounter hazardous materials or hazardous conditions during construction anywhere in the Project site, whether at Candlestick Point or HPS Phase II would for the most part be site specific and not additive because development activities at one site would be localized and would not combine with activities at another site to create a greater, combined effect. … The Project would be sequenced as described in Chapter II and is anticipated to be complete by ~~2029~~2031. Some off-site roadway improvements would be done as part of the Project, but these would be of a limited nature, largely involving streetscape improvements, and would be developed over time. On Candlestick Point and HPS Phase II, the development of both areas is expected to continue through approximately ~~2021~~2031, with only portions of each area under development at any one time.

Page III.K-118, third and fourth full paragraphs

The geographic context for the analysis of cumulative impacts related to the routine transport of hazardous materials is … Reasonably foreseeable development in this area would consist of the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters View, India Basin Shoreline, and Hunters Point Shipyard Phase I.

The cumulative context for an analysis of impacts related to use and disposal of hazardous materials would include … Reasonably foreseeable development in this area would consist of the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters View, India Basin Shoreline, and Hunters Point Shipyard Phase I.

Page III.K-120, first full paragraph

The cumulative context for an analysis of impacts related to risk of upset or accident is … Reasonably foreseeable development in this area would consist of the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters View, India Basin Shoreline, and Hunters Point Shipyard Phase I.

Page III.K-122, first full paragraph

The cumulative context for an analysis of impacts related to hazardous materials sites is defined as … Reasonably foreseeable development in this area would consist of the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters View, India Basin Shoreline, and Hunters Point Shipyard Phase I.

F.15 Changes to Section III.L (Geology and Soils)

Page III.L-12, fourth paragraph

The intensity of earthquake-induced ground motions can be described using peak ground accelerations, … exceeded in any given year. The CGS Probabilistic Seismic Hazard Assessment map accounts for amplification. Amplification effects can occur when seismic waves travel through soft soils underlain by shallow bedrock.

Page III.L-15, new first paragraph after Table III.L-3 (Active Bay Area Faults)

Amplification

Amplification effects can occur when seismic waves travel through soft soils underlain by shallow bedrock. During the design-level, site-specific seismic hazards assessment, appropriate attenuation relationships will be selected to account for amplification effects. All structures and improvements will be designed based on the appropriate seismic design parameters recommended in the seismic hazards assessment required by mitigation measure MM GE-4a.1.

Page III.L-15, second paragraph

Based on existing data, there is little or no risk of large translational movements.[386a,386b] Design-level liquefaction studies, which are further described in mitigation measures ~~MM GE-4~~MM GE-5a, would address five general types of localized potential hazards, and provide treatment methods, including the following:

[386a] ENGEO, 2009.
[386b] Engineering/Remediation Resources Group, Inc. and Shaw Environmental, Inc., *Remedial Investigation/Feasibility Study Report for Parcel E-2, Hunters Point Shipyard, San Francisco, California*, February 2009.

Page III.L-46, second paragraph

… The structural design review required by MM GE-4a.1, MM GE-4a.2, MM GE4a.3, and MM GE-5a would ensure that all necessary methods and techniques would be incorporated in the design for Project foundations and structures to reduce potential impacts from ground failure or liquefaction to a less-than-significant level.

Page III.L-49, first paragraph after Impact GE-7a

The shoreline along Candlestick Point consists of slopes protected by rip-rap or concrete debris and several areas of unprotected, beach-fronted slopes, exposed mudflats, and vegetation. … and include an adaptive management strategy that would provide further protection for future sea level rise ~~up to~~ of 55 inches or more if this should become necessary. These improvements are intended to, will be designed to, and, therefore, would improve the stability of the shoreline. …

Page III.L-52, first paragraph

The Candlestick Point site could be exposed to settlement hazards. … The rate of settlement of the Young Bay Mud from the load of the artificial fill is now very small, but further increase in loads, whether resulting from placement of new fill or the construction of buildings, would initiate a new cycle of consolidation settlement.[416a,416b] The Young Bay Mud is underlain by firmer soils and bedrock that do not pose settlement hazards.

[416a] ENGEO, 2009.
[416b] Engineering/Remediation Resources Group, Inc. and Shaw Environmental, Inc., 2009.

Page III.L-55, first full paragraph

… Extensive Young Bay Mud deposits are predominant in Parcels D and E. The rate of settlement of the Young Bay Mud from the load of the artificial fill is now very small, but any increase in loads, whether resulting from placement of new fill or the construction of buildings, would initiate a new cycle of consolidation settlement.[417a,417b] …

[417a] ENGEO, 2009.
[417b] Engineering/Remediation Resources Group, Inc. and Shaw Environmental, Inc., 2009.

Page III.L-64, third full paragraph

Implementation of the Project would modify soil and topographic conditions at the site to accommodate development and provide a stable and safe physical environment. The construction phase of the Project could expose soil to erosion by wind or water. Development of other cumulative projects in the vicinity of the Project site, including the Yosemite Slough Restoration Project, could expose soil surfaces and further alter soil conditions. …

F.16 Changes to Section III.M (Hydrology and Water Quality)

Page III.M-59, mitigation measure MM HY-1a

MM HY-1a.1 *[…]*

Erosion Control BMPs—Preserve existing vegetation where feasible, apply mulch or hydroseed areas with native, non-invasive species, until permanent stabilization is established, and use soil binders, geotextiles and mats, earth dikes and drainage swales, velocity dissipation devices, slope drains, or polyacrylamide to protect soil from erosion.

Pages III.M-61 through -64, mitigation measure MM HY-1a.2

MM HY-1a.2 Stormwater Pollution Prevention Plan: Separate Storm Sewer System. *Consistent with the requirements of the SWRCB General Permit for Storm Water Discharges Associated with Construction and Land Disturbing Activities (Construction General Permit), the Project Applicant shall undertake the proposed Project in accordance with a project-specific Storm Water Pollution Prevention Plan (SWPPP) prepared by Qualified SWPPP Developer, who shall consult with California State Parks on those elements of the SWPPP that cover the Candlestick Park State Recreation Area, including selection of best management practices and other SWPPP improvements. The SFRWQCB, the primary agency responsible for protecting water quality within the project area, is responsible for reviewing and ensuring compliance with the SWPPP. This review is based on the Construction General Permit issued by the SWRCB.*

…

- *Erosion and Sedimentation:*

  …

  - *Stabilize and re-vegetate disturbed areas as soon as possible after construction with planting, seeding, and/or mulch (e.g., straw or hay, erosion control blankets, hydromulch, or other*

similar material) except in actively cultivated areas. Planting and seeding shall use native, non-invasive species.

…

- *Post-construction BMPs:*
  - > *Re-vegetate all temporarily disturbed areas as required after construction activities are completed. Re-vegetation shall use native, non-invasive species.*

…

Page III.M-92, under Impact HY-6c

Stormwater runoff from the Yosemite Slough bridge and discharges of materials from bridge maintenance activities would not cause or contribute to an exceedance of water quality standards. Primary pollutants of concern in stormwater runoff from transportation-related land uses include fuels, PAHs, sediment, metals, and litter and debris. The pollutants could originate from automobiles, transit vehicles, cyclists, and pedestrians. Automobiles would only be a source of stormwater pollutants on game days, which occur twelve days out of the year, because the bridge would only allow automobile traffic on game days. As described in Chapter II (Project Description) on page II-38, the Yosemite Slough bridge would be constructed with a 40-foot-wide greenway, which would be converted to automobile travel lanes on 49ers game days only. The greenway would also provide vegetative treatment for stormwater pollutants associated with automobiles, and would reduce the impacts of automobile-related stormwater runoff to a less than significant level. Runoff from the transit vehicle lanes would also be routed to the greenway and/or to land-based stormwater treatment controls such as swales. The stormwater treatment measures for the bridge would be described in the Project's Stormwater Control Plan, which is subject to SFPUC's approval.

Bridge maintenance activities such as welding and grinding, sandblasting, and painting can also adversely affect water quality if materials generated from maintenance are allowed to discharge into the Bay. It is anticipated that bridge operation would be under the jurisdiction of the City, and thus stormwater runoff mitigation would be performed under the Municipal Stormwater General Permit, which requires development of a pollution prevention program for municipal operations. The municipal operations program would also include street sweeping to remove litter and sediment-associated pollutants generated by transportation land uses.

Pollutants generated from transit vehicles, cyclists and pedestrians would also be addressed under the pollution prevention program for municipal operations implemented by the City. The pollutants would also be reduced through compliance with local stormwater treatment requirements (i.e., San Francisco Stormwater Design Guidelines), which were put into effect to comply with the new development requirements in the Municipal Stormwater General Permit.

Impacts from bridge operation would be reduced via compliance with the existing stormwater runoff programs, specifically, elements of the Municipal Stormwater General Permit, and local requirements for stormwater treatment measures that would be subject to approval by the SFPUC. Operation of the Yosemite Slough bridge would not cause an exceedance of water quality standards or contribute to or cause a violation of waste discharge requirements and a less than significant impact would result. No mitigation is required.

Page III.M-96, Table III.M-5 has been revised

[NOTE: This table has been revised in response to comments and to correct a typographical error in the table title.]

Table III.M-5 Estimated Existing and Project Stormwater Peak Flow Rates and Runoff Volumes Without BMPs [Revised]

			Project Increase[a]	
Storm Event	*Existing (cfs)[b]*	*Project (cfs)[c]*	*(cfs)*	*(%)*
Candlestick Point				
5-Year	477 (130)[d]	249 (0)[d]	-228	-48%
10-Year	545	284	-261	-48%
100-Year	783	408	-375	-48%
Hunters Point Shipyard[e]				
5-Year	644	448	-196	-30%
10-Year	730	509	-221	-30%
100-Year	1,052	733	-319	-30%
2-year 24-hour (acre-feet)				
Candlestick Point	36	20	-16	-44%
HPS Phase II	64	39	-24	-38%

SOURCE: PBS&J 2009

a. A negative number denotes a reduction in Project flow rates compared to existing conditions.
b. Existing flows are based on 72 percent impervious surfaces (505.3 acres).
c. Project flows are based on 54 percent impervious surfaces ~~9~~ (379.1 acres).
d. Values in parenthesis denote the amount of total Candlestick Point site runoff flowing to the combined sewer system.
e. Off-site flow from HPS Phase I is not included in these runoff calculations. Required HPS Phase I diversions into the HPS Phase II separate stormwater sewer system would be 108 cfs.

Page III.M-96, the following sentence has been added to the first partial paragraph

… Because of the increase in permeable surface area, infiltration would be expected to increase, resulting in a corresponding decrease in runoff volumes. Grading would reduce slopes at both sites, slowing runoff rates. The runoff flow rates and volumes do not account for the effect of Project BMPs.

Page III.M-100

MM HY-12a.1 Finished Grade Elevations Above Base Flood Elevation. *The Project site shall be graded such that finished floor elevations are ~~6.5~~3.5 feet above the Base Flood Elevation (BFE), and streets and pads are 3 feet above BFE to allow for future sea level rise, thereby elevating all housing and structures above the existing and potential future flood hazard area. If the FIRM for San Francisco is not finalized prior to implementation of the Project, the Project Applicant shall work with the City Surveyor to revise the City's Interim Floodplain Map. If the FIRM for San Francisco is finalized prior to implementation of the Project, the Project Applicant shall request that the Office of the City Administrator (Floodplain Manager) request a Letter of Map Revision based on Fill (LOMR-F) from FEMA that places the Project outside a SFHA and requires that the FIRM is updated by FEMA to reflect revised regulatory floodplain designations.*

Page III.M-102, mitigation measure MM HY-12a.2

MM HY-12a.2 Shoreline Improvements for Future Sea-Level Rise. *Shoreline and public access improvements shall be designed to allow future increases in elevation along the shoreline edge to keep up with higher sea level rise values, should they occur. Design elements shall include providing*

adequate setbacks to allow for future elevation increases of at least 3 feet ~~along the shoreline~~ from the existing elevation along the shoreline. Before the first Small Lot Final Map is approved, the Project Applicant must petition the appropriate governing body to form (or annex into if appropriate) and administer a special assessment district or other funding mechanism to finance and construct future improvements necessary to ensure that the shoreline, public facilities, and public access improvements will be protected should sea level rise exceed 16 inches at the perimeter of the Project. Prior to the sale of the first residential unit within the Project, the legislative body shall have acted upon the petition to include the property within the district boundary. The newly formed district shall also administer a Monitoring and Adaptive Management Plan to monitor sea level and implement and maintain the protective improvements.

Page III.M-102, first and second paragraphs after Impact HY-12b

According to proposed site plans, the portions of HPS Phase II that fall within a SFHA are proposed to be used for stadium parking. However, housing could be located in an area subject to flooding if the rate of sea level rise were to exceed the 36 inches that serves as the basis for Project grading plans and fill elevations, and no improvements were to be made along the shoreline.

Mitigation measure MM HY-12.a.1 requires Project finished grade elevations to be above the BFE accounting for future sea level rise. Mitigation measure MM HY-12a.2 requires that shoreline and public access improvements be designed to incorporate setbacks ~~in the event that~~ to accommodate sea level rise ~~exceeds 36 inches~~-related improvements. With implementation of this mitigation measure, impacts pertaining to the placement of ~~flooding~~ housing within a potential future mapped flood hazard area would remain at less-than-significant levels.

Page III.M-103, first paragraph after Impact HY-12

The Project would place housing within a SFHA according to the preliminary FIRM for San Francisco and the City's Interim Floodplain Map (refer to Figure III.M-4). However, the preliminary grading plan for the Project site[630] shows that the site would be graded to be above the Base Flood Elevation with a safety factor of +3 feet to allow for future sea level rise with building finish floor elevations 6 inches above that (total of 3.5 feet above Base Flood Elevation). ~~such that finished grade would comply with recommendations by Moffatt and Nichol,[631] which require land elevations to be graded above the Base Flood Elevation with a safety factor of +3.5 feet to allow for future sea level rise. However, future sea levels may rise at a more rapid rate than estimated.~~ Implementation of mitigation measures MM HY-12a.1 and MM HY-12a.2 would …

Page III.M-104, second paragraph after Impact HY-13b

Development at HPS Phase II would also place structures, including the marina~~,~~ and the shoreline improvements, ~~and a portion of the Yosemite Slough bridge,~~ within a Zone V SFHA, according to the preliminary FIRM for San Francisco.[633] Structures in Zone V could be subject to high-velocity wave forces that could cause damage to the structures or redirection of flood flows onto other parts of the site. Existing piers within Zone V would only be used as breakwaters for the marina and for wildlife habitat uses, and no buildings would be constructed. The shoreline improvements, including open space public access areas, would be initially designed and constructed to accommodate a 16-inch increase in sea level rise, with an adaptive management approach to accommodate greater sea level rise increases should they

occur, as required by mitigation measure MM HY-12a.2. This conservative shoreline design for sea level rise, as well as the development setback from the shoreline required by MM HY-12a.2, would protect the site against coastal flooding hazards including high-velocity wave forces that could impede flood flows or cause flood flows to be directed to any portions of the site including open space or developed areas. Implementation of MM HY-12a.2 would reduce the impacts of placing structures in a Zone V SFHA to a less-than-significant level. ~~Mitigation measure MM HY-13b would require and the Project Applicant to obtain a Floodplain Development Permit from the City Administrator and to provide a V-Zone Certification for development within any such designated areas.~~

~~*MM HY-13b Floodplain Development Permit. To reduce the impacts of placing structures in a 100-year flood hazard area that could impede or redirect flows, the Project Applicant shall implement that following measures:*~~

- ~~*The Project Applicant shall obtain a Floodplain Development Permit from the Office of the City Administrator in accordance with the City's floodplain management ordinance that includes a hydraulic evaluation to determine whether structures or structural elements would impede or redirect flood flows and mandates minimum design and construction standards. Design and construction methods shall comply with NFIP requirements for placing structures in Zone V.*~~
- ~~*The Floodplain Development Permit shall include a "V-Zone Certification" in accordance with the NFIP. As part of the certification, a professional engineer or architect shall consider the NFIP "Free-of-Obstruction" requirement, to ensure that floodwaters or waves would not be deflected into a building or adjacent structure.*~~

~~Placement of structures in a Zone A SFHA or Zone V SFHA would result in a less-than-significant impact with implementation of mitigation measure MM HY-13b.~~

Pages III.M-104 to -105, first paragraph after Impact HY-13c

The bridge across Yosemite Slough would not place structures within a SFHA that could generate high-velocity flood forces that could cause damage to the structure itself or adjacent structures. The Yosemite Slough bridge would be designed such that the superstructure would be well above the current 100-year flood hazard elevation in Zone V, to account for future sea level rise. Because t~~T~~he bridge ~~was~~ would be designed to avoid potential impedance of flood flows~~; therefore~~, the impacts would be less than significant. No mitigation is required.

Page III.M-105, second paragraph after Impact HY-13

As discussed in Impact HY-13b, the Project would place structures within locations designated as Zone V on the preliminary FIRMs. Structures in Zone V could be subject to high-velocity flood forces that could cause damage to the structure itself or redirect flood flows into adjacent areas. There would be no buildings located in Zone V, and implementation of m~~M~~itigation measure ~~MM HY-13b~~ MM HY-12a.2 would require ~~the Project Applicant to obtain a Floodplain Development Permit from the City Administrator and provide a Zone V Certification prior to development~~ development setbacks and an adaptive strategy for future increases in sea level rise, which would protect the shoreline Zone V areas from the effects of high-velocity flood forces and reduce the impacts to a less-than-significant level.

As discussed in Impact HY-13c, the bridge would be designed to avoid potential impedance of flood flows, and the superstructure would be raised well above the current 100-year flood elevation. Therefore, the impacts would be less than significant.

Page III.M-106, mitigation measure MM HY-14

MM HY-14 Shoreline Improvements to Reduce Flood Risk. *To reduce the flood impacts of failure of existing shoreline ~~protection~~ structures, the Project Applicant shall implement shoreline improvements for flood control protection, as identified in the Candlestick Point/Hunters Point Development Project Proposed Shoreline Improvements report. Where feasible, elements of living shorelines shall be incorporated into the shoreline protection improvement measures.*

Page III.M-106, third paragraph after Impact HY-15

The expected 100-year wave run-up height from a tsunami at the South Basin is -3.8 feet SFCD. ~~Accounting for a planned~~ Even with a sea level rise of 3 feet, the 100-year wave run-up at South Basin would increase to -0.7 SFCD. …

Page III.M-107, third paragraph after "Cumulative Impacts"

Construction and operation of cumulative development would not deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level. The groundwater basins underlying the Project site are not used for water supply …

Page III.M-108, first full paragraph

Cumulative development in the watershed, including development of the Yosemite Slough Restoration Project and at Executive Park, HPS Phase I, India Basin Shoreline, Jamestown, Brisbane Baylands, and Visitacion Valley, could contribute to violations of water quality standards or WDRs. …

F.17 Changes to Section III.N (Biological Resources)

Page III.N-1, third paragraph

… The off-site aquatic resources discussed include Yosemite Slough (except the area of construction, which is included in the on-site impact analysis), the open water area between Candlestick Point and HPS Phase II (known as South Basin), and adjacent open waters that would be impacted by Project components (i.e., breakwaters, gangways, floats, etc.). …

Page III.N-4, first full paragraph

Information from these sources and from PBS&J's reconnaissance-level surveys ~~were~~ was used to identify and characterize existing conditions at the Project site, and accordingly, were substantially relied upon for this analysis. …

Page III.N-5, second full paragraph

… The vegetation communities are defined according to CDFG's Vegetation Classification and Mapping Program of the Biogeographic Data Branch ~~Wildlife and Habitat Data Analysis Branch List of California Terrestrial Natural Communities~~,[647] H.T. Harvey & Associates' wetland delineation for HPS Phase II and Candlestick Point,[648] and PBS&J's Biological Technical Report prepared for the Project.[649]

[647] California Department of Fish and Game (CDFG), *The Vegetation Classification and Mapping Program: List of Terrestrial Natural Communities Recognized by the California Natural Diversity Database*, ~~Wildlife and Habitat Data Analysis Branch,~~ Sacramento, California, September 2003 edition.

Page III.N-9, third paragraph

… One of these wetlands, in the southwestern portion of HPS Phase II, consists of pools that ~~pools~~ are shallow basins that lack drainage outlets. …

Page III.N-21, first paragraph

… However, because they tend to gather in winter roosting sites along the California coast in relatively few locations, roost sites that are used traditionally by large numbers of individuals are considered sensitive biological resources and, thus, this common butterfly is discussed here as a sensitive species. …

Page III.N-22, last paragraph

… This striking recovery is due in large measure to the ban on the use of DDT (a synthetic pesticide) in many places, including the United States. …

Page III.N-26, last paragraph

Using the likelihood of occurrence definitions provided in Table III.N-5, this species is "known" to occur within the Study Area. …

Page III.N-28, first paragraph

The only special-status bat species ~~likely to occur~~ potentially occurring within the Study Area is the western red bat (*Lasiurus blossevillii*). …

Pages III.N-28 and III.N-29, last paragraph

… Because ~~of~~ the larval forms of oysters are free-floating in the Bay, and a large population exists south of the Study Area at Oyster Point Marina,[729] native oysters are likely present on suitable substrate throughout the Study Area.

Page III.N-32, first full paragraph

… Fall-run Chinook salmon is the most abundant ESU, documented to comprise about ~~80~~92 percent of the Sacramento Basin stock ~~in the early 1980s~~ over the past 10 years of available data.[741a] …

[741a] California Department of Fish and Game, Fisheries Branch, Anadromous Resources Assessment. 2009. Chinook Salmon Escapement – All Runs. February 18.

Page III.N-40, first full paragraph

The tidal aquatic habitats adjacent to the Project site are considered EFH by NMFS for a species assemblage that includes anchovies, sardines, rockfish, sharks, sole, and flounder.[768,769] Areas supporting the native Olympia oyster found in San Francisco Bay are also considered EFH by NMFS because oyster beds generally increase fish abundance. In addition, eelgrass beds are considered EFH. …

Page III.N-43, first heading

~~Regional~~

The McAteer-Petris Act (California Government Code 66600–66682)

The *McAteer-Petris Act* created the San Francisco Bay Conservation and Development Commission … and, therefore, subject to BCDC's jurisdiction.

Regional

Page III.N-50, under Impact BI-2, add new sixth sentence to first paragraph

… operation of stadium lights. In addition, an increase in trash, particularly food waste, could potentially subsidize nuisance species such as common ravens (*Corvus corax*), American crows (*Corvus brachyrhynchos*), raccoons, rats, and feral cats, which in turn could increase predation on more sensitive wildlife species. …

Page III.N-53, second full paragraph

Of 118 bird species observed during the Yosemite Slough Watershed Wildlife Survey, 51 (43 percent) were represented by a maximum count (the maximum number of individuals recorded on a given survey) of 5 or fewer, and thus use the Project site in low numbers. The most abundant wildlife species recorded were waterbirds. Project impacts to waterbird habitat within the Yosemite Slough bridge footprint would be mitigated by ~~a contribution to the restoration of Yosemite Slough or~~ restoration ~~elsewhere~~ on site or off site, as discussed under mitigation measure MM BI-4a.1 below. Increased human use of the Project site may reduce abundance in aquatic habitats along the immediate shoreline, but ample aquatic habitat is present around the Project site, and, even without restoration, no substantial changes in common waterbird abundance (particularly relative to regional populations) are expected as a result of the Project.

Page III.N-56, under Impact BI-4a, first paragraph

As detailed in Table III.N-4 (Impacts to Wetlands and Other Jurisdictional Waters of the United States [Section 404]) and depicted in Figure III.N-5 (Impacts to Wetlands and Other Waters), through site grading, materials laydown, facilities construction, vegetation removal, and installation of shoreline treatments, Project activities at Candlestick Point would permanently impact 0.29 acre of tidal salt marsh and 4.34 acres of Section 404 "other waters,"~~;~~ relative to existing conditions (i.e., prior to completion of

remediation efforts by the Navy). Both wetlands and mud flats, the latter comprising a subset of Section 404 "other waters," are considered Special Aquatic Sites under Section 404 of the *Clean Water Act.* …

Page III.N-57, Table III.N-4 (Impacts to Wetlands and Other Jurisdictional Waters of the United States [Section 404]) has been revised

[NOTE: This table has been revised to reflect modified construction access areas per preliminary bridge drawings.]

Table III.N-4 Impacts to Wetlands and Other Jurisdictional Waters of the United States (Section 404) [Revised]

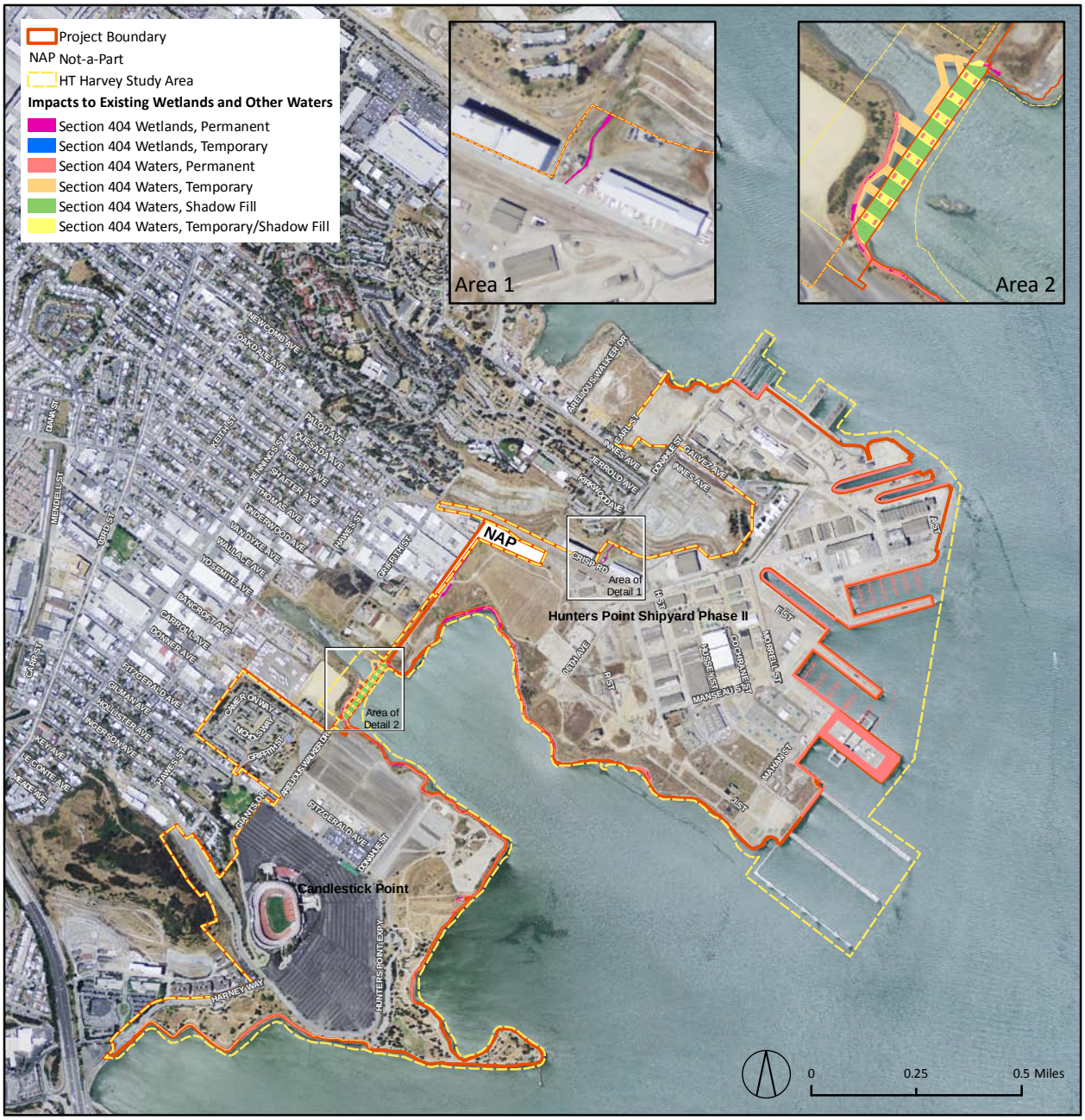
Jurisdictional Feature (Waters of the United States)	Area					Yosemite Slough							
	Candlestick Point		HPS Phase II			On Site			Off Site				
	Temporary Impacts	Permanent Impacts	Temporary Impacts	Permanent Impacts	~~Shadow Fill~~	Temporary Impacts	Permanent Impacts	~~Shadow Fill~~	Temporary Impacts	Permanent Impacts	Temporary Totals	Permanent Totals	Grand Totals[a]
Freshwater Wetland	—	—	~~<0.01 (61 sf)~~	0.17	—	—	—	—	—	—	~~<0.01 (61 sf)~~	0.17	0.17
Non-tidal Salt Marsh	—	—	~~0.09~~	~~0.06~~ 0.15	—	—	—	—	—	—	~~0.09~~	~~0.06~~ 0.15	0.15
Tidal Salt Marsh	0.01	0.29	~~0.01~~	~~0.08~~ 0.09	—	—	0.01	—	<0.01 (40 sf)	0.03	~~0.02~~ 0.01	~~0.41~~ 0.42	0.43
"Other Waters"	0.64	4.34	0.85	20.26	~~0.08~~	~~0.53~~ 0.52	~~0.17~~ 0.18	~~0.96~~	0.75	0.19	~~2.77~~ 2.76	~~24.96~~ 24.97	27.73
Totals for Impacted Section 404 Jurisdictional Features	***0.65***	***4.63***	***~~0.95~~ 0.85***	***~~20.57~~ 20.67***	***~~0.08~~***	***~~0.53~~ 0.52***	***~~0.18~~ 0.19***	***~~0.96~~***	***0.75***	***0.22***	***~~2.88~~ 2.77***	***~~25.60~~ 25.71***	***28.48***

SOURCES: H.T. Harvey & Associates, *Hunters Point Shipyard and Candlestick Point State Recreation Area Final Delineation of Wetlands and Other Waters, San Francisco, California*, February 2009 and revised July 13 and October 13, 2009.
MACTEC. *Work Program for the Construction of the Yosemite Slough Bridge Corridor*, ~~May 2009~~ March 2010.

a. Totals may not add up due to rounding.

Page III.N-58, Figure III.N-5 (Impacts to Wetlands and Other Waters) has been revised

[NOTE: The figure has been revised to reflect impacts resulting from construction access areas provided in MACTEC's bridge design drawings.]



SOURCE: HT Harvey, 2010; Moffat & Nichol, 2009; Mactech, 2010; PBS&J, 2010. PBS&J 04.19.10

FIGURE III.N-5 Candlestick Point - Hunters Point Shipyard Phase II EIR

IMPACTS TO WETLANDS AND OTHER WATERS [Revised]

Pages III.N-61 and -62, MM BI-4a.1, beginning with the last bullet on page III.N-61

…

- *Year 3 after restored areas reach colonization elevation: 50 percent combined area and basal cover (rhizomatous turf) of all vegetation; prevalence of hydrophytic species in terms of both cover and dominant species composition of the vegetation; native vascular species shall comprise ~~40~~95 percent of the vegetation in the preserve wetland.*
- *Year 5 after restored areas reach colonization elevation: 70 percent combined area and basal cover (rhizomatous turf) of all vegetation; more than 50 percent dominance in terms of both cover and species composition of facultative (FAC), facultative wetland (FACW), and obligate (OBL) species; native vascular species shall comprise ~~65~~95 percent of the vegetation in the preserve wetlands.*

…

Page III.N-63, mitigation measure MM BI-4a.2

…

- *Testing and disposal of any dredged sediment shall be conducted as required by the USACE and the Long-Term Management Strategy (LTMS)*[790]
- *All temporarily impacted wetlands and other jurisdictional waters, whether in tidal or non-tidal areas, shall be restored to pre-construction contours following construction. Such impact areas include areas that are dewatered (e.g., using coffer dams) and/or used for construction access. Temporarily impacted wetlands that were vegetated prior to construction shall be revegetated in accordance with a Wetlands and Jurisdictional Water Mitigation and Monitoring Plan as described above.*
- *For impacts to tidal habitats: …*

Page III.N-64, first paragraph

As detailed in Table III.N-4 and depicted in Figure III.N-5, through site grading, materials laydown, facilities construction, vegetation removal, installation of shoreline treatments, and construction of the marina, Project activities at HPS Phase II would permanently impact existing wetlands and other waters as follows: 0.17 acre of nontidal freshwater wetland, ~~0.08~~0.09 acre of tidal salt marsh, ~~0.06~~0.15 acre of non-tidal salt marsh, and 20.26 acres of Section 404 other waters. It would also temporarily impact ~~0.01 acre of tidal salt marsh, 0.09 acre of nontidal salt marsh, less than 0.01 acre of freshwater wetland, and~~ 0.85 acre of Section 404 other waters…

Page III.N-67, second full paragraph

As detailed in Table III.N-4 and depicted in Figure III.N-5, bridge construction equipment and materials would be staged at the site in designated lay down areas. Construction access and dewatering would result in temporary impacts to ~~0.53~~0.52 acre of Section 404 other waters. It would also result in permanent impacts to 0.01 acre of tidal salt marsh, and ~~0.17~~0.18 acre of Section 404 other waters. …

Page III.N-67, last paragraph

… The "shadow fill" produced by the Yosemite Slough bridge may change the biological functions and values of aquatic and mud flat habitats below to some extent; such an impact would cover approximately ~~0.96~~1.48 acres based on the acreage of mud flat below the immediate bridge surface. …

Page III.N-68, second paragraph

… However, shading of ~~0.94~~1.48 acres of mud flats and aquatic habitats would have only moderate effects on the functions and values of these habitats and would not result in the loss of these habitats. Mitigation measure MM BI-4a.2 shall be implemented to minimize indirect construction-related impacts on wetlands and other jurisdictional waters. Further, shading impacts to mud flats and aquatic habitats would be reduced by implementation of mitigation measure MM BI-4c.

Page III.N-68, last paragraph

Mitigation measures MM BI-4a.1 and MM BI-4a.2 (first discussed in Impact BI-4a) would be implemented to reduce the effects of construction-related activities to wetlands by mitigating for the temporary and permanent loss of the wetlands and jurisdictional waters through avoidance of impacts, requiring compensatory mitigation (i.e., creation and/or restoration), obtaining permits from the USACE, SFRWQCB, BCDC, and other agencies as applicable that are designed to protect wetlands and jurisdictional waters, and implementing construction BMPs to reduce and/or prevent impacts to ~~on~~ waters of the United States, including wetlands and navigable waters. …

Pages III.N-69 and -70, Impact BI-5b

Impact of Hunters Point Shipyard Phase II and Yosemite Slough Bridge

Impact BI-5b **Construction at HPS Phase II and construction of the Yosemite Slough bridge would not have a substantial adverse effect on eelgrass beds, a sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFG or USFWS. (Less than Significant with Mitigation)** ***[Criterion N.b]***

Within HPS Phase II a total of 1.99 acres of eelgrass ~~occurs~~ has been mapped at two locations (refer to Figure III.N-2). A small eelgrass occurrence was reported along the north shore of the South Basin directly across from Candlestick Point. The only other reported occurrence of eelgrass within HPS Phase II is on the north shore, east of the northern end of Earl Street. This eelgrass bed extends from the end of Earl Street to the pier that forms Drydock 5. These eelgrass beds are mapped as being below mean sea level and, therefore, are spatially separated from areas where shoreline treatments would occur. There are no mapped eelgrass beds where the marina improvements would occur or where the Yosemite Slough bridge would be constructed. However, because the locations of eelgrass occurrence may vary over time, eelgrass not detected during previous surveys could potentially occur in the shallow waters in or near the Yosemite Slough bridge construction footprint, either now or in the future.

The shoreline improvements associated with HPS Phase II include transforming the revetment edge in wave-protected reaches to a more natural looking shoreline by placing suitable fill to cover the revetment

that would be constructed by the Navy, which may include Articulated Concrete Block (ACB) mats and/or marsh soils. Shoreline wave berms may be included along the southwest facing shoreline at the bayward end of the ACB mats. If wave berms or other shoreline improvements, or the Yosemite Slough bridge, were constructed in ~~either of the two~~ areas where eelgrass beds ~~are known to~~ exist, they could directly impact them through excavation/removal or placement of fill material. Construction of these features or other shoreline treatments near eelgrass beds could also result in the mobilization of some sediment, which, if it were to settle out on eelgrass, could reduce photosynthesis and, therefore, productivity and survival. Because of the ecological importance but regional scarcity of eelgrass beds and the potential contribution of eelgrass beds in the Study Area to populations of aquatic species (and their predators) throughout larger portions of the Bay, any impacts would be considered a substantial reduction in the local population and, therefore, a substantial adverse effect.

To reduce this impact, the following mitigation measures shall be implemented.

MM BI-5b.1 Avoidance of Impacts to Eelgrass. *As the design of shoreline treatments progresses, and a specific Shoreline Treatment Plan is determined, the Plan shall minimize any in-water construction required for installation of any treatment measures near either of the two eelgrass locations noted above. ~~If in-water work is completely avoided within 750 feet of these areas, there would be no impact and no further mitigation would be required. If complete avoidance of work within 750 feet of these areas is not feasible, measure MM BI-5b.2 shall be implemented.~~*

MM BI-5b.2 Eelgrass Survey. *~~If avoidance of work within 750 feet of two known eelgrass locations is not feasible~~Prior to the initiation of construction of the Yosemite Slough bridge or construction of shoreline treatments, an update to the existing eelgrass mapping shall be conducted to determine the precise locations of the eelgrass beds. For the shoreline treatments, t~~This survey shall occur when a final Shoreline Treatment Plan has been prepared. The survey shall be conducted by a biologist(s) familiar with eelgrass identification and ecology and approved by NMFS to conduct such a survey. The area to be surveyed shall encompass the mapped eelgrass beds, plus a buffer of 750 feet around any in-water construction areas on Hunters Point or associated with the Yosemite Slough bridge. Survey methods shall employ either SCUBA or sufficient grab samples to ensure that the bottom was adequately inventoried. The survey shall occur between August and October and collect data on eelgrass distribution, density, and depth of occurrence for the survey areas. The edges of the eelgrass beds shall be mapped. At the conclusion of the survey a report shall be prepared documenting the survey methods, results, and eelgrass distribution within the survey area. This report shall be submitted to NMFS for approval. The survey data shall feed back into the shoreline treatment design process so that Project engineers can redesign the treatments to avoid or minimize any direct impacts to eelgrass beds.*

If the shoreline treatments can be adjusted so that no direct impacts to eelgrass beds would occur, no further mitigation under this measure would be required for shoreline treatment construction. Management of water quality concerns is addressed through mitigation measure MM BI-5b.4 and shall be required to minimize sediment accumulation on the eelgrass. If direct impacts to eelgrass beds cannot be avoided, either by Hunters Point shoreline treatments or Yosemite Slough bridge construction, mitigation measure MM BI-5b.3 shall be implemented.

Page III.N-75, first full paragraph

Similar to development at Candlestick Point, … Implementation of mitigation measures MM BI-6a.1 and MM BI-6a.2 (as detailed in Impact BI-6a), both at HPS Phase II and Yosemite Slough, would reduce the

effects of Project construction and implementation on nesting special-status and legally protected avian species to less-than-significant levels.

Page III.N-82, mitigation measure MM BI-9b

MM BI-9b …

Design Measures:

…

2. *Design structures that can be installed in a short period of time (i.e., during periods of slack tide when fish movements are lower).*
3. *Do not use unsheathed creosote-soaked wood pilings.*

…

Construction Measures:

…

3. *Avoid installation of any piles during the Pacific herring spawning season of December through February. Consult with the CDFG regarding actual spawning times if pile installation occurs between October and April.*
4. *If steel piles must be driven with an impact hammer, an air curtain shall be installed to disrupt sound wave propagation, or the area around the piles being driven shall be dewatered using a cofferdam. The goal of either measure is to disrupt the sound wave as it moves from water into air.*
5. *If an air curtain is used, a qualified biologist shall monitor pile driving to ensure that the air curtain is functioning properly and Project-generated sound waves do not exceed the threshold of 180-decibels generating 1 micropascal (as established by NMFS guidelines). This shall require monitoring of in-water sound waves during pile driving.*
6. *Unless the area around the piles is dewatered during pile driving, a qualified biologist shall be present during driving of steel piles to monitor the work area for marine mammals. Driving of steel piles shall cease if a marine mammal approaches within 250 feet of the work area or until the animal leaves the work area of its own accord.*

Page III.N-86, first full paragraph

… Implementation of mitigation measure MM BI-12a.1 and MM BI-12a.2 would reduce effects of construction activities on special-status fish by avoiding in-water construction during periods when sensitive species are most likely to be present in waters of the Project site and by educating construction personnel regarding measures to be implemented to protect fish and their habitats. Implementation of these mitigation measures would minimize any adverse effects on aquatic habitat of special-status fish, …

Page III.N-87, first full paragraph

… Implementation of mitigation measure MM BI-12a.1 and MM BI-12a.2 would reduce effects of construction activities on special-status fish by avoiding in-water construction during periods when sensitive species are most likely to be present in waters of the Project site and by educating construction personnel regarding measures to be implemented to protect fish and their habitats. Implementation of these measures would reduce potential adverse effects on special-status fish species to less-than-significant levels.

Page III.N-87

Impact BI-11c **Construction of the Yosemite Slough bridge would not have a substantial adverse effect on designated critical habitat for green sturgeon and Central California Coast steelhead ~~through permanent and temporary impacts to aquatic and mudflat foraging habitat~~ and would not result in impacts to individuals of these species, Chinook salmon, or longfin smelt through disturbance or loss of aquatic and mudflat habitat as a result of construction of shoreline revetments. (Less than Significant with Mitigation) [*Criteria N.a and N.d]***

Page III.N-87, first and second paragraphs following Impact BI-11c

Construction of the Yosemite Slough bridge would impact designated critical habitat for green sturgeon and … loss of 0.11 acre of mudflat and aquatic habitat in the footprints of the bridge piers. In addition, shading from the bridge could adversely affect aquatic and mud flat habitat, and fish that use these habitats, under the bridge (refer to Impact BI-4c). Because of the regional rarity of all these special-status fish, any impacts to individuals or to habitat used by these fish would be significant.

As described under Impact BI-11b above, some Project components would benefit these fish by increasing the extent of open water in the Project area through removal of existing structures and by reducing coastal erosion. In addition, compensatory mitigation for impacts of the bridge to aquatic habitat would be provided as described by mitigation measures MM BI-4a.1 and MM BI-4c, and mitigation measure MM BI-4a.2 shall be implemented to minimize impacts to wetlands, aquatic habitats, and water quality during construction. Implementation of mitigation measure MM BI-12a.1 and MM BI-12a.2 would reduce effects of construction activities on special-status fish by avoiding in-water construction during periods when sensitive species are most likely to be present in waters of the Project site and by educating construction personnel regarding measures to be implemented to protect fish and their habitats. Implementation of these measures would reduce potential adverse effects on special-status fish species to less-than-significant levels.

Pages III.N-89 to -90, last partial paragraph

The same three fishery management plans and the species covered in those plans discussed in the previous impact statement apply to HPS Phase II. The modifications to EFH that could arise from HPS Phase II are associated with the proposed marina, placement of rock fill to buttress existing bulkheads, and the shoreline treatments. Marina operations could affect EFH through potential impacts to water quality and fish habitat resulting primarily from spills or intentional discharges of fuel or other harmful substances from boats using, or fueling facilities associated with, the marina. The most substantial loss of EFH would result from the placement of rock buttress fill necessary to protect the integrity of existing bulkheads. Although aquatic habitat would remain above the buttresses, this rock would occupy existing fish habitat, and the Project would thus substantially modify EFH within the waters adjacent to the HPS Phase II site.

Page III.N-93, Impact BI-12c discussion, first and second paragraphs

Construction of the Yosemite Slough bridge would impact EFH through the construction of pilings required to support the bridge. As detailed in Table III.N-4, the amount of area impacted is approximately 1.28 acres of temporary impacts and 0.40 acre of permanent impacts, which includes both on site and off site areas. These impacts would have a substantial adverse affect on EFH because the function of portions of the impacted habitat would be permanently altered by the Project, a significant impact. In addition, shading from the bridge could adversely affect aquatic and mud flat habitat, and fish that use these habitats, under the bridge (refer to Impact BI-4c).

Any loss or modification of EFH that would result from the Yosemite Slough bridge would be mitigated via the compensatory mitigation for impacts to jurisdictional waters (mitigation measures MM BI-4a.1 and MM BI-4c). …

Page III.N-100, first full paragraph

As discussed in Section III.K, the Navy is responsible for some remediation activities (i.e., radiological contamination) on HPS Phase II. Because contaminants have been identified in those parcels for which remedial actions have been selected but not yet implemented by the Navy, construction of shoreline improvements has the potential to disturb sediment or soil that may contain chemical contaminants. However, if the Navy does not complete its remediation activities in advance of Project activities, the San Francisco Redevelopment Agency (~~SFRA~~Agency) or the Project Applicant would implement the remaining remediation activities in conjunction with shoreline improvement activities, with appropriate regulatory oversight, as required by mitigation measure MM HZ-10b. Impact HZ-10b discusses the process that would be followed by ~~SFRA~~Agency or the Project Applicant in conjunction with development activities with appropriate regulatory oversight to manage potentially contaminated sediments that could be affected by Project shoreline improvements.

Page III.N-101, second paragraph, new third sentence

… and other impacts. In addition, an increase in trash, particularly food waste, could potentially subsidize nuisance species, which in turn could increase predation on more sensitive wildlife species. …

Page III.N-115, first paragraph after Impact BI-24

Table III.N-4 depicts on-site and off-site impact acreages resulting from site grading, materials laydown, facilities construction, vegetation removal, and installation of shoreline treatments for Candlestick Point, HPS Phase II, and Yosemite Slough bridge. Project implementation would permanently impact ~~0.64~~0.74 acre of wetlands; including 0.17 acre of freshwater wetland, ~~0.41~~0.42 acre of tidal salt marsh and ~~0.06~~0.15 acre of non-tidal salt marsh. In addition, Project implementation would permanently impact ~~24.96~~24.97 acres of Section 404 other waters. The Project would temporarily impact ~~0.11~~0.01 acre of jurisdictional wetlands and ~~2.77~~2.76 acres of Section 404 other waters…

Page III.N-121, first and third paragraphs

The geographic context for the cumulative analysis of effects on wetlands or navigable waters is … Reasonably foreseeable development would consist of projects proposed or under construction along the

shoreline of the San Francisco Bay, including the Yosemite Slough Restoration Project, that could affect federally protected wetlands or jurisdictional waters, either adversely (i.e., development projects) or beneficially (i.e., restoration projects). …

…

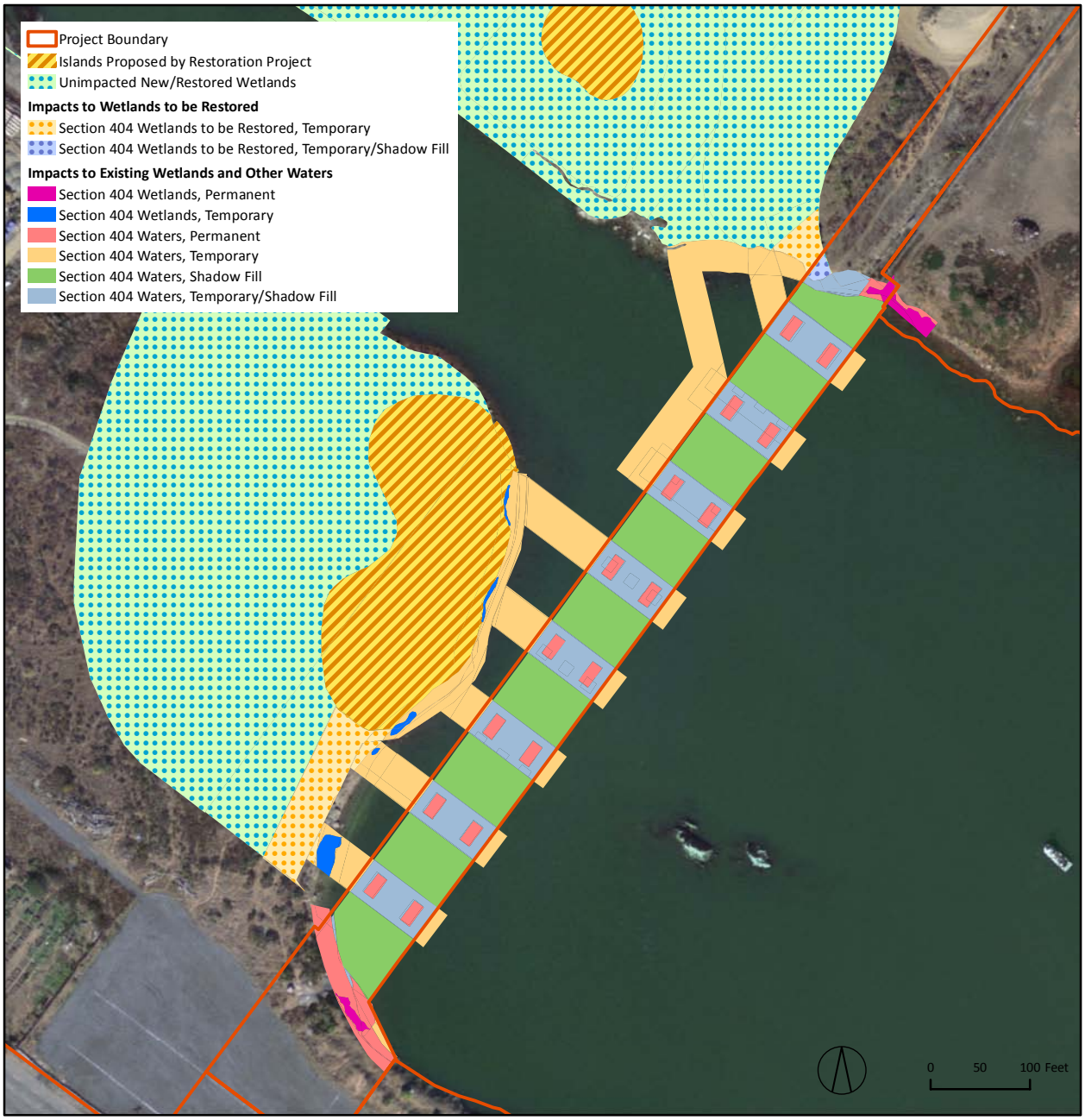
As detailed in Table III.N-4, the Project would permanently impact ~~0.64~~0.74 acre of wetlands and ~~24.96~~24.97 acres of Section 404 other waters. The Project may also permanently impact 0.0992 acre and temporarily impact 0.1532 acre of a proposed Navy wetland mitigation site (refer to Figure III.N-6), if the mitigation site is constructed prior to construction of the Yosemite Slough bridge and its approaches. Temporary Project impacts would occur to ~~0.11~~0.01 acre of wetlands and ~~2.77~~2.76 acres of Section 404 other waters. Consequently, without mitigation of these impacts and compliance with regulations governing wetlands and jurisdictional waters, the Project would contribute to loss of wetlands and jurisdictional waters within the Region.

Page III.N-122, following first partial paragraph

In response to public concerns, additional impacts to future wetland and aquatic habitat in consideration of the Yosemite Slough Restoration Project have been quantified. If the Restoration Project is implemented before the Yosemite Slough bridge is constructed, then the bridge would impact not only existing wetlands, aquatic habitats, and mud flats, but also sensitive habitats that have been restored by the Yosemite Slough Restoration Project. Based on the final Phase I Restoration Plan (on the north side of Yosemite Slough) provided by WRA, Inc. (the firm that designed the restoration plans) on 19 January 2010 and 50 percent plans for Phase II of the Restoration Plan (on the south side of Yosemite Slough) provided by WRA on 4 February 2010, additional impacts to sensitive habitats were calculated and are illustrated by Figure III.N-7 (Impacts to Wetlands and Other Waters after Yosemite Slough Wetland Restoration). Bridge construction access would result in temporary impacts to 0.21 acre of new vegetated tidal marsh that is proposed as part of the Yosemite Slough Restoration Project, but the CP-HPS Project would result in no permanent fill of new/restored wetland, aquatic, or mud flat habitat. Further, if the Restoration Project is implemented prior to bridge construction, shoreline improvements that would otherwise have been constructed to extend along the southern Yosemite Slough shoreline will not be necessary. Therefore, 0.03 acre of permanent impacts to wetlands and 0.19 acre of permanent impacts to Section 404 waters along the southern Yosemite Slough shoreline (off site) that were originally identified for the Project would not occur if Phase II of the Restoration Plan is implemented prior to bridge construction (though these existing jurisdictional areas would be temporarily impacted during bridge construction). Temporary impacts would be mitigated through implementation of mitigation measures MM BI-4a.1 and MM BI-4a.2, as required by the Project. Based on the plans for the restoration site provided by WRA as described above, less than 0.01 acre of wetlands that would be restored by the Restoration Project would be impacted by shading as a result of being located directly under the shadow of the bridge. If additional vegetated wetlands are proposed within the bridge footprint as design for Phase II of the Restoration Plan proceeds, such that additional shading impacts to vegetated wetlands would occur, and if such wetlands are constructed prior to construction of the bridge, mitigation for such impacts will be provided by the CP-HPS Project at a 1:1 ratio as described above.

Page III.N-122, new Figure III.N-7 (Impacts to Wetlands and Other Waters after Yosemite Slough Wetland Restoration) has been added after page III.N-121

[NOTE: The figure has been added to identify post-Yosemite Slough Restoration Project impacts.]



SOURCE: HT Harvey, 2010; Moffat & Nichol, 2009; Mactec, 2010; PBS&J, 2010. **PBS&J 05.07.10**

FIGURE III.N-7 Candlestick Point - Hunters Point Shipyard Phase II EIR

IMPACTS TO WETLANDS AND OTHER WATERS AFTER YOSEMITE SLOUGH WETLAND RESTORATION [New]

Page III.N-134, Table III.N-5, fourth row, first column

Longfin ~~S~~smelt

F.18 Changes to Section III.O (Public Services)

Page III.O-8

Impact PS-2 **Implementation of the Project would not result in a need for new or physically altered facilities beyond those included as part of this Project in order to maintain acceptable service ratios, response times, or other performance objectives for police protection. (Refer to~~ the various sections identified in this impact discussion~~ Sections III.D [Transportation and Circulation], III.H [Air Quality], III.I [Noise], III.J [Cultural Resources and Paleontological Resources], III.K [Hazards and Hazardous Materials], and III.M [Hydrology and Water Quality]) *[Criterion O.a]***

Page III.O-9, last paragraph

From ~~2010~~2011 to 2017, demolition and abatement activities would occur on HPS Phase II, as this is where most of the initial development would occur; the construction of a new 49ers stadium would occur between 2014 and 2017. Aside from earlier demolition and replacement of Alice Griffith housing, most construction at Candlestick Point would occur between 2017 and ~~2029~~2031. … As addressed in Impact PS-1, security of the construction areas would be the responsibility of the Applicant. Between ~~2020~~2019 and ~~2029~~2032, as new residential and non-residential uses come on line, there would be an increased need for police protection services.

Page III.O-10, second paragraph

The SFPD evaluates the need for additional officers by sector, and not station or district needs. The Project site is located in two of the five sectors within the Bayview District, both of which have been identified as high demand areas. While it is unlikely that 53 new officers would be needed at the outset of project development as development would occur over a ~~19~~20-year time period, some redistribution of the police presence in the southeastern portion of the City would be warranted by Project development, as described above.

Page III.O-12, first full paragraph

As the Project identifies community service use areas that could be used for police services, and as police services are not tied to a specific station, the SFPD would be able to maintain acceptable levels of police service during operation of the Project. ~~Therefore,~~ While the development of the Project may require new or physically altered police facilities in order to maintain acceptable police services, the potential impacts associated with the construction of a new facility have been addressed in this EIR and would not require further environmental review. As such, no mitigation is required.

Page III.O-12, third full paragraph

Development of cumulative projects within the City of San Francisco would result in increased population and employment-generating uses, based on recent projections, and associated increased demand for police protection. … Development projections estimate an increase of 61,814 households, 133,359 persons, and 195,010 jobs from 2005 to 2030, either the latest year for which projections have been formulated or the closest year to Project build-out for projections which extend in five-year increments beyond 2030, consistent with other projections in this EIR.

Page III.O-18

Impact PS-4 **Implementation of the Project would not result in a need for new or physically altered facilities beyond those included as part of this Project in order to maintain acceptable response times for fire protection and emergency medical services. (Refer to ~~the various sections identified in this impact discussion~~ Sections III.D [Transportation and Circulation], III.H [Air Quality], III.I [Noise], III.J [Cultural Resources and Paleontological Resources], III.K [Hazards and Hazardous Materials], and III.M [Hydrology and Water Quality]) *[Criterion O.b]***

Page III.O-22, last paragraph

Development of cumulative projects within the City of San Francisco would result in increased population and employment-generating uses, based on recent projections, and associated increased demand for police protection. … Development projections estimate an increase of 61,814 households, 133,359 persons, and 195,010 jobs from 2005 to 2030, either the latest year for which projections have been formulated or the closest year to Project build-out for projections that extend in 5-year increments beyond 2030, consistent with other projections in this EIR.

Page III.O-28, first paragraph under "Analytic Method"

Impacts on schools are determined by analyzing the estimated increase in student population as a result of Project build-out in ~~2029~~2032 and comparing the increase to the capacity of schools ~~in 2029~~ in 2030, the closest year to Project build-out for which housing projections have been calculated, to determine whether new or altered facilities would be required, the construction of which could result in substantial adverse environmental effects.

Page III.O-30, first and second paragraphs

Comparing the 2008 SFUSD school capacity of 63,835 to a projected 2030 population of 71,573 school-age children (recognizing that Project ~~build-out~~ occupancy is projected to occur ~~one year earlier two years later~~, in ~~2029~~2032), there is a projected shortfall of about 7,738 seats Citywide, or about a 12 percent shortfall.

As discussed in Section III.O.2 (Setting), improvements are planned for many SFUSD schools, such as replacing older schools and modernizing other facilities. … While there are no plans to reduce school capacity at the Project site, in the event that schools located in the Project site reach capacity by the year

~~2029~~2032 (or 2030 as the projections indicate), either due to a reduction in space or an increase in classroom size, the SFUSD may assign students to schools based on a lottery system, which would ensure that student enrollment is distributed to facilities that have sufficient capacity to adequately serve the educational needs of students.

F.19 Changes to Section III.P (Recreation)

Page III.P-1, first paragraph

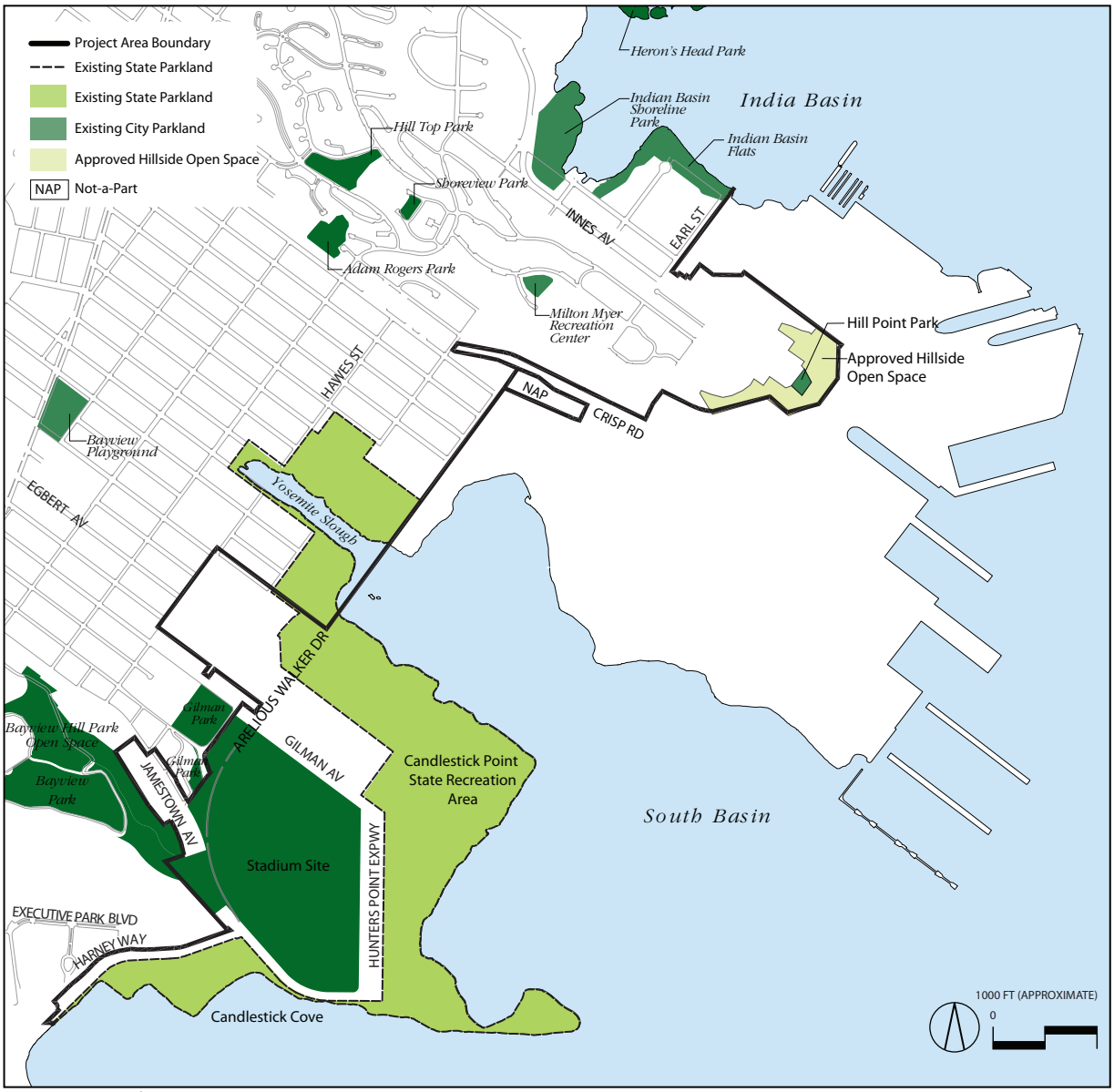
… The analysis in this section concludes that ~~no~~ the Project could have potentially significant ~~or significant~~ environmental impacts ~~development would result from the Project~~ related to the timing of proposed park; therefore, ~~no~~ a mitigation measure~~s~~ ~~are~~ is included.

Pages III.P-2 to -3, last partial paragraph

CPSRA (120.2 acres), on the shoreline of Candlestick Point, was acquired … underutilized (totaling approximately 73 acres). The CPSRA lands to the northeast of Yosemite Slough include a now defunct auto salvage yard, old warehouse, and two business locations that are currently occupied by a sound studio and a cabinet shop. CDPR leases the buildings to these tenants on a month-to-month basis. The southern portions … Until recently, the Last Rubble area was characterized by large piles of rubble and debris, remnants of the site's previous use as a dumping ground. California State Parks, with a grant from the California Integrated Waste Management Board, removed 10 acres of rubble and debris in 2009. ~~The California Integrated Waste Management Board completed a rubble and debris removal project in April 2009.~~ As a result of this, the majority of the rubble and debris was either removed or crushed on site. Yosemite Slough is part of the CPSRA, but is not within the Project site except for at its neck, where the proposed bridge would be constructed.

Page III.P-3, Figure III.P-1 (Existing and Approved Parks and Open Space) has been revised

[NOTE: The figure has been revised to add "Approved" to Hillside Parks & Open Space; and to expand the boundaries of Gilman Park and Bayview Hill Park Open Space.]



SOURCE: Lennar Urban, RHAA, 2009; PBS&J, 2010.

PBS&J 04.16.10 2056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

EXISTING AND APPROVED PARKS AND OPEN SPACE [REVISED]

FIGURE III.P-1

Page III.P-12, Impact RE-1

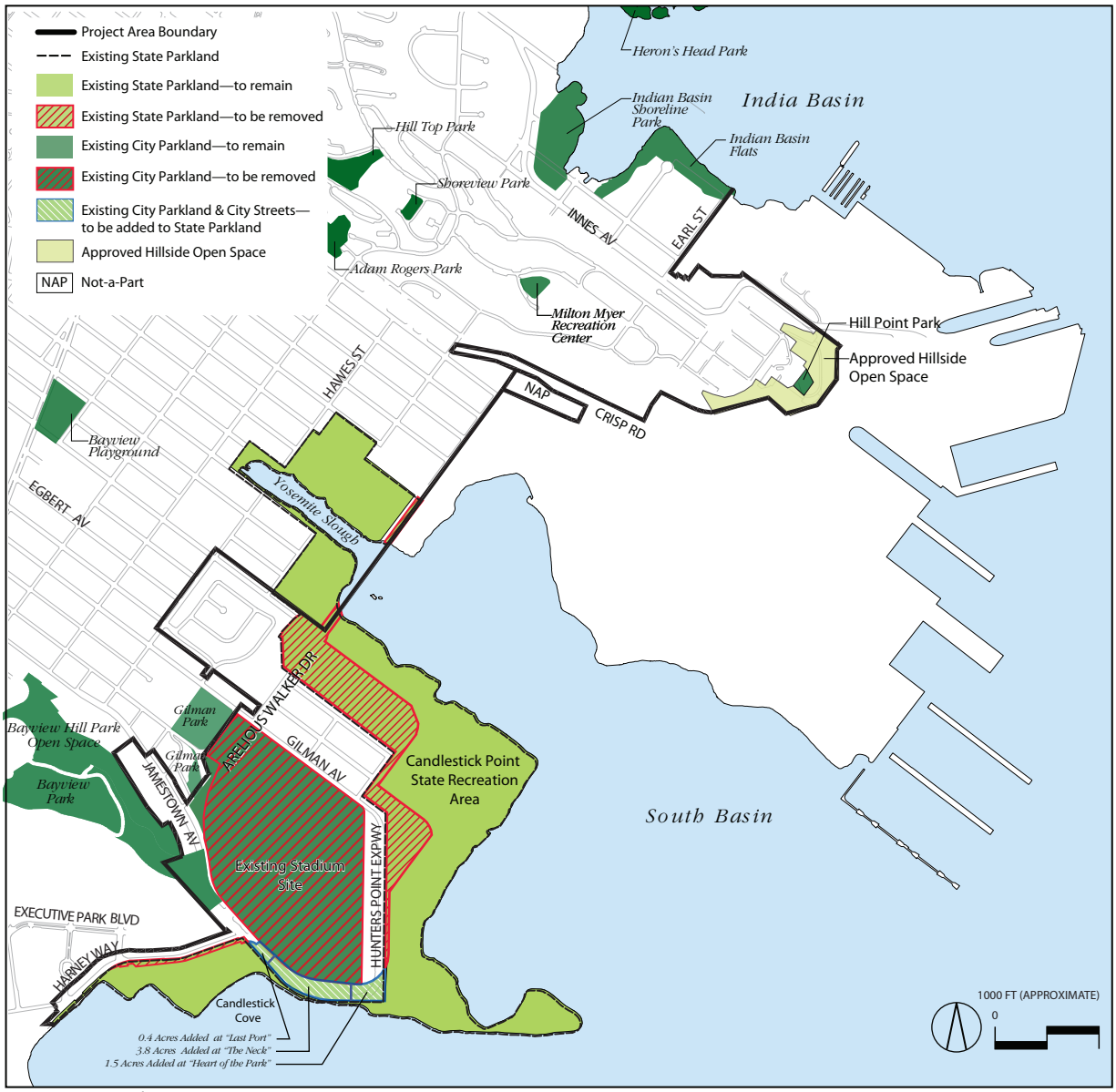
Impact RE-1 **Construction of the parks, recreational uses, and open space proposed by the Project would not result in substantial adverse physical environmental impacts beyond those analyzed and disclosed in this EIR. (Refer to ~~the various sections identified in this impact discussion~~ Sections III.D [Transportation and Circulation], III.H [Air Quality], III.I [Noise], III.J [Cultural Resources and Paleontological Resources], III.K [Hazards and Hazardous Materials], and III.M [Hydrology and Water Quality]) *[Criterion P.c]***

Page III.P-12, last partial paragraph

Construction activities associated with the proposed parks and recreational facilities are considered part of the overall Project. A discussion of Project-related construction impacts, including those associated with the construction of parks and recreational facilities, is provided in the applicable sections of this EIR, including Section III.D (Transportation and Circulation), Section III.H (Air Quality), Section III.I (Noise), Section III.J (Cultural Resources and Paleontological Resources), Section III.K (Hazards and Hazardous Materials), ~~and~~ Section III.M (Hydrology and Water Quality), and Section III.N (Biological Resources). …

Page III.P-18, Figure III.P-3 (Proposed CPSRA Reconfiguration) has been revised

[NOTE: The figure has been revised to add "Approved" to Hillside Parks & Open Space; and to expand the boundaries of Gilman Park and Bayview Hill Park Open Space.]



SOURCE: Lennar Urban, RHAA, 2009; PBS&J 2010.

PBS&J 04.16.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

PROPOSED CPSRA RECONFIGURATION [REVISED]

FIGURE III.P-3

Page III.P-25, last paragraph

… In addition, The Last Rubble would contain a new beach area ~~and marshland (refer to Figure II-21)~~. Other features here may include parking, picnic areas, overlook terraces, restrooms, and a restaurant/café.

Page III.P-26, third paragraph

As briefly described in Section III.P.3 (Regulatory Framework) discussion, … The footings for the Yosemite Slough bridge, under preliminary design, would cross the proposed extension of the Bay Trail under the Bay Trail Plan. Visitors utilizing the Bay Trail in the area of the bridge would be able to cross Arelious Walker Drive and pick up the Bay Trail on the other side of the bridge. ~~Bay Trail would be incorporated into the Yosemite Slough bridge, which would serve bus transit and pedestrian and bicycle routes between Candlestick Point and HPS Phase II (refer to Figure III.P-2).~~

Page III.P-27, second and third bullets after "Other Parks and Open Space"

- Hillside Parks and Open Space within the Project site. The hillside parks and open space include the eastern 'tail' of Bayview Park and other hillside areas below Jamestown Road. ~~The steeper areas will be maintained in a more natural state., while the flatter portion of Bayview Hill may be further developed as a neighborhood-serving park space.~~ The steeper areas and the flatter portion of Bayview Hill will be maintained in a more natural state.
- Yosemite Slough. While not located within the Project site except for the mouth of the slough, where the proposed bridge would be located, the Yosemite Slough is located directly adjacent to but outside of the Project site and is planned for restoration by the California State Parks and the California State Parks Foundation. The restoration will focus on providing new wetland habitat and environmental education opportunities. The proposed Yosemite Slough bridge would cross a small portion of the CPSRA on the southern side of the slough and pass along the edge of the eastern boundary of the CPSRA on the north side.

page III.P-27, last paragraph

… environmental education. The 44.9-acre Grasslands Ecology Park at Parcel E and the 37.2-acre Grasslands Ecology Park at Parcel E-2 on HPS Phase II are contiguous to CPSRA ~~and may be offered to the CDPR by the Agency~~.

Page III.P-30, first paragraph

Despite the availability of sufficient park acreage on the Project site, new residents or employees of the Project site may also choose to use existing ~~nearby~~ parks outside of the Project site (refer to the Setting section for discussion of nearby parks), which could result in the deterioration or degradation of those existing resources. …

Pages III.P-30 to -31, last partial paragraph

The conceptual development plan described in Chapter II would result in the development of residential units and parks during all of four stages of development. Figure ~~11~~II-17 shows the particular residential and park areas that would be developed or improved in each phase. Table III.P-3 (Residential Units and

Park Acreage Provided during Each Stage of Development) outlines the number of residential units and the acreage of parkland to be provided during each stage of development, as well as the resulting park-to-population ratio for residents of the Project site. As this table indicates, at the end of each phase, the park-to-population ratio would be no lower than 13.8 acres per 1,000 residents. Table III.P-3a (Residential Units, Employment, and Park Acreage Provided during Each Stage of Development) identifies the resulting park-to-population ratio for residents and employees of the Project site. ~~Similarly, if~~ With the employee population ~~were~~ added, the lowest park-to-population ratio at the end of a phase would be 9.6~~5~~ acres per 1,000 residents/employees following the last stage of development.

Pages III.P-31,Table III.P-3 (Residential Units and Park Acreage Provided during Each Stage of Development) has been revised. For readability, the new data are shown without underline, and deleted numbers are not shown.

[NOTE: This table has been updated to reflect the revised development schedule.]

Table III.P-3 Residential Units and Park Acreage Provided during Each Stage of Development [Revised]

Stage of Development	*Residential Units*	*Population*	*Total Parkland (ac)*	*Park-to-Population Ratio (acres per 1,000 Residents)*
Existing	256	1,113[a]	120.2	108
Phase 1	3,160	7,363[b]	235.6	32.0
Phase 2	5,165	12,035[b]	246.9	20.5
Phase 3	7,670	17,872[b]	250.4	14.0
Phase 4	10,500	24,465[b]	336.4	13.8

a. Refer to Table III.C-1 (Existing Population [2005]) in Section III.C (Population, Housing, and Employment). This population correlates to the total number of households in the Traffic Analysis Zone, which includes more than the 256 households located in the Candlestick portion of the Project site (e.g., 292). It is likely, therefore, that the population within the Candlestick portion of the Project site is less than 1,113, which would only increase the existing park-to-population ratio.
b. Calculated as 2.33 people per residential unit.

Page III.P-31, new Table III.P-3a (Residential Units, Employment, and Park Acreage Provided during Each Stage of Development) has been added

[NOTE: This table has been updated in response to comments and to reflect the revised development schedule and to add information and calculations of park-to-population ratio including Project employees as well as residents.]

Table III.P-3a Residential Units, Employment, and Park Acreage Provided during Each Stage of Development [New]

Stage of Development	Residential Units	Population	Total Parkland (ac)	Park-to-Population Ratio (acres per 1,000 Residents)	Employees	Park-to-Population Ratio (acres per 1,000 Residents & employees)
Existing	256	1,113a	120.2	108	—	201.5
Phase 1	3,160	7,363	235.6	32.0	2,346	24.3
Phase 2	5,165	12,035	246.9	20.5	7,474	12.7
Phase 3	7,670	17,872	250.4	14.0	10,595	8.8
Phase 4	10,500	24,465b	336.4	13.8	10,730	9.6

a. Refer to Table III.C-1 (Existing Population [2005]) in Section III.C (Population, Housing, and Employment). This population correlates to the total number of households in the Traffic Analysis Zone, which includes more than the 256 households located in the Candlestick portion of the Project site (e.g., 292). It is likely, therefore, that the population within the Candlestick portion of the Project site is less than 1,113, which would only increase the existing park-to-population ratio.

b. Calculated as 2.33 people per residential unit.

Page III.P-32, Impact RE-3

Impact RE-3 **Implementation of the Project would decrease the size of CPSRA but would not, overall, have an adversely effect on the recreational opportunities offered by that park, nor would it substantially adversely affect windsurfing opportunities at the Project site. (Less than Significant)** ***[Criterion P.d]***

Page III.P-32, second paragraph

Moreover, the Project would provide substantial improvements throughout the CPSRA. These improvements, which are described at length in the discussion of Impact RE-2, include revegetation and landscaping, shoreline restoration and stabilization, infrastructure improvements (such as trails, pathways, and visitor facilities), the provision of habitat and opportunities for environmental education, "Eco-Gardens," and salt-marsh restoration. The proposed Yosemite Slough bridge would cross a small portion of the CPSRA on the southern side of the slough and pass along the edge of the eastern boundary of the CPSRA on the north side. The area removed for bridge footings would impinge on approximately 300 feet or less (270 feet) through the CPSRA. On the south side, the bridge would extend Arelious Walker Drive through a portion of the CPSRA. Persons using the Bay Trail would be able to cross Arelious Walker Drive and easily access the opposite portion of the CPSRA. Thus, while the road and bridge approach on the south side of the slough would cross the CPSRA, it would not act as a physical barrier preventing use of the entire CPSRA. While the proposed road and bridge would cut through the open space in one location, the majority of the restored Slough area would remain unaffected and available for its intended use. Figure III.P-8 shows the existing unimproved and improved areas of the CPSRA and indicates where land would be removed or added relative to the existing CPSRA uses. …

Page III.P-32, third paragraph

… Moreover, the agreement between CDPR and the City or the Agency, providing for the reconfiguration of CPSRA, would also provide ~~at least $10 million in~~ substantial funding for operation and maintenance of the park. The precise amount of operations and maintenance funding to be provided has not yet been determined, but per the requirements of SB 792, it is likely to be at least $10 million. This funding will further enable~~ing~~ the park to accommodate increased demand.

Page III.P-33, fourth paragraph

The geographic context for an analysis of cumulative impacts to recreational resources is the City of San Francisco. … Reasonably foreseeable future development forecasts are based on projections of future growth and take into account projects going through the entitlement process, including the Yosemite Slough Restoration Project, Executive Park, Jamestown, Hunters Point Shipyard Phase I, Hunters View, and India Basin Shoreline, as well as additional growth in the City envisioned through 2030 (refer to analysis below).

F.20 Changes to Section III.Q (Utilities)

Page III.Q-1, second paragraph

Data used to prepare this section include information obtained from the San Francisco Public Utilities Commission (SFPUC), the California Integrated Waste Management Board (CIWMB), the San Francisco Bay Regional Water Quality Control Board (RWQCB), and other regulatory agencies and service providers. Water demand was estimated in the *Water Supply Assessment for the Proposed Candlestick Point–Hunters Point Shipyard Phase II Project* (WSA) prepared by PBS&J for the SFPUC, included as Appendix Q1 (Water Supply Assessment). Additional information was obtained from several studies prepared on behalf of Lennar Urban, including the *Candlestick Point/Hunters Point Shipyard Infrastructure Concept Report* (2007) prepared by Winzler & Kelly Consulting Engineers; the *Low Impact Development Analysis* (2008) prepared by Winzler & Kelly; the *LID Stormwater Opportunity Study* (2009) prepared by Arup; the *Revised Water Demand Memorandums* dated October 15, 2009, and April 28, 2010,[981a] by Arup, included as Appendix Q2 (Arup, Amendment to Water Demand Memorandum #16—Variant 2A [Housing/R&D Variant], April 28, 2010); Technical Memorandum from Hydroconsult Engineers dated October 2009 (Appendix Q3 [Technical Memorandum from Hydroconsult Engineers]); and the *CPHPS Infrastructure Plan* (October 2009) prepared by Winzler & Kelly and Arup.

[981a] An April 28, 2010, Addendum to the Water Demand Memorandum #16—Variant 2A (Housing/R&D Variant) (dated October 15, 2009) is included as Appendix Q2 of this C&R document.

Page III.Q-10, first full paragraph

The deficit shown in 2010 is the result of the Phased WSIP, which restricts the SFPUC's allocation from the RWS supply to 81 mgd. Full development of the additional 10 mgd of new local supplies is projected to be available by 2015. … The first phase of development of the Project is projected to be completed in ~~2017~~2019. …

Page III.Q-18, mitigation measure MM UT-2

MM UT-2 Auxiliary Water Supply System. *Prior to issuance of occupancy permits, as part of the Infrastructure Plan to be approved, the Project Applicant shall construct an Auxiliary Water Supply System (AWSS) loop within Candlestick Point to connect to the City's planned extension of the off-site system off-site on Gilman Street from Ingalls Street to Candlestick Point. The Project Applicant shall construct an additional AWSS loop on HPS Phase II to connect to the existing system at Earl Street and Innes Avenue and at Palou and Griffith Avenues, with looped service along Spear Avenue/Crisp Road.*

Page III.Q-43, first paragraph after Impact UT-5a

It is anticipated that the Project would be constructed in phases beginning in ~~2010~~2011, with full build-out by ~~2029~~2031, which represents an approximately ~~19~~20-year construction period; however, as indicated by Figure II-16 (Proposed Site Preparation Schedule), all demolition activities would be concluded by ~~2024~~2028 in Candlestick Point.

Page III.Q-45, second paragraph

At current disposal rates, the Altamont Landfill would be expected to reach capacity in January 2032; however, its permit expires three years earlier, in January 2029. Demolition activities, which generate construction debris, are expected to conclude in ~~2024~~2028 at Candlestick Point, ~~five years~~ one year before the landfill is expected to close. …

Page III.Q-46, first paragraph

At HPS Phase II, new development would begin with the construction of the 49ers stadium, scheduled for completion … Demolition activities at the rest of HPS Phase II would begin in ~~2010~~2011 and conclude by ~~2021~~2028, as indicated by Figure II-16.

Page III.Q-46, fourth paragraph

As noted, at current disposal rates, the Altamont Landfill would be expected to reach capacity in January 2032; however, it may close three years earlier, in January 2029. Most of the d~~D~~emolition activities, which generate construction debris, are expected to conclude in ~~2021~~2028 at HPS Phase II, ~~eight~~ six years before the landfill is expected to close. …

Page III.Q-47, first paragraph

It is anticipated that the Project would be constructed in phases beginning in ~~2010~~2011, with full build-out by ~~2029~~2031, which represents an approximately ~~19~~20-year construction period; however, as indicated by Figure II-16, all demolition activities would be concluded by ~~2024~~2028 in both Candlestick Point and ~~by 2021 in~~ HPS Phase II.

Page III.Q-47, third paragraph

At current disposal rates, the Altamont Landfill would be expected to reach capacity in January 2032; however, it may close three years earlier, in January 2029. Demolition activities, which generate

construction debris, are expected to conclude in ~~2024~~2028 at both Candlestick Point and ~~in 2021 at~~ HPS Phase II, a minimum of ~~five years~~ one year before the landfill is expected to close. …

Page III.Q-48, first partial paragraph

… disposal by a licensed transporter to a TSD authorized to treat such hazardous waste. Disposal of these wastes would occur intermittently as construction occurs over the ~~19~~20-year construction period, and would not likely represent a substantial amount of hazardous waste in a given year. …

Page III.Q-52, first full paragraph

As noted, above, the Altamont Landfill is scheduled to close in January 2029, ~~concurrent with~~ prior to full build-out of Candlestick Point, and the City's existing contract with Altamont Landfill expires in 2014, before build-out of Candlestick Point.

Page III.Q-53, third paragraph after Impact UT-7

The Altamont Landfill is scheduled to close in January 2029, ~~concurrent with~~ prior to full build-out of the Project, and the City's existing contract with Altamont Landfill expires in 2014, before build-out of the Project. …

F.21 Changes to Section III.S (Greenhouse Gas Emissions)

Page III.S-9, second paragraph

In 2007, 102.6 million metric tonnes of CO_2-equivalent (MMTCO~~2E~~$_2$e) greenhouse gases were emitted by the San Francisco Bay Area (95.5 MMTCO~~2E~~$_2$e were emitted within the Bay Area Air District and 7.1 MMTCO~~2E~~$_2$e were indirect emissions from imported electricity).[1132a] …

[1132a] In February 2010, BAAQMD revised their 2007 GHG emission inventory to 95.8 MMTCO$_2$e. This reduction in emissions is attributable to decreased emissions assigned to ships and boats under the transportation category.

Page III.S-25, second full paragraph and Table III.S-2 (Project Construction GHG Emissions)

Table III.S-2 (Project Construction GHG Emissions) summarizes the output results from Table 3-5 of the GHG inventory and presents the emissions estimates in metric tonnes of CO_2. The table indicates that an estimated ~~105,587~~129,274 tonnes CO_2e emissions from Project construction equipment would be emitted over the course of the ~~minimum~~ entire construction period ~~of 16 years~~.

[NOTE: This table has been updated to reflect the revised development schedule.]

Table III.S-2 Project Construction GHG Emissions [Revised]

Location	*Construction Equipment*	*Worker Commuting*	*Hauling*	*Total GHG Emissions*
Candlestick Point	56,403	~~1,807~~ 2,913	~~1,316~~ 6,103	***~~59,526~~ 65,419***
Hunters Point Shipyard Phase II	42,895	~~2,265~~ 2,734	~~901~~ 18,226	***~~46,061~~ 63,854***
Total	***99,298***	***~~4,072~~ 5,647***	***~~2,217~~ 24,329***	***~~105,587~~ 129,274***

SOURCE: ENVIRON, 2010. Updated Project Phasing Effect on Air Quality and Climate Change Analyses Candlestick Point-Hunters Point Shipyard Phase II Development Plan

If these one-time emissions are annualized assuming a 40-year development life (which is likely low), the one-time emissions contribute approximately ~~2,640~~3,232 tonnes CO_2e emissions annually. …

F.22 Changes to Section IV.A (Introduction) [in Chapter IV (Project Variants)][147]

Page IV-1, first paragraph

This section introduces six variants of the Project that were formulated by the Agency, the City and Lennar Urban. These variants are addressed at a project level of detail in this chapter of this EIR, and include the following:

- Variant 1: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—R&D Variant
- Variant 2: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—Housing Variant
- Variant 2A: San Francisco 49ers move outside the project area (no football stadium constructed at HPS Phase II)—Housing/R&D Variant
- Variant 3 (Tower Variants A, B, C, and D): Four Candlestick Point tower variants would have the same land use program and overall description as with the Project, but would have different locations, massings, and heights for residential towers at Candlestick Point
- Variant 4: A utilities variant would include an automated solid waste collection system, decentralized wastewater treatment, and district energy
- Variant 5: Shared stadium where both the San Francisco 49ers and Oakland Raiders would play at the stadium at HPS Phase II

Three variants (Variants 1, 2, and 2A) address the scenario of the San Francisco 49ers moving to the City of Santa Clara or elsewhere with no football stadium constructed at HPS Phase II. Each of those three variants includes a different land use program at the HPS Phase II site. Variant 1 (R&D Variant) would include increases in R&D space at the stadium location. Variant 2 (Housing Variant) would relocate 1,350 residential units from Candlestick Point to the stadium site. Variant 2A (Housing/R&D Variant) would relocate 1,650 housing units from Candlestick Point to the stadium site, and, in addition, includes an additional 500,000 sf of R&D compared to the Project (for a total of 3,000,000 sf of R&D); 1,000,000 sf of the total R&D for Variant 2A would be constructed on the stadium site along with the residential uses.

The Candlestick Point Tower Variant (Variant 3) would have the same land use program and overall description as the Project, but would have different locations, massings, and heights for residential towers at Candlestick Point (expressed as four options for this variant: Candlestick Point Tower Variants A, B, C, and D).

A Utilities Variant (Variant 4) would include an automated solid waste collection system, decentralized wastewater treatment, and district energy. A 49ers/Raiders Shared Stadium Variant (Variant 5) would

[147] Text changes on pages IV-18, IV-19, IV-21, IV-23, IV-87, and IV-89 related to the R&D Variant (Variant 1) and the Housing Variant (Variant 2) are made to conform the text of the Draft EIR to Appendix D of the Draft EIR.

include the scenario of a shared stadium, where both the 49ers and Oakland Raiders would play at a new stadium at HPS Phase II.

None of the variants would alter the Project Objectives, which are provided in detail in Chapter II (Project Description) of this EIR. The variants are analyzed at a project level of detail, which is equal to the Project analysis included in Chapter III (Environmental Setting, Impacts, and Mitigation Measures), Section III.A through Section III.S of this EIR. The environmental impacts that would result from implementation of the variants are presented following the description of each variant. A comparison of the variant development programs to the Project is presented in Table IV-1 (Comparison of Variants to the Project). Table IV-2 (Impact Comparison of Project Variants) summarizes the effects of the Project compared to the variants.

~~This section introduces five variants of the Project that were formulated by the Agency, the City and Lennar Urban., and other stakeholders. Two variants address the scenario of the San Francisco 49ers moving to the City of Santa Clara with no football stadium constructed at HPS Phase II. Those two variants include a different land use program at the HPS Phase II site. Compared to the Project, the development program of these variants at HPS Phase II would include increases in R&D space with the No Stadium—Additional Research and Development Variant (R&D Variant), and relocating residential units to HPS Phase II with the No Stadium—Housing Variant (Housing Variant). The Candlestick Point tower variant would have the same land use program and overall description as the Project, but would have different locations and heights for residential towers at Candlestick Point (expressed as three options for this variant: Candlestick Point Tower Variants A, B, and C). A utilities variant would include an automated solid waste collection system, decentralized wastewater treatment, and district energy. Another variant would include the scenario of a shared stadium where both the 49ers and Oakland Raiders would play at a new stadium at HPS Phase II.~~

Page IV-1, second paragraph

Most of the features of the variants would be similar to the features of the Project. None of the variants would alter the Project Objectives, which are provided in detail in Chapter II (Project Description). The Project could be approved in combination with Variants 3 (Tower Variants A, B, C, and D), 4, and/or 5, any of which can be overlaid on the Project. Variants 1, 2, and 2A represent variants of the Project without a stadium; either of these variants, if approved, could also include components of Variants 3 (Tower Variants A, B, C, and D), 4, and/or 5. For all of these variants, this ~~c~~Chapter IV (Project Variants) provides an environmental analysis such that this EIR would be adequate under CEQA for purposes of review and approval for any of the variants of the Project either individually or in combination with elements of the Project. The variants are analyzed at a project-level of detail, which is equal to the Project analysis included in Chapter III (Environmental Setting, Impacts, and Mitigation Measures) Section III.A through Section III.S of this document. The environmental impacts that would result from implementation of the variants are presented following the description of each variant. A comparison of the variant development programs to the Project is presented in Table IV-1 (Comparison of Variants to the Project). Table IV-2 (Impact Comparison of Project Variants) summarizes the effects of the Project compared to the variants. ~~As necessary, figures are included to illustrate key details of the Variants and are presented below with the variant descriptions.~~

Pages IV-2 and IV-3, Table IV-1 (Comparison of Variants to the Project) and Table IV-2 (Impact Comparison of Project Variants) have been revised

[NOTE: These tables have been revised to include information concerning Variant 2A and Tower Variant D.]

Table IV-1 Comparison of Variants to the Project [Revised]

Differences	*Project*	*Variant 1: R&D Variant (No Stadium, Additional R&D)*	*Variant 2: Housing Variant (No Stadium, Housing)*	*Variant 2A: Housing/ R&D Variant (No Stadium)*	*Variant 3: Candlestick Point Tower Variants (Different Tower Heights and Locations, Larger Floor Plates)*	*Variant 4: Utilities Variant (Additional On-Site Infrastructure)*	*Variant 5: 49ers/Raiders Shared Stadium*
						Same overall development plan as Project, but with minor shifts in building locations to accommodate 570,000 gsf for the proposed utility systems (with 330,000 gsf located below ground).	Same development plan as Project
Land Use Plan							
Residential (units)—Candlestick Point	7,850	7,850	6,500	6,225[a]	7,850	7,850	7,850
Residential (units)—Hunters Point Phase II	2,650	2,650	4,000	4,275[a]	2,650	2,650	2,650
					Same number of residential units, but different placement of towers		
Office	150,000	150,000	150,000	150,000	150,000	150,000	150,000
Research & Development (gsf)	2,500,000	5,000,000	2,500,000	3,000,000	2,500,000	2,500,000	2,500,000
Regional Retail	635,000	635,000	635,000	635,000	635,000	635,000	635,000
Neighborhood Retail	~~125~~250,000	~~125~~250,000	~~125~~250,000	250,000	~~125~~250,000	~~125~~250,000	~~125~~250,000
			Same overall amount of neighborhood retail as Project, but different distribution within HPS Phase II (refer to text for a description)	Same overall amount of neighborhood retail as Project, but different distribution within HPS Phase II (refer to text for a description]			
Tower Floor Plates	10,000 sf	10,000 sf	10,000 sf	10,000 sf	12,500 sf	N/A	N/A

Table IV-1 Comparison of Variants to the Project [Revised]

Differences	*Project*	*Variant 1: R&D Variant (No Stadium, Additional R&D)*	*Variant 2: Housing Variant (No Stadium, Housing)*	*Variant 2A: Housing/ R&D Variant (No Stadium)*	*Variant 3: Candlestick Point Tower Variants (Different Tower Heights and Locations, Larger Floor Plates)*	*Variant 4: Utilities Variant (Additional On-Site Infrastructure)*	*Variant 5: 49ers/Raiders Shared Stadium*
Football Stadium (seats)	69,000 Stadium built by 2017	0	0	0	69,000 Stadium built by 2017	69,000 Stadium built by 2017	69,000 Shared stadium with 49ers and Oakland Raiders Stadium site built by 2017
Yosemite Slough Bridge	Auto/BRT/Ped	BRT/Ped	BRT/Ped	BRT/Ped	Auto/BRT/Ped	Auto/BRT/Ped	Auto/BRT/Ped
Parks, Open Space, and Recreation Uses							
Total Parks, Open Space, and Recreational Uses	336.4	327.0	349.4	326.6	336.4	336.4	337.5
New Parks	148.1	160.5	158	159	148.1	148.1	148.6
Sports Fields and Active Recreation	91.6	69.8	96.7	70.9	91.6	91.6	91.6
State Parklands (acres)	96.7	96.7	~~94.7~~96.7	96.7	96.7	96.7	96.7

SOURCE: Lennar Urban, 2010.

~~Boxes indicate a change in comparison to the Project.~~

a. The bridge would be open to automobiles only on game days.

Table IV-2 Impact Comparison of Project Variants [Revised]

		Impacts								
					Variant 3: Candlestick Point Tower Variants					
	Topic	Variant 1: R&D Variant (No Stadium, Additional R&D)	Variant 2:Housing Variant (No Stadium, Housing)	Variant 2A: Housing Variant with R&D (No Stadium)	Tower Variant 3A	Tower Variant 3B	Tower Variant 3C	Tower Variant 3D	Variant 4: Utilities Variant (Additional On-Site Infrastructure)	Variant 5: 49ers/ Raiders Shared Stadium
III.B	Land Use and Plans	=	=	=	=	=	=	=	=	=
III.C	Population, Housing, and Employment	=	=	=	=	=	=	=	=	=
III.D	Transportation and Circulation	>	<	>	=	=	=	=	=	=
III.E	Aesthetics	=	<	<	>	>	>	>	=	=
III.F	Shadows	<	<	<	>	=	<	<	=	=
III.G	Wind	<	<	<	=	=	=	=	=	=
III.H	Air Quality	=	=	=	=	=	=	=	=	=
III.I	Noise	>	<	=	=	=	=	=	=	=
III.J	Cultural Resources and Paleontological Resources	=	=	=	=	=	=	=	=	=
III.K	Hazards and Hazardous Materials	=	=	=	=	=	=	=	=	=
III.L	Geology and Soils	=	=	=	=	=	=	=	=	=
III.M	Hydrology and Water Quality	>	<	=	=	=	=	=	<	=
III.N	Biological Resources	=	=	=	=	=	=	=	=	=
III.O	Public Services	>	<	=	=	=	=	=	=	=
III.P	Recreation	=	=	=	=	=	=	=	=	=
III.Q	Utilities	=	=	=	=	=	=	=	<	=
III.R	Energy	=	=	=	=	=	=	=	=	=
III.S	Greenhouse Gas Emissions	>	=	=	=	=	=	=	=	=

SOURCE: PBS&J, 2009.

Each topic is compared to the Project and for each impact area, impacts are equal to (=), greater than (>), or less than (<) the Project impacts.

F.23 Changes to Section IV.B (Variant 1: R&D Variant [No Stadium—Additional Research & Development])

Page IV-4, last paragraph

The land use program outlined in the Chapter II for Candlestick Point would be the same for ~~this~~ the ~~Housing~~ R&D Variant (Variant 1), with fewer housing units.[1178a] The discussion below is focused on the changes that would occur at HPS Phase II.

[1178a] The number of residential units in each district may be adjusted depending on market demand; however, the sum total of housing units for Candlestick Point would not exceed 7,850 units.

Page IV-8, first paragraph

As discussed in Chapter II, the HPS Phase II land use plan would consist of four districts: HPS Village Center, HPS North, R&D, and HPS South. … A summary of the development proposed in each of the districts with the R&D Variant (Variant 1) is provided in Table IV-4.[1178b] …

[1178b] The number of residential units in each district may be adjusted depending on market demand; however, the sum total of housing units for HPS Phase II would not exceed 2,650 units.

Page IV-12, first paragraph

Build-out of the R&D uses would begin in ~~2017~~2011, with completion in ~~2021~~2031. Figure IV-4 (R&D Variant Building and Park Construction Schedule) illustrates the overall sequence of development for the R&D Variant (Variant 1).

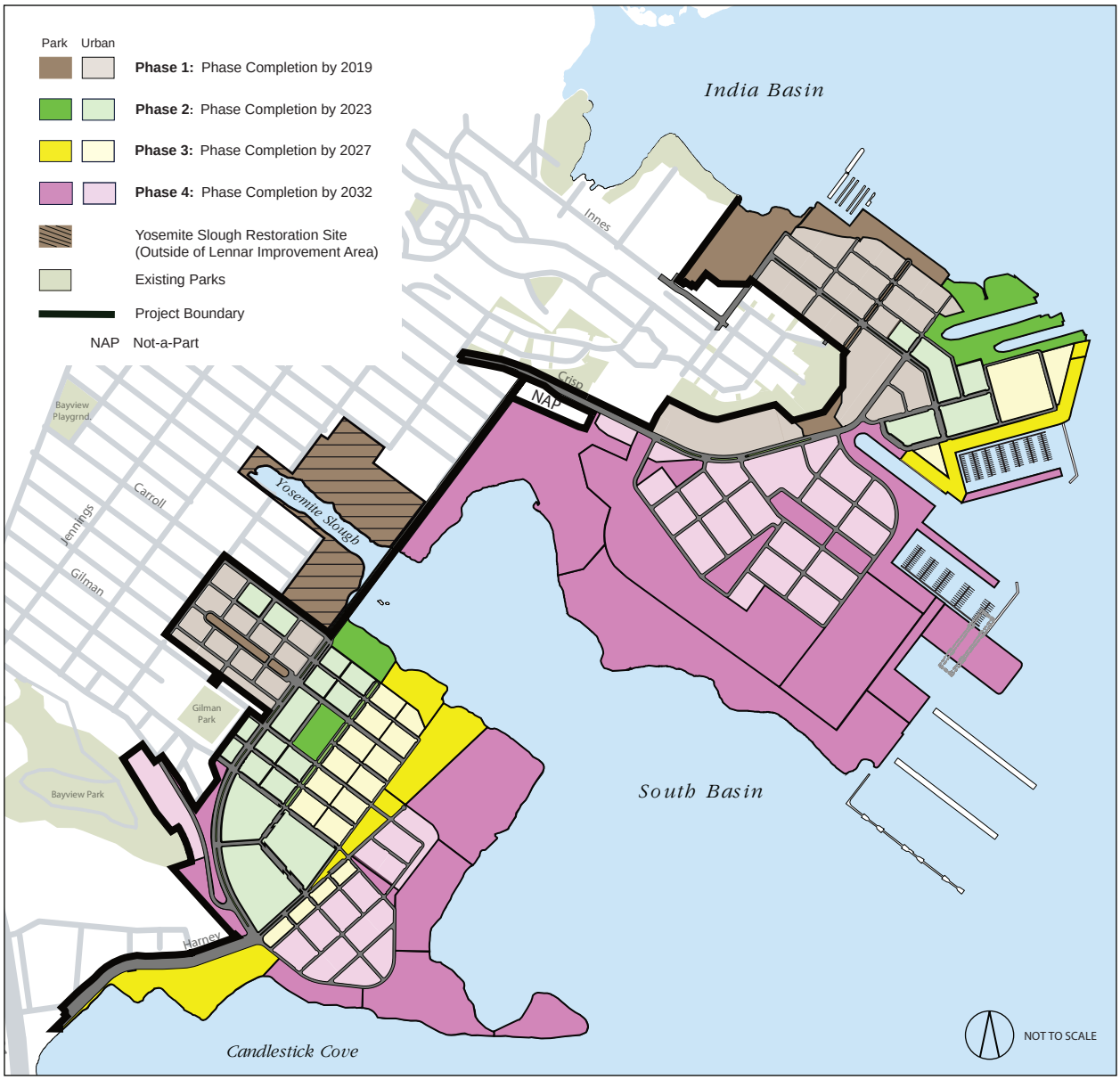
Page IV-12, last paragraph

The R&D Variant (Variant 1) proposes infill development, centered on nodes of commercial and retail activity at Candlestick Point and HPS Phase II with no physical divisions. Residential and non-residential infill around these nodes of activity would provide a more continuous land use pattern and street grid, provide new services and community amenities in the Bayview Hunters Point neighborhood, allow better access to parks and recreational facilities (which would be improved under the R&D Variant [Variant 1]), and remove existing barriers to circulation and access. There are five blocks with privately owned parcels on Candlestick Point that the Applicant seeks to acquire for the development, including one on Jamestown Avenue in the Jamestown District (currently vacant) and four contiguous blocks in the Candlestick Point North District (currently vacant or developed with an RV park). If the private parcels are not acquired by the Applicant, they would be permitted under the BVHP Redevelopment Plan and the Planning Code to develop via an Owner Participation Agreement (OPA) in a manner that is consistent with the BVHP Redevelopment Plan or would be allowed to operate as an existing non-conforming use. For those parcels that are currently developed, or for any of the parcels if they develop via an OPA, that development would be included in the overall total development that would occur on the Project site. The total amount of development under this variant would not change; that is, the Applicant's development on the remaining portion of the site plus any development under separate OPAs as envisioned under the R&D Variant (Variant 1) would result in the same overall development

level as proposed by the Applicant. The R&D Variant (Variant 1) would not divide an established community; therefore, no impact would occur, similar to the Project.

Page IV-13, Figure IV-4 (R&D Variant [Variant 1] Building and Park Construction Schedule) has been revised

[NOTE: The figure has been revised to indicate building construction activities starting 1 to 2 years later than originally planned.]



SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

Candlestick Point — Hunters Point Shipyard Phase II EIR

FIGURE IV-4

R&D VARIANT (VARIANT 1)
BUILDING AND PARK CONSTRUCTION SCHEDULE [REVISED]

Page IV-15, first paragraph

With the R&D Variant (Variant 1), construction is scheduled for completion beginning in the Year ~~2017~~2011, extending through the Year 2031, a period of approximately ~~12~~20 years. …

Page IV-18, first paragraph

The R&D Variant (Variant 1) would increase the total amount of development compared to the Project with an increase in R&D space at HPS Phase II of 2,500,000 gsf; there would be no 69,000-seat football stadium. … ~~The R&D Variant would have the same arena-related transportation effects as with the Project.~~ The R&D Variant (Variant 1) would have the same roadway, transit, bikeway, and Bay Trail improvements proposed with the Project, including the Yosemite Slough bridge. …

Page IV-18, last paragraph

With the R&D Variant (Variant 1), 44 of the 60 study intersections would operate at LOS E or LOS F conditions during the weekday AM or PM, or Sunday PM peak hours. Development associated with the R&D Variant (Variant 1) would result in significant unavoidable impacts at 31 intersections, six more than for the Project. …

Page IV-19, first complete sentence at top of page

… would apply as well to the R&D Variant. At ~~five~~ six locations, the R&D Variant (Variant 1) would have significant project-level or cumulative effects on intersection conditions that would not occur with the Project. As discussed below, at ~~three~~ four of the ~~five~~ six intersections, the R&D Variant (Variant 1) impacts would be significant and unavoidable, and at two of the ~~five~~ six intersections (Crisp/Palou and Innes/Earl), the impacts would be less than significant with mitigation.

Page IV-21, the following text is inserted after the first complete paragraph

At the signalized intersection of Cesar Chavez/Evans, the R&D Variant (Variant 1) would contribute significantly to cumulative impacts identified for the 2030 No Project conditions. The Transportation Study (Appendix D) explains in the 2030 No Project analysis, that the Hunters Point Shipyard Redevelopment Plan FEIR identified a mitigation measure at this intersection that involved a reconfiguration of the northbound approach of Evans Avenue to Cesar Chavez Street to provide exclusive northbound left and right turn lanes, and changing the signal timing plan to include the exclusive left turn and right turn movements. The measure identified that the northeast corner curb return would require structural modifications to the existing viaduct. DPW, as part of the BTI Project analysis, determined that widening of the existing structure supporting the intersection of Evans Avenue and Cesar Chavez Street is not feasible. The R&D Variant (Variant 1) and cumulative impacts at this intersection would be significant and unavoidable.

Page IV-23, first partial paragraph

… The R&D Variant would have less-than-significant effects on other transportation conditions (loading, air traffic, emergency access).

Arena Impacts

The R&D Variant (Variant 1) would have the same arena-related transportation effects as with the Project, that is, significant and unavoidable impacts on traffic and transit operations, except the impact to transit operations would be caused by traffic congestion (as for the Project) and by possibly added transit demand. Since the amount of background transit demand under the R&D Variant (Variant 1) would be higher than the Project, it is possible that the added transit demand associated with a sold-out arena event would create demand for transit service greater than the capacity of the transit supply to the arena. This possible effect would be reduced by having SFMTA increase the frequency on regularly scheduled Muni routes (primarily the CPX-Candlestick Express) serving the arena area prior to large events at the arena. Additional shuttle service provided by the arena operator to key regional transit destinations, such as BART, Caltrain, and the T-Third light rail route would also reduce this possible effect, but as for the Project, even with this mitigation and the mitigation identified for the Project to address impacts on transit operations, MM TR-23.1 (Maintain proposed headways for the 29 Sunset), the impact on transit operations would, like the Project, remain significant and unavoidable. Likewise, impacts on traffic, as for the Project, would be reduced but not avoided with implementation of mitigation measure MM TR-41 (Transportation Management Plan for the arena).

Page IV-23, first paragraph after "Construction"

As noted above, construction impacts of the R&D Variant (Variant 1) on the visual character of the area would be similar to the Project, except that the R&D uses would be constructed by ~~2021~~2031, later than the 2017 construction of the Project stadium. This would not change the significance of impacts. Construction activities would occur throughout the 702-acre R&D Variant (Variant 1) site over the approximately ~~19~~20-year build-out period, ending in ~~2029~~2031.

Page IV-29, first paragraph after "Construction"

As stated above, overall construction impacts of the R&D Variant (Variant 1) with respect to air quality would be similar to the Project. Construction activities would occur throughout the 702-acre R&D Variant (Variant 1) site over the approximately 20-year build-out period ending in ~~2029~~2031, with the construction of the additional R&D facilities occurring between ~~2017 and 2021~~ 2018 and 2031.

Page IV-31, Table IV-7 (R&D Variant [Variant 1] Operational Criteria Pollutant Emissions (Year 2032) has been revised

[NOTE: The title of this table has been updated to reflect the revised development schedule.]

Table IV-7 R&D Variant (Variant 1) Operational Criteria Pollutant Emissions (Year ~~2030~~2032) [Revised]

Scenario/Emission Source		*ROG (lbs/day)*	*NO_X (lbs/day)*	*CO (lbs/day)*	*PM_{10} (lbs/day)*	*$PM_{2.5}$ (lbs/day)*
Hunters Point Shipyard						
Area[a]		182	55	44	1	1
Motor Vehicles (External)		119	109	1,247	576	108
	Subtotal	*302*	*164*	*1,291*	*578*	*110*

Table IV-7 R&D Variant (Variant 1) Operational Criteria Pollutant Emissions (Year ~~2030~~2032) [Revised]

Scenario/Emission Source	ROG (lbs/day)	NO_X (lbs/day)	CO (lbs/day)	PM_{10} (lbs/day)	$PM_{2.5}$ (lbs/day)
Candlestick Point					
Area[a]	449	70	53	4	4
Motor Vehicles (External)	216	195	2,221	1,025	193
Subtotal	*665*	*265*	*2,274*	*1,028*	*196*
All Development Sites					
Area[a]	631	125	97	5	5
Motor Vehicles (External)	335	304	3,468	1,601	301
Motor Vehicles (Internal)	30	13	228	45	9
All Sources (R&D Variant)	***997***	***442***	***3,793***	***1,650***	***315***
Comparison to Proposed Project	***106%***	***112%***	***111%***	***111%***	***111%***
Change from Proposed Project	*6%*	*12%*	*11%*	*11%*	*11%*
Comparison to Business as Usual	***89%***	***74%***	***70%***	***64%***	***65%***
Reduction from Business as Usual	*-11%*	*-26%*	*-30%*	*-36%*	*-35%*
All Development Sites (Business as Usual)					
Area[a]	631	125	97	5	5
Motor Vehicles	485	476	5,292	2,561	481
All Sources (Business as Usual)	***1,117***	***601***	***5,389***	***2,566***	***486***
Comparison to R&D Variant	***112%***	***136%***	***142%***	***155%***	***154%***

SOURCE: PBS&J, 2009. Based on URBEMIS 2007 Version 9.2.4.

Daily emissions of ROG and NO_X were calculated under Summer conditions when ambient ozone concentrations are highest. Daily emissions of CO, PM_{10}, and $PM_{2.5}$ were calculated under winter conditions when associated ambient concentrations are highest.

* Area emissions are from sources located on the project site, such as natural gas combustion for heating/cooling, maintenance equipment, consumer product use, etc.

Page IV-34, beginning with first paragraph

In terms of human health risks associated with vehicle emissions, vehicle trips and thereby vehicle emissions along local roadways would increase with development of the R&D Variant (Variant 1), similar to the Project. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations from traffic associated with the R&D Variant (Variant 1) were estimated at selected roadways and compared against the 0.2 $\mu g/m^3$ action level to determine the potential health risks on receptors attributed to vehicle emissions from the R&D Variant (Variant 1). ~~Potential $PM_{2.5}$ concentrations at select roadways with the addition of future traffic volumes, including the traffic associated with the R&D Variant (which were assumed to be similar to Project traffic), were estimated compared against SFDPH thresholds to determine the potential health risks attributed to vehicle emissions.~~ Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of *San Francisco* and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street

- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of ~~Project~~Variant-related traffic, no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's~~ the 0.2 µg/m^3 ~~threshold~~ action level.[1187] ~~As c~~Concentrations would not exceed ~~SFDPH's threshold~~ the action level, and as such, impacts would be less than significant, similar to the Project.

[1187] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix IV, ~~September 28, 2009~~ May 4, 2010.

Page IV-37, second paragraph

As with the Project, development at HPS Phase II with the R&D Variant (Variant 1) would result in the demolition of Buildings ~~208,~~ 211, 224, 231, and 253, which have been determined eligible as contributors to the California Register of Historic Resources (CRHR)–eligible Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. …

Page IV-49, Table IV-9 (Citywide Number of Police Officers and Estimated R&D Variant [Variant 1] Demand) has been revised

[NOTE: This table has been updated to reflect the revised development schedule.]

Table IV-9 Citywide Number of Police Officers and Estimated R&D Variant (Variant 1) Demand [Revised]

		Population	Police Officers
Citywide (2005)			
Residents		799,302	
Employees		552,167	
	Total	***1,351,469***	***2,033***
Ratio (officer to population)		1:665	
Project (~~20292~~2032)			
Residents		24,465	
Employees		16,635	
	Total	***41,100***	***62[a]***
Ratio (officer to population)		1:663	
	Project Total		***53***

SOURCES: The population and households data reported for San Francisco is 2005 data provided in a Memorandum from John Rahaim, Director of Planning, San Francisco Planning Department to Michael Carlin, Deputy General Manager, San Francisco Public Utilities Commissions, *Projections of Growth by 2030*, July 9, 2009; SFPD 2005 total staffing: PSSG District Station *Boundaries Analysis*, 2008; Proposed population and employment: Section III.C.

a. The projected number of police officers for the R&D Variant is rounded up, and most closely reflects the 1:665 ratio of the Project.

Page IV-54, first paragraph

The conceptual development plan for this Variant would result in the development of residential units and parks during all of four stages of development. … As this table indicates, the park-to-population ratio would not drop below ~~12.3~~8.4 acres per 1,000 population at any time during the four stages of development, which exceeds the benchmark of 5.5 acres of parkland per 1,000 population. …

Page IV-54, Table IV-10 (R&D Variant [Variant 1] Residential Units and Park Acreage Provided during each Stage of Development) has been revised. For readability, the new data are shown without underline, and deleted numbers are not shown.

[NOTE: This table has been updated to reflect the revised development schedule.]

Table IV-10 R&D Variant (Variant 1) Residential Units and Park Acreage Provided during Each Stage of Development [Revised]

Stage of Development	*Residential Units*	*Population*	*Total Parkland (ac)*	*Park-to-Population Ratio (acres per 1,000 Residents)*
Existing	256	1,113[a]	120.2	108
Phase 1	3,160	7,363[b]	135.8	18.4
Phase 2	5,165	12,034[b]	147.1	12.2
Phase 3	7,670	17,871[b]	150.6	8.4
Phase 4	10,500	24,465[b]	327.0	13.4

a. Refer to Table III.C-1 (Existing Population [2005]) in Section III.C (Population, Employment, and Housing). This population correlates to the total number of households in the Traffic Analysis Zone, which includes more than the 256 households located in the Candlestick portion of the Project site (e.g., 292). It is likely, therefore, that the population within the Candlestick portion of the Project site is less than 1,113, which would only increase the existing park-to-population ratio.
b. Calculated as 2.33 people per residential unit.

Page IV-61, second full paragraph

The City has issued a Request for Qualifications to solicit bids for a new contract to accommodate the City's disposal capacity beyond the expiry of the current agreement. … Demolition activities, which generate construction debris, are expected to conclude in ~~2024~~2028 at Candlestick Point and in ~~2021~~2023 at HPS Phase II, ~~a minimum of five years~~ one year before the landfill is expected to close. …

Page IV-68, last paragraph

As stated above, overall construction impacts of the R&D Variant (Variant 1) with respect to climate change and GHG emissions would be similar to the Project. …The GHG emissions associated with the construction activities are short-term in duration and ~~will~~ would be a total of ~~105,587~~129,274 tonnes CO_2e. When this is distributed over an anticipated time schedule of ~~16~~20 years, approximately ~~6,600~~6,464 tonnes per year ~~will~~ would be emitted. …

F.24 Changes to Section IV.C (Variant 2: Housing Variant [No Stadium—Relocation of Housing])

Page IV-79, last paragraph

Residential development at HPS Phase II would begin in ~~2017~~2012 with completion in ~~2021~~2023. …

Page IV-82, last paragraph

The Housing Variant (Variant 2) proposes infill development, centered on nodes of commercial and retail activity at Candlestick Point and HPS Phase II with no physical divisions. Residential and non-residential infill around these nodes of activity would provide a more continuous land use pattern and street grid, provide new services and community amenities in the Bayview Hunters Point neighborhood, allow better access to parks and recreational facilities (which would be improved under the Housing Variant), and remove existing barriers to circulation and access. There are five privately owned parcels on Candlestick Point that the Applicant seeks to acquire for the development, including one block on Jamestown Avenue in the Jamestown District (currently vacant) and four contiguous parcels in the Candlestick Point North District (either vacant or containing an RV park). If these private parcels are not acquired by the Applicant, they would be permitted under the BVHP Redevelopment Plan and the Planning Code to develop via an Owner Participation Agreement (OPA) in a manner that is consistent with the BVHP Redevelopment Plan or would be allowed to operate as an existing non-conforming use. For those parcels that are currently developed, or for any of the parcels if they develop via an OPA, that development would be included in the overall total development that would occur on the Project site. The total amount of development under this variant would not change; that is, the Applicant's development on the remaining portion of the site plus any development under separate OPAs as envisioned under the Housing Variant would result in the same overall development level as proposed by the Applicant. The Housing Variant (Variant 2) would not divide an established community; therefore, no impact would occur, similar to the Project.

Page IV-84, first full paragraph

With the Housing Variant (Variant 2), the first phase of construction is scheduled for completion ~~beginning~~ in ~~the Year 2017~~2019, extending through ~~the Year 2029~~2031, a period of approximately 12 years. …

Page IV-87, first paragraph

Overall, the Housing Variant would not increase the total amount of development compared to the Project but would relocate approximately 1,350 housing units from Candlestick Point to HPS Phase II. Therefore, 4,000 residential units (rather than 2,650 residential units) would be developed at HPS Phase II. The Housing Variant would include all uses proposed with the Project with the exception of the stadium, which would be replaced by the relocated housing units. … There would be no football stadium. Therefore, the Housing Variant would not have game day or other stadium event transportation impacts associated with the Project. ~~The Housing Variant would have the same arena-related transportation effects as with the Project.~~

Page IV-87, sixth paragraph

The Housing Variant would have similar project and cumulative effects at most study intersections as would occur with the Project; only cumulative impacts at the intersections of Cesar Chavez/Evans and Bayshore/Oakdale would worsen as compared to the Project. Section III.D~~,~~ discusses traffic effects at those intersections~~,~~ and the feasibility of mitigation measures. As noted in Impact TR-3, Impact TR-4, Impact TR-5, Impact TR-6, and Impact TR-8, Project intersection impacts would be significant and unavoidable. Those conclusions would apply as well to the Housing Variant. Like the R&D Variant, the Housing Variant would contribute to cumulative traffic in the 2030 condition at Cesar Chavez/Evans and cause intersection operating conditions at Bayshore/Oakdale to worsen in the PM peak hour from LOS C under 2030 conditions to LOS E. No feasible mitigation exists for either intersection and the Housing Variant's contribution to cumulative impacts would be significant and unavoidable.

Page IV-89, the following text is inserted after the second paragraph

… Therefore, the parking shortfall would not result in significant parking impacts, and Housing Variant impacts on parking would be less than significant.

The Housing Variant would have the same arena-related transportation effects as with the Project, that is, significant and unavoidable impacts on traffic and transit operations, except that, like the R&D Variant, the impact to transit operations would be caused by traffic congestion (as for the Project) and by possibly added transit demand. As for the R&D Variant, this possible effect would be reduced by having SFMTA increase the frequency on regularly scheduled Muni routes (primarily the CPX-Candlestick Express) serving the arena area prior to large events at the arena and having the arena operator provide additional shuttle service to key regional transit destinations, such as BART, Caltrain, and the T-Third light-rail route. Implementation of this mitigation and MM TR-23.1 would reduce but not avoid significant impacts on transit operations. Also as for the Project and the R&D Variant, implementation of mitigation measure MM TR-41 (Transportation Management Plan for the arena) would reduce but not avoid significant impacts on traffic.

Page IV-90, first paragraph

As noted above, construction impacts of the Housing Variant (Variant 2) on the visual character of the area would be similar to the Project because construction practices and activities would be similar for similar types of construction. Construction of the housing on the proposed stadium site would occur later in the ~~19~~20-year building period than construction of the stadium under the Project. Construction activities would occur throughout the 702-acre Housing Variant site over the build-out period, ending in ~~2029~~2031.

Page IV-96, fourth full paragraph

As stated above, overall construction impacts of the Housing Variant (Variant 2) with respect to air quality would be similar to the Project. Construction activities would occur throughout the 702-acre Housing Variant site over the approximately 20-year build-out period ending in ~~2029~~2031, with the construction of the additional dwelling units occurring between ~~2017~~2019 and ~~2021~~2023.

Page IV-100, beginning with fourth paragraph

In terms of human health risks associated with vehicle emissions, vehicle emissions along local roadways would shift location with development of the Housing Variant (Variant 2), as some residential units will be relocated from Candlestick Point to HPS Phase II. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations from traffic associated with the Housing Variant (Variant 2) were estimated at selected roadways and compared against the 0.2 $\mu g/m^3$ action level to determine the potential health risks on receptors attributed to vehicle emissions from the Housing Variant (Variant 2). ~~Potential $PM_{2.5}$ concentrations at select roadways with the addition of future traffic volumes, including the traffic associated with the Housing Variant (which were assumed to be similar to Project traffic), were estimated compared against SFDPH thresholds to determine the potential health risks attributed to vehicle emissions.~~ Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of San Francisco and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

~~With the addition of Project-related traffic, no receptors along the streets listed above would experience $PM_{2.5}$ concentrations in excess of SFDPH's 0.2 $\mu g/m^3$ threshold.[1220] As concentrations would not exceed SFDPH's threshold, and as such, impacts would be less than significant, similar to the Project.~~

With the addition of ~~Project~~Variant-related traffic, no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's~~ 0.2 $\mu g/m^3$ ~~threshold~~ action level.[1220] ~~As c~~Concentrations would not exceed the ~~SFDPH's threshold~~ action level, and as such, impacts would be less than significant, similar to the Project.

[1220] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix IV, ~~September 28, 2009~~ May 4, 2010.

Page IV-104, second full paragraph

As with the Project, development at HPS Phase II with the Housing Variant (Variant 2) would result in the demolition of Buildings ~~208,~~ 211, 224, 231, and 253, which have been determined eligible as contributors to the California Register of Historic Resources (CRHR)–eligible Hunters Point Commercial Dry Dock and Naval Shipyard Historic District. …

Page IV-117, Table IV-25 (Citywide Number of Police Offices and Estimated Housing Variant [Variant 2] Demand) has been revised

[NOTE: This table has been updated to reflect the revised development schedule.]

Table IV-25 Citywide Number of Police Officers and Estimated Housing Variant (Variant 2) Demand [Revised]

		Population	*Police Officers*
Citywide (2005)			
Residents		799,302	
Employees		552,167	
	Total	***1,351,469***	***2,033***
Ratio (officer to population)		1:665	
Project (~~2029~~2032)			
Residents		24,465	
Employees		10,378	
	Total	***34,843***	***52[a]***
Ratio (officer to population)		1:665	

SOURCE: The population and households data reported for San Francisco is 2005 data provided in a Memorandum from John Rahaim, Director of Planning, San Francisco Planning Department to Michael Carlin, Deputy General Manager, San Francisco Public Utilities Commissions, *Projections of Growth by 2030*, July 9, 2009; SFPD 2005 total staffing: PSSG District Station *Boundaries Analysis*, 2008; Proposed population and employment: Section III.C.

a. The projected number of police officers for the R&D Variant is rounded up, and most closely reflects the 1:665 ratio of the Project.

Page IV-130, third paragraph

As noted, at current disposal rates, the Altamont Landfill would be expected to reach capacity in January 2032; however, it may close three years earlier, in January 2029. Demolition activities, which generate construction debris, are expected to conclude in ~~2024~~2028 at Candlestick Point and in ~~2021~~2023 at HPS Phase II, ~~a minimum of five years~~ one year before the landfill is expected to close.

Page IV-136, last paragraph

As stated above, overall construction impacts of the Housing Variant with respect to climate change and GHG emissions would be similar to the Project. Construction activities would occur from the use of construction equipment, workers commuting, and soil hauling activities. The GHG emissions associated with the construction activities are short-term in duration and ~~will~~ would be a total of ~~105,587~~129,274 tonnes CO_2e. When this is distributed over an anticipated time schedule of ~~16~~20 years, approximately ~~6,600~~6,464 tonnes per year ~~will~~ would be emitted. Since these emissions are short in duration and small in comparison to the overall construction and mining emissions for the San Francisco Bay Area Air Basin GHG emission inventory, the Housing Variant GHG emissions for construction would be less than significant, similar to the Project.

F.25 Addition of Section IV.Ca (Variant 2A: Housing/R&D Variant [No Stadium—Relocation of Housing; Additional R&D]) [New Section]

The following text in its entirety is inserted following Page IV-139. Although this text is new, for readability, it is not underlined.

IV.Ca VARIANT 2A: HOUSING/R&D VARIANT (NO STADIUM—RELOCATION OF HOUSING; ADDITIONAL R&D)

IV.Ca.1 Overview

An option to Variant 2 (Housing Variant)—Variant 2A (Housing/R&D Variant)—has been identified that would allow for additional R&D on the stadium site, along with housing, in the event the 49ers do not choose to develop a stadium in the HPS Phase II area. As compared to the Housing Variant (Variant 2), described on pages IV-72 through IV-81 of the Draft EIR), the Housing/R&D Variant (Variant 2A) would relocate 275 residential units from Candlestick Point to HPS Phase II and redistribute 50 residential units within other districts on Candlestick Point. The Housing/R&D Variant (Variant 2A) would not develop the uses in the Jamestown District that would occur under the Housing Variant (Variant 2). If the parcels on the privately owned block in the Jamestown District and the four additional blocks in Candlestick Point North District (currently vacant or developed with an RV park) are not acquired by the Project Applicant, the property owners could develop their property under the BVHP Redevelopment Plan via an Owner Participation Agreement or continue the current non-conforming use. The total amount of residential development would remain at 10,500 units, the same as for the Project and the Housing Variant (Variant 2).

An additional 500,000 sf of R&D use would be constructed on the stadium site as compared to the Housing Variant (Variant 2), for a total of 3,000,000 sf of R&D at the HPS Phase II site. The Project includes 2,500,000 sf of R&D, the R&D Variant (Variant 1) includes 5,000,000 sf of R&D, and the Housing Variant (Variant 2) analyzes 2,500,000 sf of R&D; therefore, the 3,000,000 sf of R&D under the Housing/R&D Variant (Variant 2A) would fall within the range of development programs analyzed by the R&D Variant (Variant 1), the Project, and the Housing Variant (Variant 2).

The total amount of park acreage with the Housing/R&D Variant (Variant 2A) would be 326.6 acres, which represents a decrease of approximately 9.8 acres as compared to the Project (which would provide 336.4 acres), about 22.8 acres less than the Housing Variant (Variant 2), which would provide 349.4 acres, and 0.4 acre less than the R&D Variant (Variant 1), which would provide 327.0 acres, because of increased development on the stadium site. However, the decrease in park acreage would not reduce park acreage below the identified threshold of 5.5 acres of park per 1,000 residents, as further described in this section.

Table IV-19a (Housing/R&D Variant [Variant 2A] Land Use Summary) presents the land use summary for the Housing/R&D Variant. Figure IV-7a (Housing/R&D Variant [Variant 2A] Land Use Plan) illustrates the proposed Housing/R&D Variant (Variant 2A) land uses.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-19a Housing/R&D Variant (Variant 2A) Land Use Summary [New]

Land Use	Candlestick Point	HPS Phase II	Total
Residential[a]			
Residential Density Range I (15 to 75 units per acre)	940	1,320	2,260
Residential Density Range II (50 to 125 units per acre)	3,855	2,185	6,040
Residential Density Range III (100 to 175 units per acre)	270	460	730
Residential Density Range IV (175 to 285 units per acre)	1,160	310	1,470
Total (units)	***6,225***[b]	***4,275***[c]	***10,500***
Retail			
Regional Retail (gsf)	635,000	N/A	635,000
Neighborhood Retail (gsf)	125,000	125,000	250,000
Total (gsf)	***760,000***	***125,000***	***885,000***
Office (gsf)	150,000	N/A	150,000
Research & Development	***N/A***	***3,000,000***	***3,000,000***
Hotel (gsf)	150,000	N/A	150,000
Rooms	220	N/A	220
Artists' Studios/Art Center (gsf)	N/A	255,000	255,000
Community Services (gsf)[d]	50,000	50,000	100,000
Parks & Open Space			
New Parks (acres)	8.1	150.9	159.0
New Dual-Use Sports Fields/Multi-Use Lawn and Stadium Parking and Waterfront Recreation (acres)	N/A	70.9	70.9
New and Improved State Parkland (acres)	96.7	N/A	96.7
Total (acres)	***104.8***	***221.8***	***326.6***
Marina (slips)	N/A	300	300
Performance Venue/Arena (gsf)	75,000	N/A	75,000
Seats	10,000	N/A	10,000
Parking (spaces)			
Residential (structured)	6,225	4,275[e]	10,500
Commercial (structured)	2,346	4,428	6.774
General and Commercial (on-street)	1,360	1,428	2,788

Table IV-19a Housing/R&D Variant (Variant 2A) Land Use Summary [New]

Land Use	Candlestick Point	HPS Phase II	Total

SOURCE: Lennar Urban, 2010.

a. The number of residential units in each district may be adjusted depending on market demand; however, the total of housing units for Candlestick Park would not exceed 6,225 units and the total number of housing units for HPS Phase II would not exceed 4,275 units.

b. 1,625 units less than the Project (moved to HPS Phase II).

c. 1,625 units more than the Project (moved from Candlestick Point).

d. Community facilities parcels are intended to provide the existing BVHP community and the future Project community with dedicated land for uses designed to provide, preserve, and leverage such critical local resources as social services, education, the arts, other community services (including public safety facilities such as fire and police stations), and facilities for the benefit of senior citizens. Additional uses proposed for the community facilities parcels such as retail, services, offices, and R&D space, beyond the 100,000 proposed for community facilities, would be absorbed within the retail or R&D program proposed in HPS Phase II. Total uses would not exceed those amounts identified in this table.

e. Residential parking at HPS Phase II would be increased compared to the Project to provide parking for the additional residential units and R&D.

There would be no new significant environmental impacts or an increase in the severity of impacts compared to the impacts analyzed for the Project, R&D Variant (Variant 1), or the Housing Variant (Variant 2) as a result of the modification presented by the Housing/R&D Variant (Variant 2A). An environmental analysis of these modifications, with associated illustrative graphics, is contained in this section.

IV.Ca.2 Project Objectives

The objectives for the Housing/R&D Variant (Variant 2A) would be the same as for the Project. A full list of Project objectives is provided in Section II.D of this EIR. In particular, the Housing/R&D Variant (Variant 2A) was prepared to address the following portion of Objective 1:

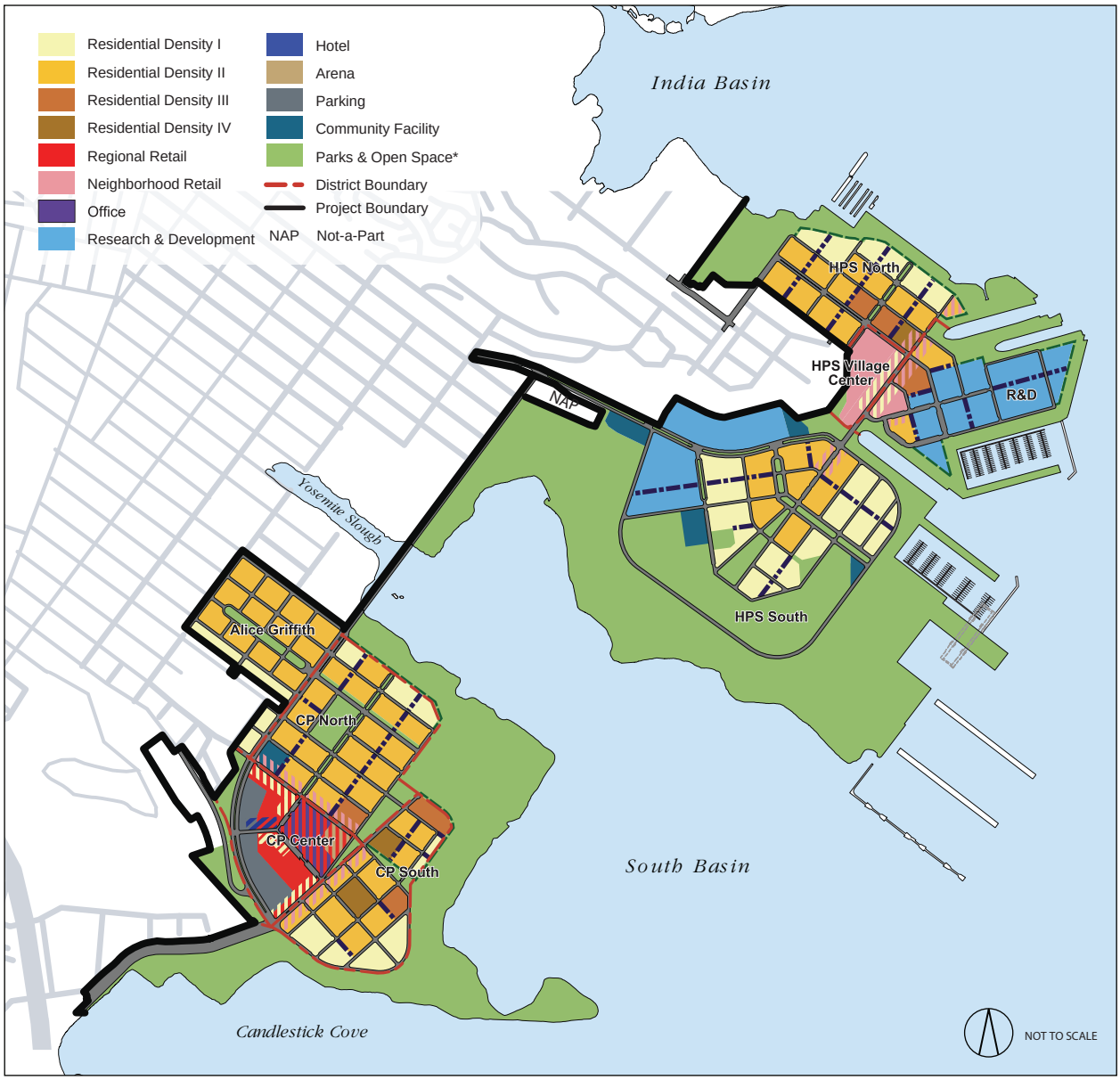
- Implement the CP-HPS Development Plan with public benefits, whether or not the 49ers decide to remain in San Francisco, including developing alternate uses for the stadium site on the Shipyard Property that are consistent with the overall CP-HPS Development Plan objectives.

IV.Ca.3 Characteristics

Section II.E outlines the Project's land use plan, parks and open space plan, transportation improvements, infrastructure plan, community benefits, and green building concepts. While many of these components of the Project would also apply to this variant, the discussion below outlines the principal differences.

Land Use Plan

The land use program outlined in Chapter II (Project Description) for Candlestick Point would generally be the same for this Housing/R&D Variant (Variant 2A) as for the Project, with the exception that 1,625 residential units that would have been constructed on Candlestick Point would be relocated to HPS Phase II. The total number of residential units to be developed would remain the same at 10,500. The discussion below is focused on the changes that would occur at HPS Phase II, relative to the Project, the R&D Variant (Variant 1), and the Housing Variant (Variant 2).



SOURCE: Lennar Urban, 2010.

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FIGURE IV-7a

Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A)
LAND USE PLAN [NEW]

The changes proposed with the Housing/R&D Variant (Variant 2A) compared to the Project include residential, R&D, and neighborhood commercial land uses for the HPS South district and the same small reductions in neighborhood commercial uses in other HPS Phase II districts as noted for the Housing Variant (Variant 2). One thousand, six hundred and twenty-five residential units would be relocated to HPS Phase II from Candlestick Point compared to the Project, but the overall total number of residential units would remain the same (i.e., 10,500) as under the Project. The Housing/R&D Variant (Variant 2A) would include 3,000,000 sf of R&D, which is 500,000 sf more when compared to the Project and the Housing Variant (Variant 2) and 2,000,000 sf less than under the R&D Variant (Variant 1). All other land uses within the HPS Phase II districts would be the same as the Project, as described in detail in Chapter II (Project Description). A summary of the development in HPS Phase II proposed with the Housing/R&D Variant (Variant 2A) is provided in Table IV-20a (Housing/R&D Variant [Variant 2A] HPS Phase II Land Use Summary). Figure IV-8a (Housing/R&D Variant [Variant 2A] Maximum Building Heights) illustrates the maximum building heights for Variant 2A.

With the Housing/R&D Variant (Variant 2A), the 69,000-seat NFL stadium proposed with the Project would not be constructed in the HPS South district. Instead, the Housing/R&D Variant would result in construction of 1,625 dwelling units at Density Ranges I and II and 1,000,000 sf of R&D in the HPS South district. The Project includes no residential or R&D in this district. In addition, with the Housing/R&D Variant, the HPS South district would develop 25,000 gsf of neighborhood retail, while the Project would not develop any neighborhood retail adjacent to the stadium.

Parks and Open Space at HPS Phase II

The Housing/R&D Variant (Variant 2A) parks and open space on Candlestick Point would be the same as for the Project; this discussion focuses on HPS Phase II changes. The Housing/R&D Variant (Variant 2A) would include additional parks and would reconfigure the design and sizes of parks and open space areas at HPS Phase II compared to the Project. As presented in Table IV-21a (Housing/R&D Variant [Variant 2A] HPS Phase II Parks and Open Space), HPS Phase II would have 221.8 acres of parks and open space compared to the 230 acres on HPS Phase II under the Project. The Sports Field Complex proposed with the Housing/R&D Variant (Variant 2A) would be 39 acres, which is approximately 20 acres less than proposed with the Project. The 2.0-acre Hunters Point South Park, 0.7-acre Hunters Point Mini Park, 0.9-acre Hunters Point Neighborhood Park, and 3.1-acre Hunters Point Wedge Park would be constructed in the HPS South district, which is not included in the Project. Table IV-21a presents the proposed park and open space at HPS Phase II in the Housing/R&D Variant (Variant 2A).

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-20a Housing/R&D Variant [Variant 2A] HPS Phase II Land Use Summary [New]

District	*Net Acres*[a]	*Dwelling Units*[b,c]	*Density*	*Neighborhood Retail (gsf)*	*Artist Space (gsf)*	*R&D (gsf)*	*Community Services (gsf)*	*Total Commercial (gsf)*
Hunters Point Shipyard North	26.88	2,090	I, II, III, IV	18,000[d]	0	0	0	18,000
Hunters Point Shipyard Village Center	7.69	125	I, II, III	20,000[e]	255,000	0	0	275,000
Research & Development	26.75	435	II, III	62,000[f]	0	2,000,000	0	2,062,000
Hunters Point Shipyard South	61.24[g]	1,625[h]	I, II	25,000[i]	0	1,000,000	50,000	1,075,000
Total	***122.56***	***4,275***[h]	***N/A***	***125,000***	***255,000***	***3,000,000***	***50,000***	***3,430,000***

SOURCE: Lennar Urban, 2009.

a. Net Acreage excludes the street network.

b. 1,320 Residential Density Range I (15 to 75 units per net acre)
2,185 Residential Density Range II (50 to 125 units per net acre)
460 Residential Density Range III (100 to 175 units per net acre)
310 Residential Density Range IV (175 to 270 units per net acre)
4,275 Total units

c. The number of residential units in each district may be adjusted depending on market demand; however, the total of housing units for HPS Phase II would not exceed 4,275 units.

d. 7,000 gsf less than the Project.

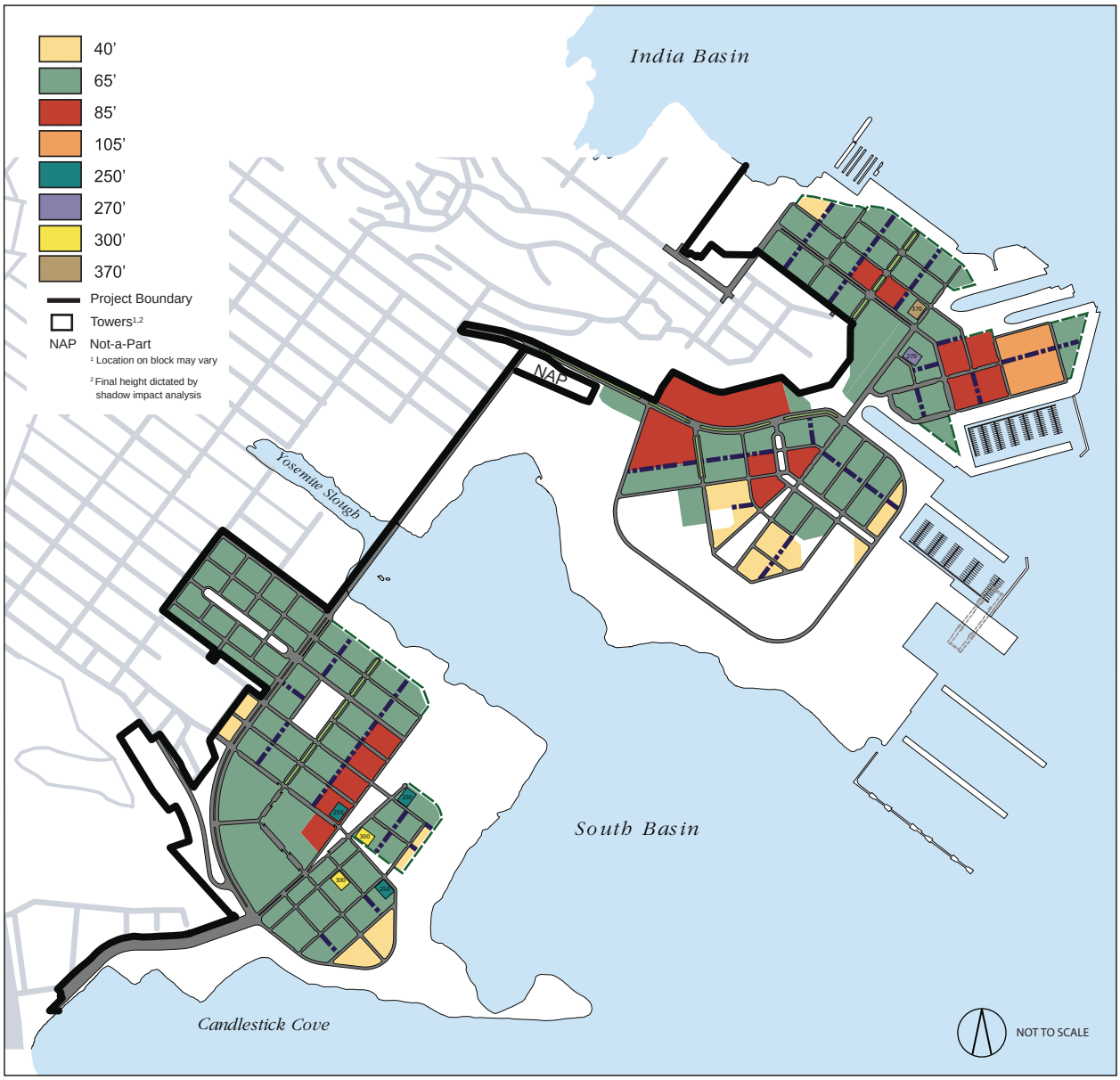
e. 5,000 gsf less than the Project.

f. 13,000 gsf less than the Project.

g. The net acreage of the HPS South district would be increased compared to the Project (32.26 acres with stadium).

h. 1,625 units more than the Project.

i. 25,000 more than the Project.



SOURCE: Lennar Urban, 2010.

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FIGURE IV-8a

HOUSING/R&D VARIANT (VARIANT 2A)
MAXIMUM BUILDING HEIGHTS [NEW]

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-21a Housing/R&D Variant (Variant 2A) HPS Phase II Parks and Open Space [New]

Park/Open Space		*Acres*
New Parks		
Northside Park		12.8
Waterfront Promenade		32.4
Heritage Park		15.6
Grasslands Ecology Park at Parcel E		45.2
Grasslands Ecology Park at Parcel E-2		38.2
Hunters Point Wedge Park		3.1
Hunters Point South Park		2.0
Hunters Point Neighborhood Park		0.9
Hunters Point Mini Park		0.7
	Subtotal	*150.9*
New Sports Fields and Active Urban Recreation		
Sports Field Complex		39.0
Multi-Use Lawn		25.2
Waterfront Recreation & Event Pier		6.7
	Subtotal	*70.9*
	Total	***221.8***

SOURCE: Lennar Urban 2010.

Figure IV-9a (Housing/R&D Variant [Variant 2A] Parks and Open Space) illustrates the location of the proposed parks and open space. Figure IV-10a (Housing/R&D Variant [Variant 2A] Building and Park Construction Schedule) provides phasing and construction information for development of the buildings and parks under Variant 2A.

Transportation and Circulation

The transportation and circulation plan under the Housing/R&D Variant (Variant 2A) would be the same as proposed for the Housing Variant (Variant 2).

Infrastructure

The location of major infrastructure improvements under the Housing/R&D Variant (Variant 2A) would be the same as that proposed for the Housing Variant (Variant 2).

SOURCE: Lennar Urban, RHAA, 2010.

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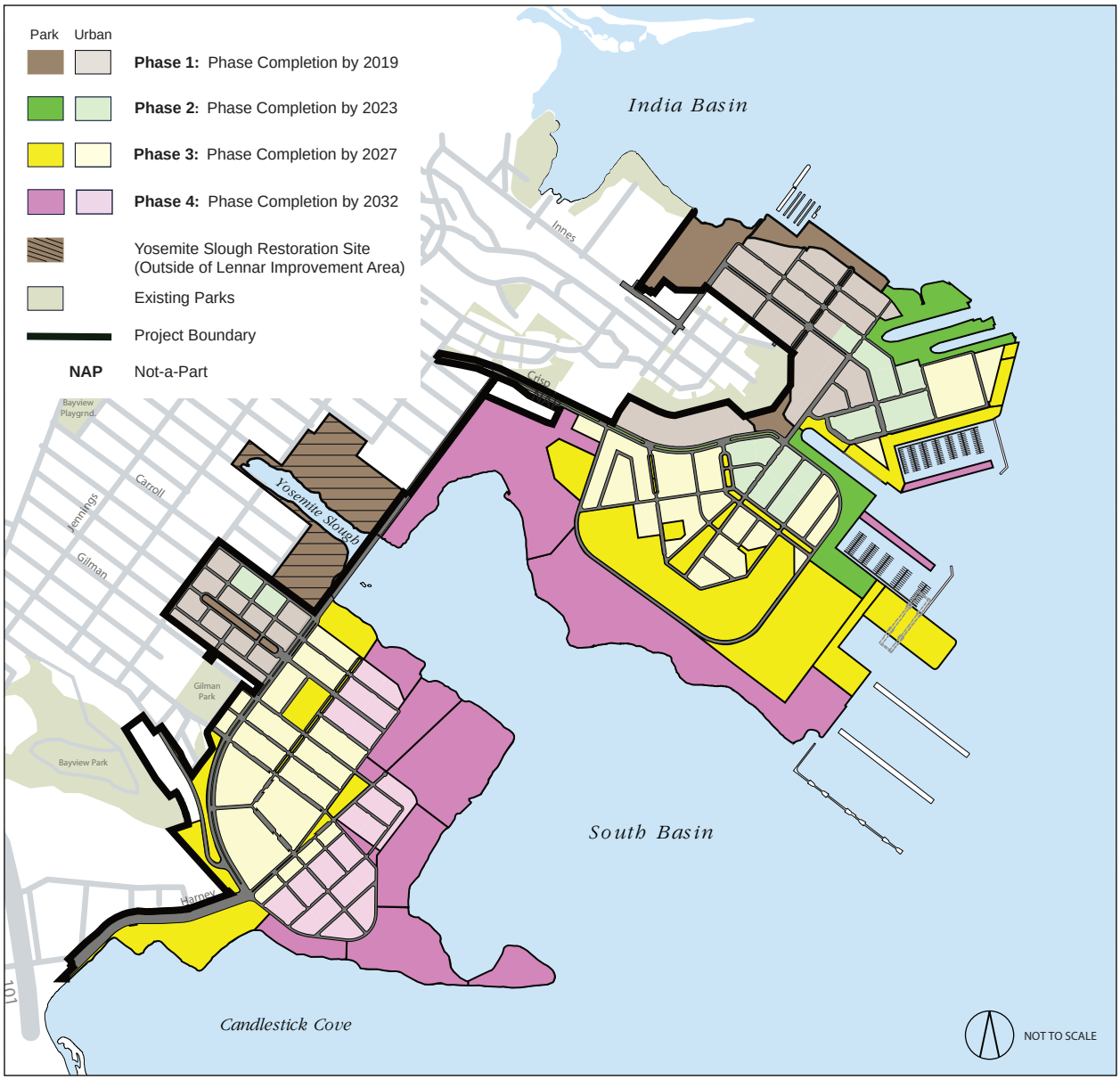
Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A) PARKS AND OPEN SPACE [NEW]

FIGURE IV-9a



SOURCE: Lennar Urban, 2010.

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Candlestick Point — Hunters Point Shipyard Phase II EIR

FIGURE IV-10a

HOUSING/R&D VARIANT (VARIANT 2A)
BUILDING AND PARK CONSTRUCTION SCHEDULE [NEW]

Implementation

Build-out of the housing and R&D uses at HPS Phase II would begin in the first phase of development and would be completed by 2027. Figure IV-10a illustrates the overall sequence of development for the Housing/R&D Variant (Variant 2A).

IV.Ca.4 Potential Environmental Effects

Analytic Method

The Housing/R&D Variant (Variant 2A) represents a modification of the Housing Variant (Variant 2) and also includes components of the R&D Variant (Variant 1). The R&D Variant (Variant 1) analyzes 5,000,000 sf of R&D on the stadium site and the Housing/R&D Variant (Variant 2A) contemplates 3,000,000 sf of R&D on the stadium site. The Housing Variant (Variant 2) proposes relocating 1,350 residential units to HPS Phase II, and the Housing/R&D Variant (Variant 2A) contemplates relocating 1,625 residential units to HPS Phase II.

For environmental resources that are dependent on types of land uses, rather than size, (Land Use and Plans, Hazards and Hazardous Materials, and, to some extent, Utilities and Energy) it would be appropriate to compare the impacts of the Housing/R&D Variant (Variant 2A) to those impacts analyzed for the R&D Variant (Variant 1) and/or the Housing Variant (Variant 2) to demonstrate that the impacts from the Housing/R&D Variant (Variant 2A) are "bracketed" within the range of impacts already analyzed.

The footprint of development for Variant 2A is approximately the same as that of the R&D Variant (Variant 1) but slightly less than that of the Project.[148] The Housing/R&D Variant (Variant 2A) would result in a total of 46.8 percent area of impervious surface (an indicator of development footprint) on HPS; the Project would result in total impervious surface area on HPS of 48.4 percent; and the R&D Variant (Variant 1) would have total impervious surface area on HPS of 46.7 percent. For environmental resources whose impacts depend on the extent or intensity of development and extent of ground disturbance (Cultural/Paleontological Resources, Hazards and Hazardous Materials, Geology and Soils, Hydrology and Water Quality), it would be appropriate to compare the impacts of the Housing/R&D Variant (Variant 2A) to the Project, as the Project's development "footprint" is slightly greater than the footprint of the Housing/R&D Variant (Variant 2A). The location of development would remain the same under the Housing/R&D Variant (Variant 2A) and the impact conclusions made for the Project that also depend on the specific location of development (Biological Resources and Cultural/Paleontological Resources) would also apply to Variant 2A. Thus, the impacts of the Housing/R&D Variant (Variant 2A) have been bracketed by the impacts analyzed for the Project with respect to Cultural Resources and Paleontological Resources, Hazards and Hazardous Materials, Geology and Soils, Hydrology and Water Quality, and Biological Resources. Impacts of the Housing/R&D Variant (Variant 2A) that are dependent on intensity of development or extent of land disturbance would be substantially the same as the impacts for the development proposed for the Project.

[148] IBI Group, April 8, 2010.

With respect to Wind and Shadow impacts, which are dependent on the heights and massing of structures, building heights and massing for the Housing/R&D Variant (Variant 2A) would be substantially similar to the Project, and within the height limits established by the Project districts. Therefore, the impacts of the Housing/R&D Variant (Variant 2A) for these topics would be appropriately compared to the impacts of the Project.

For Transportation and Circulation, Aesthetics, Air Quality, Noise, Recreation, and Greenhouse Gas Emissions, the combination of housing and R&D on the stadium site and development schedule modifications require a somewhat more comprehensive analysis to determine the impacts of the Housing/R&D Variant (Variant 2A) compared to the Project, the R&D Variant (Variant 1), or the Housing Variant (Variant 2).

Therefore, the impacts of the Housing/R&D Variant (Variant 2A) are analyzed in the following sections compared to the impacts of the Project, Variant 1, and/or Variant 2, whichever is the most appropriate for the particular resource, to demonstrate that the impacts of Variant 2A would be bracketed by one or more of the analyses previously provided in the EIR.

Construction Impacts

Potential construction-related environmental effects of the Housing/R&D Variant (Variant 2A) would be approximately the same as those analyzed for the R&D Variant (Variant 1), as it would include approximately the same intensity of development. Therefore, all construction-related environmental effects of the Housing/R&D Variant (Variant 2A) are the same as contained in the analysis of the R&D Variant on pages IV-12 through IV-71 of the EIR.

Depending on the phasing of the additional development, the Housing/R&D Variant (Variant 2A) may result in fewer construction traffic impacts between future years 2012 and 2017, when the new stadium would be constructed, and somewhat greater impacts in the years the housing and additional R&D would be constructed. Implementation of a Construction Traffic Management Program (the same as described for the Project in mitigation measure MM TR-1) would help minimize the Housing/R&D Variant's contribution to cumulative construction-related traffic impacts. However, localized construction-related traffic impacts would remain significant and unavoidable, similar to the Project, and would be bracketed by the analysis for the Project.

With regard to air quality, construction activities would occur over the same construction period and would be essentially the same as those identified for the Project and the R&D Variant (Variant 1). Any project within the City of San Francisco, including the Housing/R&D Variant, would be required to comply with *San Francisco Health Code* Article 22B, Construction Dust Control, which requires the preparation of a site-specific dust control plan, (with mandatory mitigation measures similar to the BAAQMD's) for construction projects within 1,000 feet of sensitive receptors (residence, school, childcare center, hospital or other health-care facility or group-living quarters). Implementation of mitigation measure MM HZ-15, which identifies specific mitigation that would be used to reduce emissions associated with construction. As the development footprint of the Housing/R&D Variant (Variant 2A) would be substantially similar to and have been "bracketed by" the analyses for the Project and the R&D Variant (Variant 1), impacts would be less than significant as previously identified in the

analyses of construction air quality impacts for the Project and the R&D Variant (Variant 1), and would be bracketed by the impact analysis for the Project and the R&D Variant (Variant 1).

With respect to airborne human health risks, construction measures MM AQ-2.1 and MM AQ-2.2 would be implemented for the Housing/R&D Variant (Variant 2A), reducing diesel particulate matter (DPM) and dust or particular matter (PM_{10}) to less than significant. As construction emissions associated with the Housing/R&D Variant (Variant 2A) are expected to be lower than those associated with construction of a stadium in the same location (e.g., Project), the Housing/R&D Variant (Variant 2A) would have reduced impacts compared to the Project. Refer to Appendix T4 (ENVIRON, Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, April 26, 2010). The Health Risk Assessment (HRA) performed for the Project (Appendix H3 to the EIR) concluded that the inhalation cancer risk at the Maximum Extent of Impact (MEI) for the Project would be 4.5 in one million. This represents the maximum level of DPM experienced by all off-site and on-site (i.e., Alice Griffith) sensitive receptors during Project construction activities. Exposure to DPM from construction activities associated with the Project would not exceed the BAAQMD threshold. The Housing/R&D Variant (Variant 2A) is not anticipated to exceed Project impacts and, therefore, would not exceed the BAAQMD CEQA threshold. In addition, the HRA concluded the maximum chronic noncancer HI to be 0.01, which is below the BAAQMD's HI significance threshold of 1.0. Therefore, this impact would be bracketed by the impact analyzed in the Project, and would similarly be less than significant.

The HRA for the Project analyzed the potential for construction activities to generate toxic air contaminants (TACs) associated with soil-PM_{10} and evaluated the potential concentrations of airborne soil-PM_{10} at numerous receptors on site (residents at the Alice Griffith Public Housing units) and off site (adult and child residents, workers, and schoolchildren) in the Project vicinity. The inhalation cancer risk at the point of maximum impact or MEI as a result of construction activities at the Project site would be 0.04 in one million and would not exceed the BAAQMD threshold, similar to the Project. In addition, the HRA concluded the maximum non-cancer HI to be 0.03, which would be below the BAAQMD's significance threshold of 1.0. The impacts of the Housing/R&D Variant (Variant 2A) would be bracketed by the analysis for the Project.

All construction-related mitigation measures outlined for the Project would also apply to the Housing/R&D Variant (Variant 2). These include: MM TR-1, MM AE-2, MM AQ-2.1, MM AQ-2.2, MM NO-1a.1, MM NO-1a.2, MM NO-2a, MM CP-1b.1, MM CP-2a, MM CP-3a, MM HZ-1a, MM HZ-1b, MM HZ-2a.1, MM HZ-2a.2, MM HZ-5a, MM HZ-9, MM HZ-10b, MM HZ-12, MM HZ-15, MM GE-2a, MM GE-3, MM GE-4a.1, MM GE-4a.2, MM GE-4a.3, MM GE-5a, MM GE-6a, MM GE-10a, MM GE-11a, MM HY-1a.1, MM HY-1a.2, MM HY-1a.3, MM HY-6a.1, MM HY-12a.1, MM HY-12a.2, MM HY-14, MM BI-4a.1, MM BI-4a.2, MM BI-5b.1, MM BI-5b.3, MM BI-5b.4, MM BI-6a.1, MM BI-6a.2, MM BI-6b, MM BI-9b, MM BI-12a.1, MM BI-12a.2, MM BI-12b.1, MM BI-12b.2, MM BI-14a, MM PS-1, MM UT-3a, and MM UT-5a. (Refer to Table ES-2.)

Operational Impacts

Land Use and Plans

The Housing/R&D Variant (Variant 2A) would develop 3,000,000 sf of R&D on the HPS Phase II site, which is 2,000,000 less square footage than the R&D Variant (Variant 1). However, 1,625 additional housing units and 500,000 additional sf of R&D compared to the R&D Variant (Variant 1) would be constructed on HPS Phase II on the stadium site. The impacts of the types of land uses proposed for the stadium site under the Housing/R&D Variant (Variant 2A) have been analyzed in both the R&D and Housing Variant analyses contained on pages IV-12 through IV-139 of the Draft EIR.

The Housing/R&D Variant (Variant 2A) would not introduce any new land uses that were not analyzed in the R&D and Housing Variants. The residential units and R&D would be located on the stadium site, the same as for the R&D and Housing Variants, and would not divide an established community. The Housing/R&D Variant (Variant 2A) would not conflict with any policies of applicable land use plans or result in urban decay, as analyzed for the R&D and Housing Variants, as the proposed uses and densities are within the range of development analyzed for the R&D and Housing Variants. The impacts would be less than significant, similar to the R&D and Housing Variants.

Population, Housing, and Employment

The Housing/R&D Variant (Variant 2A) would result in construction of the same number of dwelling units as the Project (10,500), with the same resulting resident population increase. The Housing/R&D Variant (Variant 2A) would generate 11,629 jobs,[149] less than the 16,635 jobs estimated for the R&D Variant (Variant 1), but more than for the Project. Therefore, impacts related to population, housing, and employment would be bracketed by the analysis for the Project and Variant 1, and would be similarly less than significant.

Transportation and Circulation

Overall, the Housing/R&D Variant (Variant 2A) would not increase the total amount of residential development compared to the Project, but would relocate approximately 1,625 housing units from Candlestick Point to HPS Phase II, and would add 500,000 gsf of R&D to HPS Phase II. Therefore, 4,275 residential units (rather than 2,650 residential units as under the Project) and 3,000,000 gsf (rather than 2,500,000 gsf as under the Project) of R&D would be developed at HPS Phase II. The Housing/R&D Variant (Variant 2A) would include all uses proposed with the Project with the exception of the stadium, which would be replaced by the relocated housing units and additional R&D. There would be no football stadium. Therefore, the Housing/R&D Variant (Variant 2A) would not have game day or other stadium event transportation impacts associated with the Project. The Housing/R&D Variant (Variant 2A) would have the same roadway, transit, bikeway, and Bay Trail improvements proposed with the Project, including the Yosemite Slough bridge. However, as with all non-stadium variants, the bridge would be narrower than the bridge with the Project, with a 41-foot-wide right-of-way to accommodate two BRT lanes, a sidewalk, and a Class I bicycle path.

[149] Utilizing generation factor of one job for every 4,000 sf.

As with the Project, the Housing/R&D Variant (Variant 2A) would implement a Transportation Demand Management plan as described in Project mitigation measure MM TR-2 and a Transit Operating Plan as described in Project mitigation measure MM TR-17.

A transportation analysis was conducted for the Housing/R&D Variant (Variant 2A) and key conclusions are presented below. The analysis is provided as Appendix T6 (LCW Consulting, CP-HPS Phase II Development Plan Transportation Study—Project Variant 2A, March 15, 2010) to this document.

Trip Generation

The Housing/R&D Variant (Variant 2A) would have 220,323 total daily person trips, slightly more than the trips generated with the Project (219,651), but less than the R&D Variant (236,291). Similarly, the Housing/R&D Variant (Variant 2A) would generate slightly more peak hour person trips during both the AM and PM peak hours (14,042 weekday AM trips, 20,727 weekday PM trips, and 18,240 Sunday PM trips) than the Project (13,558 weekday AM trips, 20,412 weekday PM trips, and 18,128 Sunday PM trips), but fewer peak hour trips than the R&D Variant (16,253 weekday AM trips, 22,586 weekday PM trips, and 19,719 Sunday PM trips). Thus, the impacts from the Housing/R&D Variant (Variant 2A with respect to trip generation have been bracketed by the analysis for the Project and the R&D Variant (Variant 1).

Intersection LOS

There are three intersections—Cesar Chavez/Evans, Crisp/Palou, and Bayshore/Oakdale—where the Housing/R&D Variant (Variant 2A) would result in a greater impact than as identified for the Project. The intersections of Crisp/Palou and Bayshore/Oakdale would have a project-level significant impact that does not occur under the Project. At these same two intersections, however, the R&D Variant (Variant 1) was identified to have a significant and unavoidable impact, with greater levels of delay (although same level of service) when compared to the Housing/R&D Variant (Variant 2A). Therefore, for these two intersections, the impacts have been bracketed by the analysis for the Project and for the R&D Variant (Variant 1).

For the intersection of Cesar Chavez/Evans, the Housing/R&D Variant (Variant 2A) would make a significant contribution to cumulative impacts as well as a project-level significant impact compared to the no significant contribution and no significant project-level impact under the Project. For the same intersection, the analysis for the R&D Variant (Variant 1) concluded that there would be a significant contribution and a significant project-level impact, and the contribution from the R&D Variant (Variant 1) would be greater for the R&D Variant (Variant 1) than for the Housing/R&D Variant (Variant 2A). The average delay at this intersection would be less under the Housing/R&D Variant (Variant 2A) than under the R&D Variant (Variant 1). Therefore, for this intersection, the impacts have been bracketed by the analysis for the Project and the R&D Variant (Variant 1).

Freeway Conditions

The Housing/R&D Variant (Variant 2A) would generate more trips than the Project but fewer than the R&D Variant (Variant 1), as noted, above. The Housing/R&D Variant (Variant 2A) effects on freeway mainline sections and freeway ramp junctions would be greater compared to the Project, but less than

with the R&D Variant (Variant 1). The Housing/R&D Variant (Variant 2A) ramp queuing effects would be similar to Project effects. The Housing/R&D Variant (Variant 2A) would result in significant impacts with respect to ramp queuing at the same off-ramp locations as the Project, with one exception. With the Housing/R&D Variant (Variant 2A), the US-101 northbound off-ramp to Harney Way would not be likely to experience queues extending back to the mainline in the PM peak hour. However, the Housing/R&D Variant's contribution to other off-ramps expected to experience significant traffic impacts associated with queuing under Project conditions would be the same as the Project. As described for Project impacts, no feasible mitigation measures have been identified for the freeway off-ramps expected to experience significant impacts. Impacts of the Housing/R&D Variant (Variant 2A) on freeway conditions would be significant and unavoidable, the same as for the Project and the R&D Variant (Variant 1), except for the one off-ramp location noted where the impact of the Housing/R&D Variant (Variant 2A would be less than significant, compared to the significant and unavoidable impact on this off-ramp under both the Project and the R&D Variant (Variant 1). Thus, the impacts of the Housing/R&D Variant (Variant 2A) with respect to freeway conditions would be bracketed by the impact analysis for the Project and the R&D Variant (Variant 1) as contained in the EIR.

Transit Impacts

The Housing/R&D Variant (Variant 2A), as with the Project, would include extended and new transit services; transit trips with the Housing/R&D Variant (Variant 2A) would be accommodated within the capacity of these services. The Housing/R&D Variant (Variant 2A), as with the Project, would have a less-than-significant impact with mitigation (i.e., implementation of MM TR-27—the Transit Operating Plan) on local and regional transit capacity. However, as with the Project, transit impacts would occur from traffic congestion delay. Overall, those transit delay conditions with the Housing/R&D Variant (Variant 2A) would affect the same lines as with the Project as presented in Section III.D, Impact TR-21 to Impact TR-30. Project mitigation measures MM TR-21 to MM TR-30 would also apply to the Housing/R&D Variant (Variant 2A), but, as concluded in Section III.D of the EIR, the feasibility or implementation of the measures is uncertain, and the transit delay effects would remain significant and unavoidable. The Housing/R&D Variant (Variant 2A) would require a similar number of additional vehicles on the same routes as the Project to mitigate transit congestion delays. Impacts associated with the Housing/R&D Variant (Variant 2A) would be more extensive than those for the Project and the Housing Variant (Variant 2), but less than the R&D Variant (Variant 1), and would be significant and unavoidable.

Bicycle Impacts

The Housing/R&D Variant (Variant 2A) bicycle trips would be accommodated within the proposed street and network, and impacts on bicycle circulation would be less than significant.

As with the Project, potential significant impacts on bicycle travel on Palou Avenue would occur under Housing/R&D Variant. Project mitigation measure MM TR-32 would reduce impacts on bicyclists; however, because a feasibility study would be required, the implementation of Project mitigation measure MM TR-32 is uncertain, and, therefore, the Housing/R&D Variant (Variant 2A) impacts on bicycle circulation would remain significant and unavoidable, the same as for the Project.

Pedestrian Impacts

The Housing/R&D Variant (Variant 2A) would be accommodated within the proposed sidewalk and pedestrian network, and impacts on pedestrian circulation would be less than significant.

Parking Impacts

The Housing/R&D Variant (Variant 2A) would result in a demand for about 21,776 spaces, compared with a maximum permitted supply of about 17,274 spaces; therefore, the maximum off-street parking supply would be about 4,502 spaces fewer than the estimated peak demand. The Project would have a demand for 21,233 spaces and maximum supply of 16,874 spaces, about 4,360 spaces fewer than estimated peak demand. Due to parking supply constraints and accessibility to transit, future Housing/R&D Variant (Variant 2A) parking demand may be somewhat lower than estimated, and, therefore, the parking space shortfall would also be less than the number of spaces that would be required in order to accommodate all the vehicles anticipated if the proposed parking supply were unconstrained. Since the parking supply would be constrained, the actual parking demand would be expected to be less. As discussed in Section III.D, peak parking demand would not occur simultaneously; public parking facilities, such as the one proposed in Candlestick Point, and on-street parking spaces can usually be shared efficiently among many destinations, and the Housing/R&D Variant (Variant 2A) would include a Travel Demand Management program that includes a number of parking strategies to make auto use and ownership less attractive, as well as strategies to encourage alternative modes.

As noted for the Project, it is possible that some drivers may seek available parking in adjacent Bayview residential areas to the west. The potential increase in parking demand in adjacent neighborhoods would likely spill over to streets with existing industrial uses in the vicinity, which could, in turn, increase demand for parking in nearby Bayview residential areas. Parking supply is not considered a permanent physical condition, and changes in the parking supply would not be a significant environmental impact. The loss of parking may cause potential secondary effects, which would include cars circling and looking for a parking space in neighboring streets. The secondary effects of drivers searching for parking is typically offset by a reduction in vehicle trips due to some drivers who are aware of constrained parking conditions in a given area shifting to other modes. Hence, any secondary environmental impacts that may result from a shortfall in parking would be minor. Therefore, the parking shortfall would not result in significant parking impacts, and Housing/R&D Variant (Variant 2A) impacts on parking would be less than significant.

The Housing/R&D Variant (Variant 2A) would have less-than-significant effects on other transportation conditions (loading, air traffic, and emergency access).

Arena Impacts

As with the R&D Variant (Variant 1), since the amount of background transit demand under the Housing/R&D Variant (Variant 2A) would be higher than the Project, it is possible that the added transit demand associated with a sold-out arena event would create demand for transit service greater than the capacity of the transit supply to the arena. Project mitigation measure MM TR-51 (Transportation Management Plan for the arena) and MM TR-23.1 (Maintain the proposed headways of the 29-Sunset) would apply to the Housing/R&D Variant (Variant 2A) and would help minimize the impacts. This

mitigation requires that SFMTA increase frequency on regularly scheduled Muni routes (primarily the CPX-Candlestick Express) serving the arena area prior to large events at the arena and convert one of the two automobile travel lanes in each direction into a transit-only travel lane on Gilman Avenue between Arelious Walker Drive and Third Street. Additionally, westbound Paul Avenue, between Third Street and Bayshore Boulevard, provides one westbound travel lane and on-street parking. Additional shuttle service to key regional transit destinations, such as BART, Caltrain, and the T-Third light rail route would also be provided by the arena operator. With implementation of the mitigation measure, the Housing/R&D Variant's impacts to transit service would be reduced, but not to less-than-significant levels. In addition, traffic impacts during events at the arena would not be mitigated, and would impact transit operations. Because transit demand would be greater under the Housing/R&D Variant (Variant 2A) compared to the Project and less than the demand under the R&D Variant (Variant 1), the impacts of the Housing/R&D Variant (Variant 2A) have been bracketed in the analysis contained in the EIR for the Project and the R&D Variant (Variant 1).

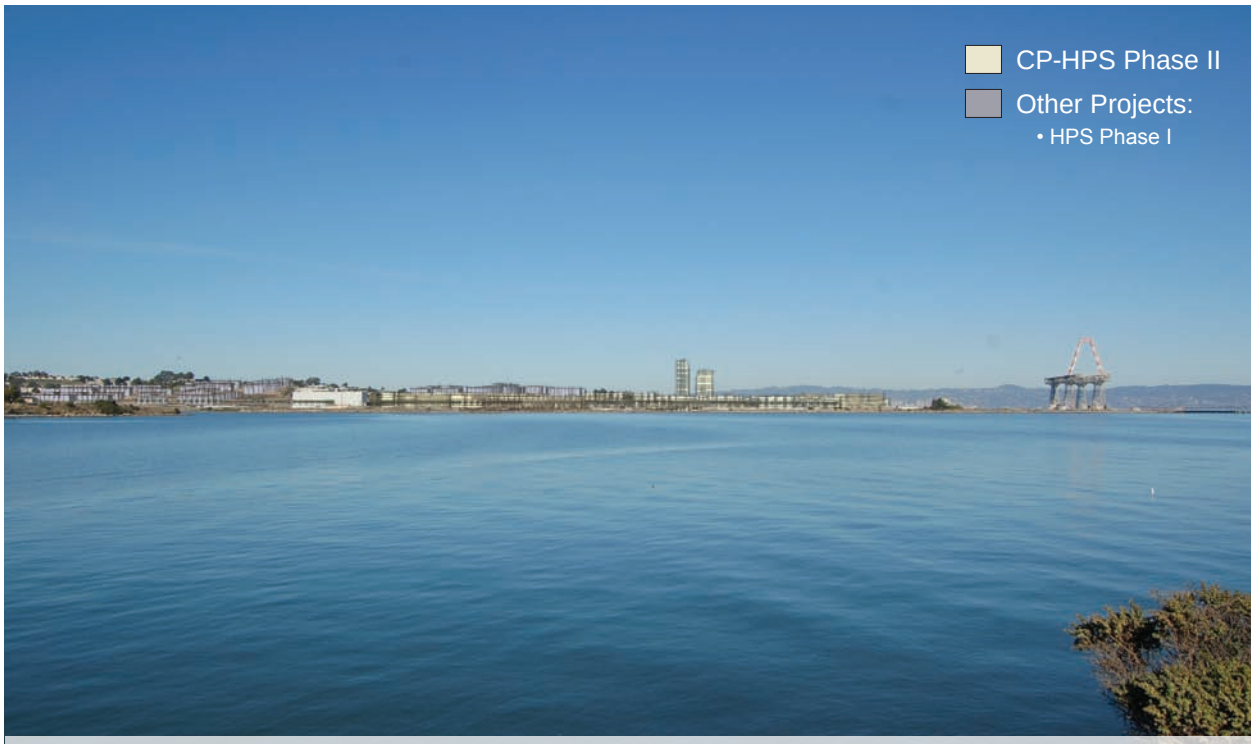
Aesthetics

Compared to the R&D Variant (Variant 1) and Housing Variant (Variant 2), building heights and massing would appear substantially similar to what was analyzed for those variants. All other urban design and building forms with the Housing/R&D Variant, and resulting effects, would be similar to conditions with the R&D and Housing Variants. Building heights and massing would remain within the parameters analyzed for the R&D and Housing Variants. Building heights would be maintained within the height limits established for the Project districts (refer to Figure IV-8a). There would be new development along the south side of Crisp, which would not occur under the Project, Variant 1, or Variant 2. However, as illustrated in Figure IV-7a and Figure IV-8a, the structures proposed south of Crisp under Variant 2A would not exceed 85 feet in height or be taller than proposed buildings farther east. The area where additional structures (compared to the Project) would be constructed would be limited to a small portion of the site.

The Housing/R&D Variant (Variant 2A) would not introduce new land uses or types of structures that were not previously considered and analyzed with respect to effects on scenic resources. Similarly, as the Housing/R&D Variant (Variant 2A) would develop the same mix of uses on the same site, the impacts to visual character or quality would be the same as analyzed for the Project, the R&D Variant (Variant 1), and the Housing Variant (Variant 2).

Figure IV-10b through Figure IV-10d provide visual simulations of the general appearance, height, bulk, and location of structures proposed under Variant 2A. Figure III.E-10 (Viewpoint Locations) also identifies Views 16a and 18a. As can be seen, the overall appearance of Variant 2A would be substantially similar to the Project and the other variants. No long- or mid-range views would be blocked and no scenic resources would be affected, similar to the Project and the other variants. As the amount of development would be within the development envelope analyzed for the Project, Variant 1, and Variant 2, and with implementation of the same mitigation measures identified for the Project, impacts from light and glare would be less than significant.

Existing



Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.11.10 02056 | JCS | 10

FIGURE IV-10b

Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A)
VIEW 17: NORTHEAST FROM CPSRA [NEW]

Existing

Proposed

SOURCE: Lennar Urban, 2010.

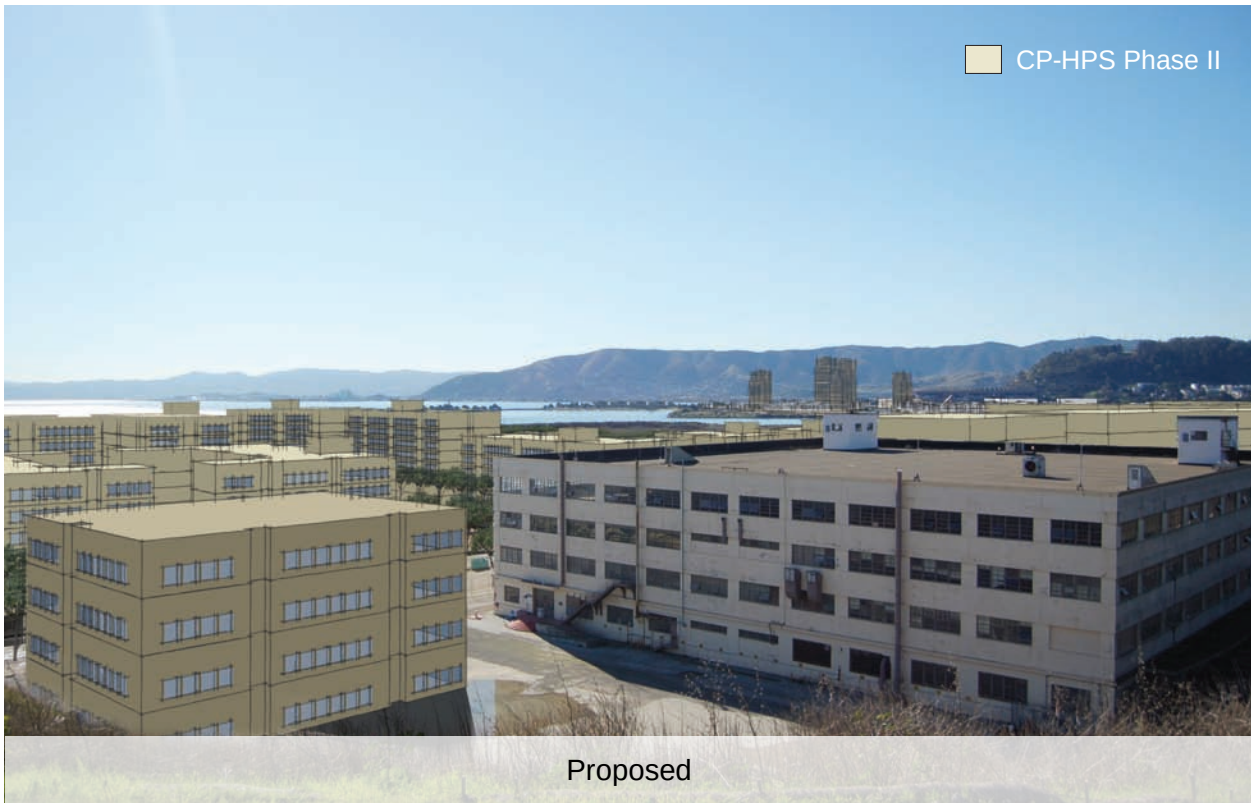
PBS&J 04.11.10 02056 | JCS | 10

FIGURE IV-10c

Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A)
VIEW 18: SOUTH FROM HILLTOP OPEN SPACE [NEW]

Existing



Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.11.10 02056 | JCS | 10

FIGURE IV-10d

Candlestick Point — Hunters Point Shipyard Phase II EIR

HOUSING/R&D VARIANT (VARIANT 2A)
VIEW 16a: SOUTHWEST FROM CRISP ROAD [NEW]

Therefore, the impacts on scenic vistas, scenic resources, visual character, and from light and glare would be less than significant, similar to the Project, the R&D Variant (Variant 1), and the Housing Variant (Variant 2).

Shadow

The buildings proposed under the Housing/R&D Variant (Variant 2A) on the stadium site would be lower in height than those analyzed for the Project; none of the buildings proposed on the stadium site would be greater than the 156-foot height of the proposed stadium as analyzed for the Project. Therefore, shadow impacts of the Housing/R&D Variant (Variant 2A) would be less than the Project and less than significant.

Wind

Maximum building heights would be subject to the same height limitations as the Project. Heights of the R&D and residential structures would be less than the 156-foot height of the stadium structure, and there would be no new structures of 100 feet or greater. The impacts would be less than significant, similar to the Project.

Air Quality

Other than the stadium site and removal of housing units in the Jamestown District on Candlestick Point, land uses provided with the Housing/R&D Variant (Variant 2A) would be the same as the Project. The additional R&D and housing on the stadium site were evaluated considering the 350-foot restriction (buffer) required by the HPS Redevelopment Plan.[150] The Housing/R&D Variant (Variant 2A) was also evaluated to update the traffic $PM_{2.5}$ and cumulative analyses presented in the technical memoranda prepared by ENVIRON as Appendix H4 (Community Hazards and San Francisco Health Code Article 38 Analyses Candlestick Point–Hunters Point Shipyard Phase II Redevelopment Project, May 2010) and as Appendix T4 ENVIRON, Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, April 26, 2010).

Operational impacts to regional and local air quality would be substantially similar to the Project, less in most respects but slightly greater for PM_{10}. Under the Housing/R&D Variant, the football stadium proposed under the Project would be replaced with 1,625 residential units redistributed from Candlestick Point to HPS Phase II as well as 500,000 sf of R&D. Due to the redistribution of uses under this variant, approximately 672 additional vehicle trips over that of the Project would occur and would result in a somewhat higher level of daily VMT than the Project. As such, the level of certain emissions anticipated under the Housing/R&D Variant (Variant 2A) would be slightly greater than the Project. As shown in Table IV-23a (Housing/R&D Variant [Variant 2A] Operational Criteria Pollutant Emissions [Year 2030]), the difference in daily emissions of ROX, NO_X, CO, and $PM_{2.5}$ would decrease under this variant compared to the Project by 1 to 6 percent, while PM_{10} emissions would increase by 1.6 percent. Compared to the R&D Variant (Variant 1), because Variant 1 would have substantially greater trips and

[150] The HPS Redevelopment Plan states, "No Laboratory, Life Sciences, Light Industrial, and/or Green Technology uses containing a facility that emits regulated toxic air contaminants shall be permitted within 350 feet of any residential use south of Crisp Road in Hunters Point South."

VMT, the Housing/R&D Variant (Variant 2A) emissions would be less than under the R&D Variant (Variant 1) during operation.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-23a Housing/R&D Variant (Variant 2A) Operational Criteria Pollutant Emissions (Year 2030) [New]

Scenario/Emission Source	*ROG (lbs/day)*	*NO_X (lbs/day)*	*CO (lbs/day)*	*PM_{10} (lbs/day)*	*$PM_{2.5}$ (lbs/day)*
Hunters Point Shipyard (Variant 2A)					
Area[a]	261	54	38	0	0
Motor Vehicles (External)	107	96	1,062	508	96
Subtotal	*368*	*150*	*1,100*	*508*	*96*
Candlestick Point (Variant 2A)					
Area[a]	358	58	38	0	0
Motor Vehicles (External)	207	188	2,049	1,006	186
Subtotal	*564*	*246*	*2,087*	1,006	*186*
All Sources (Variant 2A)	***932***	***396***	***3,187***	***1,514***	***282***
All Development Sites (Proposed Project)					
Area[a]	616	108	83	5	5
Motor Vehicles (External)	308	278	3,177	1,466	276
Motor Vehicles (Internal)	30	13	229	45	9
All Sources (Proposed Project)	***945***	***394***	***3,406***	***1,490***	***285***
Comparison to Proposed Project	***99%***	***99.5%***	***94%***	***101.6%***	***99%***
Change from Proposed Project	*-1%*	*0.5%*	*-6%*	*1.6%*	*-1%*
All Sources (R&D Variant)	***997***	***442***	***3,793***	***1,650***	***315***
Comparison to Proposed Project	***106%***	***112%***	***111%***	***111%***	***111%***
Change from Proposed Project	*6%*	*12%*	*11%*	*11%*	*11%*
All Development Sites (Business as Usual)					
Area[a]	616	108	83	5	5
Motor Vehicles	485	476	5,292	2,561	481
All Sources (Business as Usual)	***1,101***	***585***	***5,375***	***2,566***	***486***
Comparison to Proposed Project	***116.5%***	***148%***	***158%***	***172%***	***170.5%***
Comparison to R&D Variant	***110%***	***132%***	***142%***	***155%***	***154%***
Comparison to Variant 2A to Business as Usual	***84%***	***67%***	***59%***	***58%***	***59%***
Reduction from Business as Usual	*-16%*	*-33%*	*-41%*	*-42%*	*-41%*

SOURCE: PBS&J, 2010. Based on URBEMIS 2007 Version 9.2.4; model input/output in included in Appendix H1.

Daily emissions of ROG and NO_X were calculated under Summer conditions when ambient ozone concentrations are highest. Daily emissions of CO, PM_{10}, and $PM_{2.5}$ were calculated under winter conditions when associated ambient concentrations are highest.

* Area emissions are from sources located on the project site, such as natural gas combustion for heating/cooling, maintenance equipment, consumer product use, etc.

All variants and the Project would result in fewer emissions during the operation of their respective land uses compared to a similar level of development without the energy and transportation considerations discussed in this EIR. The Housing/R&D Variant (Variant 2A), similar to the Project and the other variants, would incorporate features intended to reduce motor vehicle trips, designed as a dense, compact development with a mix of land uses that would facilitate pedestrian, bicycle, and transit travel. The Housing/R&D Variant's transportation analysis estimates that a similar housing development that did not include the trip reduction features of the Housing/R&D Variant (Variant 2A) would generate 220,323 daily external motor vehicle trips (about 0.6 percent more than the Project, which would generate 219,651 daily trips and 6.8 percent less than the R&D Variant [Variant 1], which would generate 236,291 daily trips). The comparison of the Housing/R&D Variant (Variant 2A) to a similar level of development under "business as usual" conditions shows a 16 to 42 percent reduction in criteria pollutant emissions.

Nonetheless, criteria pollutant emissions of ROG, NO_X, PM_{10}, and $PM_{2.5}$ associated with land uses anticipated under the Housing/R&D Variant (Variant 2A) would exceed existing BAAQMD thresholds. Under BAAQMD's current thresholds, impacts are considered significant if daily emissions of criteria pollutants exceed 80 lbs/day of ROG, NO_X, and PM_{10}. Similar to the Project and the R&D Variant (Variant 1), no additional feasible mitigation measures are available to would reduce the Housing/R&D Variant's operational criteria emissions below the BAAQMD thresholds. This would be a significant and unavoidable impact. It should be noted that, as stated above, although the significance under this variant would be similar to the Project and the R&D Variant (Variant 1), all criteria pollutant emissions, with the exception of PM_{10}, and a slight increase of NO_X associated with the operation of uses under the Housing/R&D Variant (Variant 2A) would be less than the Project, and all criteria pollutant emissions would be less than with the R&D Variant (Variant 1), as stated in Table IV-23a.

With respect to airborne human health risks, emissions associated with operation activities under the Housing/R&D Variant (Variant 2A) would increase the levels of two potential human health risks: (1) TACs and (2) vehicle emissions ($PM_{2.5}$). Under the Housing/R&D Variant, dwelling units would be relocated from CP to the HPS Phase II area.

The Housing/R&D Variant (Variant 2A) continues to include R&D facilities at HPS Phase II, which are situated partly on the stadium site to the west of the proposed housing on the stadium site and the remainder on a peninsula extending to the east of the proposed additional housing and south of other proposed residential areas. As the predominant winds are out of the west, some on-site receptors would be downwind from some of these R&D areas, particularly the R&D area on the stadium site. As such, a health risk analysis (HRA) was conducted to determine the potential impacts from a variety of TAC sources in the R&D areas for the Housing/R&D Variant, similar to those discussed for the Project and R&D Variant (Variant 1). Details regarding this assessment can be found in a technical memorandum prepared by ENVIRON on April 26, 2010.[151]

The HRA estimated the excess lifetime cancer risk and chronic noncancer HI due to the combined TAC emissions from the R&D areas at any surrounding receptor location. The HPS Redevelopment Plan

[151] ENVIRON, *Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 (Tower Variant D), Alternative 2, and Subalternative 4A*, April 26, 2010.

states "no Laboratory, Life Sciences, Light Industrial, and/or Green Technology uses containing a facility that emits regulated toxic air contaminants shall be permitted within 350 feet of any residential use south of Crisp Road in Hunters Point South." Though the Housing/R&D Variant (Variant 2A) has residential areas immediately adjacent to the R&D on the stadium site, with the provision in the HPS Redevelopment Plan, the estimated cancer risks for long-term residential exposure not exceed 10 in one million in the residential areas. The estimated health risks would be above BAAQMD thresholds for all residential receptor locations as a result of implementation of the Variant without the following mitigation measure. Impacts from this Variant would be less than significant with implementation of MM AQ-6.1 and MM AQ-6.2, developed for the Project.

In terms of human health risks associated with vehicle emissions, vehicle trips and thereby vehicle emissions along local roadways would increase with development of the Housing/R&D Variant, similar to the Project. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations from traffic associated with the Housing/R&D Variant were estimated at selected roadways and compared against the 0.2 $\mu g/m^3$ action level to determine the potential health risks on receptors attributed to vehicle emissions from the Housing/R&D Variant.

Several roadway segments were chosen based on whether Variant-related traffic would use these streets to access neighboring freeways and other areas of *San Francisco* and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the Housing/R&D Variant (Variant 2A), no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of the 0.2 $\mu g/m^3$ action level.[152] Concentrations would not exceed the action level, and as such, impacts would be less than significant, similar to the Project.

Overall, the operational emissions generated by the Housing/R&D Variant (Variant 2A) would be bracketed by the amounts generated by the Project and the R&D Variant (Variant 1).

Noise and Vibration

As with the Project, construction activities for the Housing/R&D Variant (Variant 2A) would create a substantial temporary increase in ambient noise levels on the site and in existing residential neighborhoods adjacent to the site. Construction activities would need to comply with the San Francisco Noise Ordinance, which prohibits construction between 8:00 P.M. and 7:00 A.M. and limits noise from any individual piece of construction equipment (except impact tools) to 80 dBA at 100 feet.

[152] ENVIRON, *Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 (Tower Variant D), Alternative 2, and Subalternative 4A*, April 26, 2010.

Implementation of mitigation measures MM NO-1a.1 and MM NO-1a, which would require implementation of construction best management practices to reduce construction noise and the use of noise-reducing pile driving techniques, would reduce any potentially significant impacts to less-than-significant levels, similar to the Project.

Construction activities could also create excessive ground-borne vibration levels in existing residential neighborhoods adjacent to the site and at proposed on-site residential uses, should the latter be occupied before construction activity on adjacent parcels is complete. Implementation of MM NO-1a.1, MM NO-1a.2, and MM NO-2a would require implementation of construction best management practices, noise-reducing pile driving techniques as feasible, and monitoring of buildings within 50 feet of pile driving activities. Implementation of these measures would reduce vibration impacts under the Housing/R&D Variant, but not to a less-than-significant level, as vibration levels from pile driving activities could be as high as 103 VdB for the residential uses within the HPS North District, the CP Center, and South Districts when occupied; therefore, this impact would remain significant and unavoidable, similar to the Project.

Daily operation of a Housing/R&D Variant, such as mechanical equipment and delivery of goods, would not expose noise-sensitive land uses on or off site to noise levels that exceed the standards established by the City of San Francisco. This impact would be less than significant, similar to the Project. Operation activities associated with a Housing/R&D Variant, such as delivery trucks, would not generate or expose persons on or off site to excessive groundborne vibration. This impact would also be less than significant, similar to the Project.

Operation of a Housing/R&D Variant (Variant 2A) would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes. Noise level increases associated with the Housing/R&D Variant (Variant 2A) are shown in Table IV-24a (Housing/R&D Variant (Variant 2A) Modeled Traffic Noise Levels along Major Project Site Access Roads). Impacts would be significant along Carroll Avenue, Gilman Avenue, and Jamestown Avenue, similar to the Project. However, the Housing/R&D Variant (Variant 2A) would have slightly lower noise levels than the Project along Carroll Avenue and Gilman Avenue but would still be significant, as shown in the table. Measures available to address significant traffic noise increases in these residential areas are limited. As the ultimate feasibility and implementation of the noise insulation measures that would be required to reduce roadway noise levels to below the threshold of significance would be dependent on factors that would be beyond the control of the City/Agency as the Lead Agency or the Project Applicant to guarantee. Therefore, this impact would remain significant and unavoidable, as with the Project.

Because the Housing/R&D Variant (Variant 2A) would not include a football stadium, noise impacts identified for the Project from football games and concerts would not occur with implementation of the Housing/R&D Variant (Variant 2A).

The Housing/R&D Variant (Variant 2A) site is not located within an airport land use plan area or near a private airstrip. Furthermore, the Housing/R&D Variant (Variant 2A) does not include an aviation component. Therefore, the Housing/R&D Variant (Variant 2A) would not result in the exposure of people to excessive aircraft noise levels. Impacts would be less than significant, similar to the Project.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-24a Housing/R&D Variant (Variant 2A) Modeled Traffic Noise Levels along Major Project Site Access Roads [New]

Roadway	Land Use	Existing Noise Level	2030 Without Project	2030 With Project	2030 With Housing/R&D Variant	Variant-Related Increase	Allowable Increase	Significant Impact?
Innes north of Carroll Avenue	Residential	53.3	60.9	60.9	60.9	0	2	No
3rd Street south of Carroll Avenue	Residential	62.8	67.3	68.3	67.4	0.1	1	No
Cesar Chavez Boulevard west of 3rd Street	Residential	59	63.5	63.5	63.6	0.1	2	No
Palou Avenue east of 3rd Street	Residential	56.8	61.6	62.1	61.7	0.1	2	No
Ingalls Street north of Carroll Avenue	Residential	56.7	61.7	63.1	62.7	1.0	2	No
Carroll Avenue east of 3rd Street	Commercial	**52.6**	**53.8**	**58.1**	**57.3**	**3.5**	**3**	**Yes**
Gilman Avenue east of 3rd Street	Residential	**57.7**	**60.6**	**64.6**	**63.0**	**2.4**	**2**	**Yes**
Jamestown Avenue north of Harney Way	Residential	51.4	55.5	61.2	59.2	3.7	5	No
Harney Way west of Jamestown Avenue	Residential	52.6	59.0	59.6	59.7	0.7	3	No
Bayshore Boulevard north of Visitacion	Residential	65.1	68.5	68.6	67.9	-0.6	1	No

SOURCE: PBS&J, 2010

Cultural Resources and Paleontological Resources

As the Housing/R&D Variant (Variant 2A) would have a smaller footprint than the Project and would develop in the same location, the impact analysis for the Project to cultural and paleontological resources would be applicable to the Housing/R&D Variant (Variant 2A). The same significant and unavoidable impact to historic resources would occur with demolition of Buildings 211, 224, 231, and 253. Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing all other cultural/paleontological resource impacts to less than significant, the same as the Project.

Hazards and Hazardous Materials

As the Housing/R&D Variant (Variant 2A) would have the same types and mix of land uses and slightly less ground disturbance as the Project, the impact analysis for the Project with regard to hazards and hazardous materials would be applicable to the Housing/R&D Variant (Variant 2A). The Housing/R&D Variant (Variant 2A) would not introduce any uses that would handle or transport hazardous materials, other than routine household-type and landscaping chemicals, the risk of which was analyzed in the Draft EIR for the Project. There would be similar amounts of grading and excavation, with similar risks as the Project, of exposure to hazardous materials. The same structures would be demolished during site preparation. The introduction of housing and R&D on the stadium site would not be different from the significance conclusions set forth for the Project. All mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant, the same as for the Project. Therefore, the impact analysis for hazards and hazardous materials for the Housing'/R&D Variant (Variant 2A) would be bracketed by the impact analysis for the Project.

Geology and Soils

As the Housing/R&D Variant (Variant 2A) would have a smaller development footprint than the Project, and would place development in the same locations as the Project, the impact analysis for the Project with regard to geology and soils would apply to the Housing/R&D Variant (Variant 2A). In some areas of the stadium site, slightly different portions would be covered by structures (e.g., west of the stadium footprint); however, there are no geologic conditions in the portion of the stadium site that would be developed under the Housing/R&D Variant (Variant 2A) that would differ from the geologic conditions on the portion of the site where the stadium would be constructed. The potential impact from rock fragmentation at the Jamestown District under the R&D Variant (Variant 1) and Housing Variant (Variant 2) would not occur under the Housing/R&D Variant (Variant 2A). Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant, the same as for the Project. The impacts of the Housing/R&D Variant (Variant 2a) with respect to geology and soils would be bracketed by the analysis for the Project.

Hydrology and Water Quality

The Housing/R&D Variant (Variant 2A) would have slightly less impermeable surface area than the Project, as noted, above. The same type and mix of land uses would be developed under Variant 2A as the Project. Therefore, the impact analysis for the Project with regard to Hydrology and Water Quality would also apply to the Housing/R&D Variant (Variant 2A). Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant, the same as for the Project.

Biological Resources

The Housing/R&D Variant (Variant 2A) would disturb slightly less surface area than the Project, as noted, above. The locations of development are substantially the same as under the Project. Development would not occur on any portion of the site that has not been previously analyzed, except for a small portion on the south side of Crisp Road that would now contain structures. However, there

are no sensitive species or habitat in this location that would be adversely affected by development. Therefore, the impact analysis for the Project with regard to biological resources would apply to the Housing/R&D Variant (Variant 2A). Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant, the same as for the Project.

Public Services

Public Services impacts are based on adequacy of service provided to the population. The Housing/R&D Variant (Variant 2A) would result in the same number of residents as the Project, as the number of dwelling units would be the same. The Housing/R&D Variant (Variant 2A) would generate 11,629 jobs, less than the 16,635 jobs estimated for the R&D Variant. Therefore, the impacts on Public Services analyzed for the R&D Variant (Variant 1) would also apply to the Housing/R&D Variant (Variant 2A), as the population and employment generated are within the maximums previously analyzed under the R&D Variant (Variant 1). The impacts would be less than significant, bracketed within the analysis for the Project and the R&D Variant (Variant 1). Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant.

Recreation

The Housing/R&D Variant (Variant 2A) would provide 326.6 acres of parkland, which is 9.8 acres less than the Project. The conceptual development plan for this Variant would result in the development of residential units and parks during all stages of development. Table IV-26a (Housing/R&D Variant [Variant 2A] Residential Units and Park Acreage Provided during Each Stage of Development) outlines the number of residential units and the acreage of parkland provided during each stage of development, as well as the resulting park-to-population ratio for residents of the Project site (even if developed under the Housing/R&D Variant). As this table indicates, the park-to-population ratio would not drop below 13.3 acres per 1,000 population at any time during the four stages of development, which exceeds the benchmark of 5.5 acres of parkland per 1,000 population.

Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant, the same as for the Project.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-26a Housing/R&D Variant (Variant 2A) Residential Units and Park Acreage Provided during Each Stage of Development [New]

Stage of Development	Residential Units	Population	Total Parkland (ac)	Park-to-Population Ratio (acres per 1,000 Residents)
Existing	256	1,113[a]	120.2	108
Phase 1	3,160	7,363[b]	136.0	18.5
Phase 2	4,410	10,275[b]	162.5	15.8
Phase 3	7,785	18,139[b]	246.7	13.6
Phase 4	10,500	24,465[b]	326.6	13.3

SOURCE: Lennar Urban, 2010.

a. Refer to Table III.C-1 (Existing Population [2005]) in Section III.C (Population, Employment, and Housing). This population correlates to the total number of households in the Traffic Analysis Zone, which includes more than the 256 households located in the Candlestick portion of the Project site (e.g., 292). It is likely, therefore, that the population within the Candlestick portion of the Project site is less than 1,113, which would only increase the existing park-to-population ratio.

b. Calculated as 2.33 people per residential unit.

Utilities

A supplemental Water Demand Memo (refer to Appendix Q2 [Arup, Amendment to Water Demand Memorandum #16—Variant 2A (Housing/R&D Variant), April 28, 2010]) was prepared to calculate the water demand for the Housing/R&D Variant (Variant 2A). As shown in Table IV-27a (Housing/R&D Variant [Variant 2A] Water Demands Adjusted for Plumbing Codes and SF Green Building Ordinance [mgd]), total demand for potable water would be 1.73 mgd, which is less than the 1.99 mgd calculated for the R&D Variant (Variant 1). Calculating wastewater generation based on land use (residential, football stadium, and performance venue calculated at 95 percent of water demand; all other land uses calculated at 57 percent of water demand), the total wastewater generated by the Housing/R&D Variant (Variant 2A) would be 1.23 mgd (refer to Table IV-28a [Housing/R&D Variant [Variant 2A] Wastewater Generation]), which is less than the 1.35 mgd calculated for the R&D Variant (Variant 1). Mitigation measures identified for the Project and the R&D Variant (Variant 1) would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-27a Housing/R&D Variant (Variant 2A) Water Demands Adjusted for Plumbing Codes and SF Green Building Ordinance (mgd) [New]

Land Use	Candlestick Point	Hunters Bay Shipyard	Total
Residential	0.48	0.35	0.83[a]
Hotel	0.05	0.00	0.05
Office	0.04	0.00	0.04
Artists Studios	0.00	0.01	0.01
R&D	0.00	0.43	0.43
Neighborhood Retail	0.02	0.02	0.03[a]
Regional Retail	0.08	0.00	0.08

Table IV-27a	Housing/R&D Variant (Variant 2A) Water Demands Adjusted for Plumbing Codes and SF Green Building Ordinance (mgd) [New]		
Land Use	*Candlestick Point*	*Hunters Bay Shipyard*	*Total*
Community Uses	0.01	0.01	0.02
Football Stadium	0.00	0.00	0.00
Performance Venue	0.01	0.00	0.01
Subtotal	*0.70[a]*	*0.82[a]*	*1.52[a]*
Parks and Open Space	0.06	0.15	0.22
Total Demand	***0.76[a]***	***0.97[a]***	***1.73***

SOURCE: Arup, Candlestick Point–Hunters Point Shipyard Phase II Water Demand Memorandum, April 2010.

a. Numbers are rounded according to standard rounding practices and may not add up due to hidden decimals used in this table. These entries are correct and are consistent with Table 13 of the Water Demand Memorandum.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-28a	Housing/R&D Variant (Variant 2A) Wastewater Generation [New]			
Land Use	*Estimated Wastewater Generation Expressed as % of Water Demand (or as otherwise specified)*	*Candlestick Point (mgd)*	*Hunters Point (mgd)*	*Total Housing Variant (mgd)*
Residential	95%	0.46	0.33	0.79
Hotel	95%	0.03	0.00	0.03
Office	57%	0.02	0.00	0.02
Artists Studios	57%	0.00	0.01	0.01
R&D	57%	0.00	0.25	0.25
Neighborhood Retail	57%	0.01	0.01	0.02
Regional Retail	57%	0.05	0.00	0.08
Community Uses	57%	0.01	0.01	0.02
Football Stadium	95%	0.00	0.00	0.00
Performance Venue	95%	0.01	0.00	0.01
Total		***0.59***	***0.61***	***1.23***

SOURCE: Arup, March 31, 2010.

With regard to solid waste generation, Table IV-30a (Housing/R&D Variant (Variant 2A) Solid Waste Generation) shows that the total amount of solid waste that would result from implementation of the Housing/R&D Variant (Variant 2A) would be 20,036 tons per year, 2,189 tons less than under the R&D Variant (Variant 1), which would generate 22,225 tons (refer to Table IV-14 [R&D Variant Solid Waste Generation] on page IV-62 of the EIR). Therefore, the analysis of solid waste for the Housing/R&D Variant (Variant 2A) would be bracketed by the analysis for the R&D Variant (Variant 1). Similar to the R&D Variant (Variant 1), solid waste generated by the Housing/R&D Variant (Variant 2A) could be accommodated by the remaining landfill capacity with implementation of the strategies for diversion of waste as described in Section III.Q (Utilities) of the EIR. Mitigation measures identified for the Project and the R&D Variant (Variant 1) would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-30a Housing/R&D Variant (Variant 2A) Solid Waste Generation [New]

		Candlestick Point			*HPS Phase II*			*Total*		
Use	*Generation Factor (per day)*	*Area or Units*	*Tons per Day or Event*	*Tons per Year*	*Area or Units*	*Tons per Day or Event*	*Tons per Year*	*Area or Units*	*Tons per Day or Event*	*Tons per Year or per Total Number of Events[a]*
Residential	5.653 lbs/unit	6,225	17.6	6,422	4,275	12.1	4,410	10,500	29.7	10,832
Retail	0.02600411 lbs/sf	760,000 sf	9.9	3,613.5	125,000 sf	1.6	584.0	885,000 sf	11.5	4,197.5
Office	0.006 lbs/sf	150,000 sf	0.5	182.5	0	0	0	150,000 sf	0.5	182.5
Hotel	0.0108 lbs/sf	150,000 sf	0.8	292.0	0	0	0	150,000 sf	0.8	292.0
R&D	0.006 lbs/sf	0	0	0	3,000,000 sf	9	3,285	3,000,000 sf	9	3,285
Performance Venue	2.23 lbs/seat	10,000 seats	5.6[b]	836.3[c]	0	0	0	10,000 seats	5.6	836.3[c]
Stadium	2.23 lbs/seat	0	0	0	0	0	0	0	0	0
Artist Studios/Art Center	0.006 lbs/sf	0	0	0	255,000 sf	0.8	292	255,000 sf	0.8	292.0
Community Facilities	0.006 lbs/sf	50,000 sf	0.15	54.8	50,000 sf	0.15	54.8	100,000 sf	0.3	109.6
Total				***13,082***			***6,954***			***20,036***

SOURCE: PBS&J 2010; Generation Factors from Arup, *Carbon Footprint Report*, March 24, 2009.

a. Calculated by adding the horizontal columns, rather than calculating total number of units by the generation rate.
b. The Performance venue is projected to be 50 percent attendance.
c. Assumes 150 events per year at 50 percent attendance.

Energy

As shown below in Table IV-31a (Housing/R&D Variant [Variant 2A] Electricity Demand from Building Envelopes [MWh]), the Housing/R&D Variant (Variant 2A) would be expected to result in an electricity demand of approximately 33,105 Megawatt hours (MWh). This represents a 21 percent decrease in electrical consumption compared to the R&D Variant (Variant 1). Therefore, as the electricity demand for Variant 2A would be less than what has been analyzed for Variant 1, the impacts have been bracketed by the analysis for the R&D Variant (Variant 1) and would be similarly less than significant. Mitigation measures identified for the Project would be implemented for the Housing/R&D Variant (Variant 2A), reducing the impacts to less than significant.

Greenhouse Gas Emissions

A greenhouse gas emissions analysis was conducted for the Housing/R&D Variant (Variant 2A) and the analysis is provided in Appendix T5 (ENVIRON, Updated Greenhouse Gas Emissions Calculation for Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, March 12, 2010).

Operational impacts to climate change and GHG emissions would be substantially similar to the Project. Under the Housing/R&D Variant (Variant 2A), as shown in Appendix T5, the operational GHG emissions for the Housing/R&D Variant (Variant 2A) would be higher than the Project GHG emissions by 7,013 tonnes of CO_2e per year. As noted in Table IV-17 on page IV-69 of the Draft EIR, the R&D Variant (Variant 1) would emit 178,651 tonnes of CO_2e per year, 14,488 tonnes more than the Housing/R&D Variant (Variant 2A). All mitigation measures and improvements in electricity carbon intensity and energy efficiency of the buildings under the Project and the R&D Variant (Variant 1) would be implemented with the Housing/R&D Variant (Variant 2A). This would result in substantially similar reductions of GHG emissions as the Project and, like the Project and the R&D Variant (Variant 1), the Housing/R&D Variant (Variant 2A) would make a less-than-significant contribution to the cumulative impacts of climate change and GHG emissions. For the same reasons as stated for the Project, the Housing/R&D Variant (Variant 2A) would not impede the achievement of San Francisco's GHG emission reduction ordinance nor the statewide emission reductions required under AB 32, which is also called the *California Global Warming Solutions Act of 2006*.

BAAQMD Draft GHG Thresholds

With mitigation, the Housing/R&D Variant-related operational emissions of 161,596 tonnes per year result in 4.6 tonnes CO_2e per service population per year based on a service population of 35,498 (this accounts for 23,869 net new residents [based on 2.33 residents per household and accounting for existing units on site] and all 11,629 jobs). The operational emissions of the Project were identified as totaling 4.5 tonnes CO_2e per year, and emissions of the Housing Variant (Variant 2) were identified as totaling 4.6 tonnes CO_2e per year. As the Housing/R&D Variant (Variant 2A) would result in a substantially similar amount of CO_2e per year as the Project and the Housing Variant (Variant 2), previously analyzed, like the Project and the Housing Variant (Variant 2), the Housing/R&D Variant (Variant 2A) would result in a less-than-significant impact on climate change.

[NOTE: This table is included to provide detailed information concerning land uses proposed under the Housing/R&D Variant (Variant 2A).]

Table IV-31a Housing/R&D Variant (Variant 2A) Electricity Demand from Building Envelopes (MWh) [New]

		Candlestick Point			HPS Phase II			Project Site Total			
Type of Use	*Electricity Use Factor, 2008 Title 24 Standards (MWh/gsf or unit)[a]*	*Development Program[b]*	*MWh Consumed Annually, 2008 Title 24 Standards[c]*	*MWh Consumed Annually, with 15% Reduction*	*Development Program[b]*	*MWh Consumed Annually, Title 24 Standards[c]*	*MWh Consumed Annually, with 15% Reduction*	*Development Program*	*MWh Consumed Annually, Title 24 Standards*	*MWh Consumed Annually, with 15% Reduction*	*Percent of Total Electricity by Land Use*
Residential Units	1.7350[d]	6,225	10,800	9,180	4,275	7,417	6,304	10,500	18,218	15,485	47%
Retail	0.0027	635,000	1,715	1,457	—	0	0	635,000	1,715	1,457	4%
Neighborhood Retail	0.0027	125,000	338	287	125,000	338	287	250,000	675	574	2%
Office	0.0052	150,000	780	663	—	0	0	150,000	780	663	2%
R&D	0.0052	—	0	0	3,000,000	15,600	13,260	3,000,000	15,600	13,260	40%
Hotel	0.0027	220	1	1	—	0	0	220	1	1	0%
Artist Studios/ Center	0.0052	—	0	0	255,000	1,326	1,127	255,000	1,326	1,127	3%
Community Space	0.0052	50,000	260	221	50,000	260	221	100,000	520	442	1%
Arena	0.0015	75,000	113	96	—	0	0	75,000	113	96	0.3%
Total			***14,007***	***11,905***		***24,941***	***21,200***		***38,948***	***33,105***	***100%***

SOURCES:

Housing/R&D Variant (Variant 2A) electricity demand was estimated based on the Applicant's commitment to achieve 15 percent energy reductions below Title 24 standards and use ENERGY STAR appliances in all residential units.

a. The energy use factor cited for residential units is from: ENVIRON International Corporation, *Climate Change Technical Report: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, October 2009, Table 3-8 (Appendix S to this EIR). The factor was derived by subtracting the "Plug-in" factor from the "Electricity Delivered, Total" column (in the "15 percent Better than Title 24 2008 and ENERGY STAR Appliances" row). The factor was converted from kWh to MWh (1 MWh = 1,000 kWh).

b. Based on buildout floor areas provided in Table IV-3 of this EIR.

c. Calculated by multiplying energy use factor by number of units or gsf.

d. The electricity factors cited for non-residential uses are from: ENVIRON International Corporation, *Climate Change Technical Report: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, October 2009, Table 3-16 (Appendix S to this EIR). The factors are in the "Non-Title 24" column. The factors were converted from kWh to MWh.

e. Numbers are rounded according to standard rounding practices and may not add up due to hidden decimals.

F.26 Changes to Section IV.D (Variant 3: Candlestick Point Tower Variants)

Page IV-140, first paragraph

The Candlestick Point Tower Variants (Tower Variants) would have different locations and heights and bulk of residential towers at Candlestick Point. The ~~three~~ four Candlestick Point Tower Variants (Tower Variants A, B, ~~and~~ C, and D) would have the same overall land use program as the Project. …

Page IV-140, add new fourth bullet

- **Tower Variant D** would reduce a 37-story tower to 31 stories within Candlestick Point South; one 27-story residential tower at Candlestick Point South would be lowered to 24 stories, or three fewer floors; and one 32-story tower would be relocated from Candlestick Point South to Candlestick Point North. This Variant would add 10 stories to one of the 22-story residential towers at Candlestick Point North, resulting in a 32-story residential tower; one 22-story tower and one 17-story tower would be relocated within Candlestick Point North; and one residential tower at Candlestick Point North would be lowered to 24 stories, or three fewer floors. This Variant would have an additional 24-story residential tower at Candlestick Point Center. This Variant would have 12 towers at Candlestick Point, compared to 11 towers with the Project. The floor plate area of the residential towers would be increased to 12,500 sf compared to the 10,000 sf analyzed for the Project, which would result in slightly greater tower bulk. However, the larger floor plates would be accommodated on the existing podium design and, therefore, the building footprint would not increase.

Page IV-140, fifth paragraph, new Figure IV-16a (Tower Variant D) has been added

As shown in Figure IV-13 through Figure IV-16a (Tower Variant D), the Tower Variants' overall street and block plan would be same as that of the Project. All other features of the Tower Variants would also be the same as the Project.

SOURCE: Lennar Urban, IBI Group, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16a

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D [NEW]

Page IV-145, add new fourth section after Tower Variant C discussion

Tower Variant D

Tower Variant D is based on height, bulk and massing requirements for vertical development within the Project site as described in the Design For Development. The Design For Development indentifies specific locations for certain towers and allows towers in certain "tower zones." Where the Design For Development allows placement of towers within a "tower zone," the Tower Variant D analysis assumes a specific tower location within proposed tower zones, which in some instances could potentially increase new shading on existing open space owned by or under the jurisdiction of the San Francisco Recreation and Park Department (SFRPD). Figure C&R-1 (Tower Variant D Tower Zones Map) indicates where the Design For Development identifies tower zones and the assumed location of towers within those zones for purposes of the Tower Variant D analysis.

Tower Variant D would reduce one 37-story tower to 31 stories, or six fewer floors, in Candlestick Point South; one 27-story residential tower at Candlestick Point South would be lowered to 24 stories, or three fewer floors; and one 32-story tower would be relocated from Candlestick Point South to Candlestick Point North. This Variant would add 10 stories to one of the 22-story residential towers at Candlestick Point North, resulting in a 32-story residential tower, as with Tower Variants A and C; one 22-story tower and one 17-story tower would be relocated within Candlestick Point North; one residential tower at Candlestick Point North and one residential tower at Candlestick Point South would be lowered to 24 stories, or three fewer floors, as with Tower Variant A. This Variant would have an additional 24-story residential tower at Candlestick Point Center, as with Tower Variants B and C. This Variant would have 12 towers at Candlestick Point, compared to 11 towers with the Project.

The residential tower floor sizes with Tower Variant D would be a maximum of 12,500 square feet, compared to 10,500-square-foot maximum floor sizes with the Project. All other features of Tower Variant D would be the same as the Project, with the same land uses, the same total amount of development, and the same development footprint. With Tower Variant D, the two residential towers at HPS Phase II proposed with the Project would also have floor sizes with a maximum of 12,500 square feet, compared to 10,500-square-foot maximum floor sizes with the Project.

Page IV-147, last paragraph

The pattern and scale of buildings at Candlestick Point with the Tower Variants would be similar to the Project. All Tower Variants would have 10 or ~~11~~12 towers, compared to 11 towers with the Project. As shown in Figure IV-14 to Figure IV-16a, the Tower Variants would include at least ~~nine~~ six of the 11 residential towers proposed with the Project in the identical location, with differences in the number floors of four of the towers (Tower Variant A); or would relocate a tower from Candlestick Point North to Candlestick Point Center and reduce the number floors of three other towers (Tower Variant B); or relocate a tower from Candlestick Point North to Candlestick Point Center, remove another tower from Candlestick Point North and reduce the number floors of two other towers, and add 10 floors at one tower (Tower Variant C and D); Tower Variant D would relocate a 37-story tower and reduce total floors to 31 stories within Candlestick Point South; one 32-story tower would be relocated from Candlestick Point South to Candlestick Point North; one 22-story tower and one 17-story tower would

be relocated within Candlestick Point North; and one additional 24-story residential tower would be added at Candlestick Point Center. Tower Variant D would have 12 towers at Candlestick Point, compared to 11 towers with the Project.

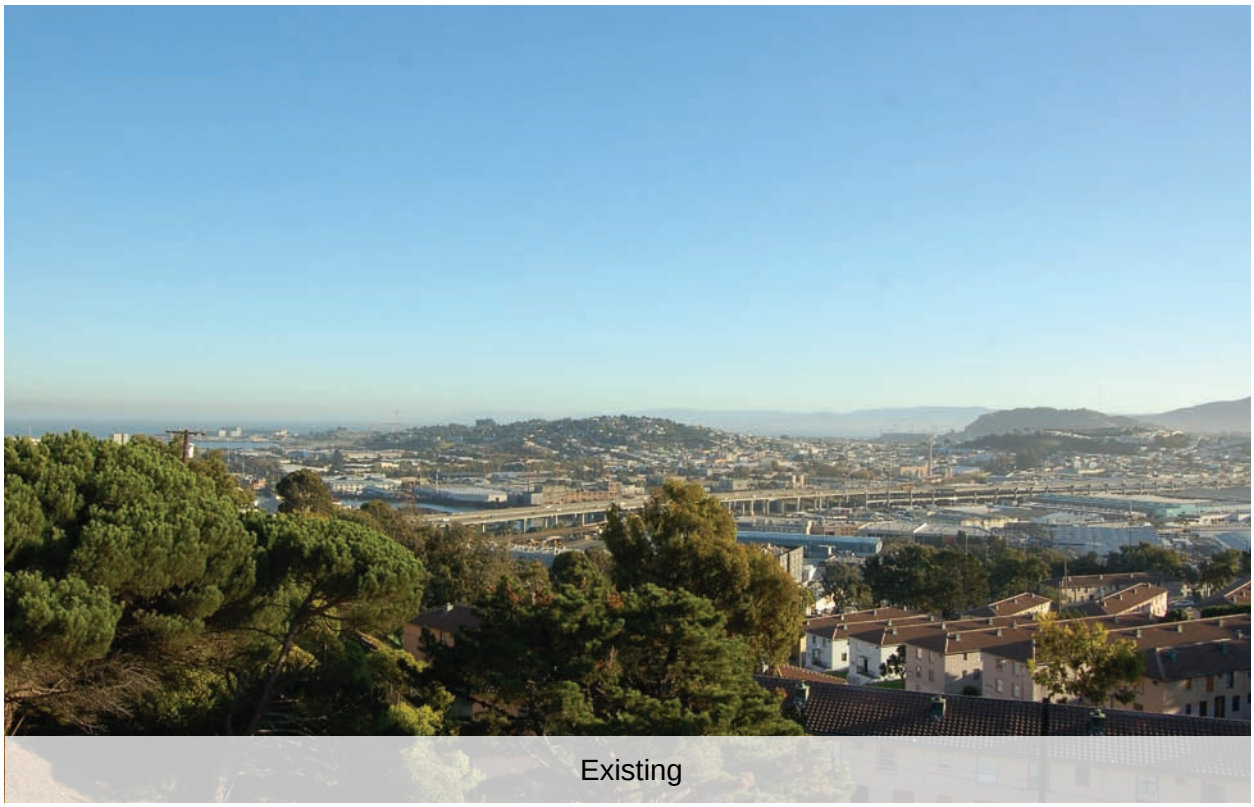
Tower Variant D would have maximum floor sizes of 12,500 square feet, compared to 10,500 square foot maximum floor sizes with the Project. Tower Variant D dimensions and visibility would be slightly greater than with the Project; overall visual effects would be similar to the Project.

Page IV-148, first paragraph and adding Figure IV-16b through Figure IV-16k

Views of Candlestick Point from long-range vantage points to the north and south or from nearby locations at CPSRA would be similar to views with the Project. Some the towers would have different heights compared to the Project, depending upon the Variant. Views of the relocated 24-story tower with Tower Variant B, ~~or~~ C, or D would be apparent from locations to the south, but Tower Variant B or C would also remove one or two towers from Candlestick Point North near Candlestick Point North Neighborhood Park, and views of residential towers from near that proposed park would vary from those with the Project. The towers at Candlestick Point would range from 220 feet to 420 feet in height. Tower Variant D would relocate one 32-story tower farther from CPSRA and would reduce the height of three towers adjacent to CPSRA (two by three stories and one by six stories), compared to the Project (see Figure IV-16a. Those changes would reduce the visibility of towers from CPSRA open space. Among the Tower Variants, Tower Variant D would have the most changes, compared to the Project, in terms total numbers of towers and larger maximum floor sizes. Therefore, the text below provides more detailed discussion of the visual quality effects of Tower Variant D.

Figure IV-16b (Tower Variant D, View 4: South from Potrero Hill) through Figure IV-16k (Tower Variant D, View 19: East from Hunters Point Hill Open Space) include visual simulations of Tower Variant D from 10 of the 20 viewpoints provided in Section III.E (Aesthetics). Figure III.E-11 (View 1: Southeast from Twin Peaks) through Figure III.E-30 (View 20: Southeast from Heron's Head Park). Figure IV-16b through Figure IV-16k can be compared to the corresponding visual simulations for the Project from those ten locations. The ten locations provide representative information of visual effects of Candlestick Point Tower Variant D (refer to Figure III.E-10 [Viewpoint Locations], page III.E-23).

Figure IV-16b (Tower Variant D, View 4: South from Potrero Hill) illustrates the long-range view from Potrero Hill to the south and the Bay beyond that would include Tower Variant D residential towers at Candlestick Point, between Hunters Point Hill and Bayview Hill, ranging from 240 feet to a maximum 420 feet in height, as with the Project. The towers would replace distant existing views of Candlestick Park stadium and surrounding parking areas. The towers would appear similar to conditions with the Project, as shown in Figure III.E-14 (View 4: South from Potrero Hill). The Tower Variant would be visible from this location, against San Francisco Bay as a background, and the residential towers at Candlestick Point would be a new built element between Bayview Hill and Hunters Point Hill. As with the Project, views of the Bay or the East Bay hills would be partially blocked, but a substantial portion of the view would remain. HPS Phase II would also be a new element seen against the Bay and the East Bay hills.



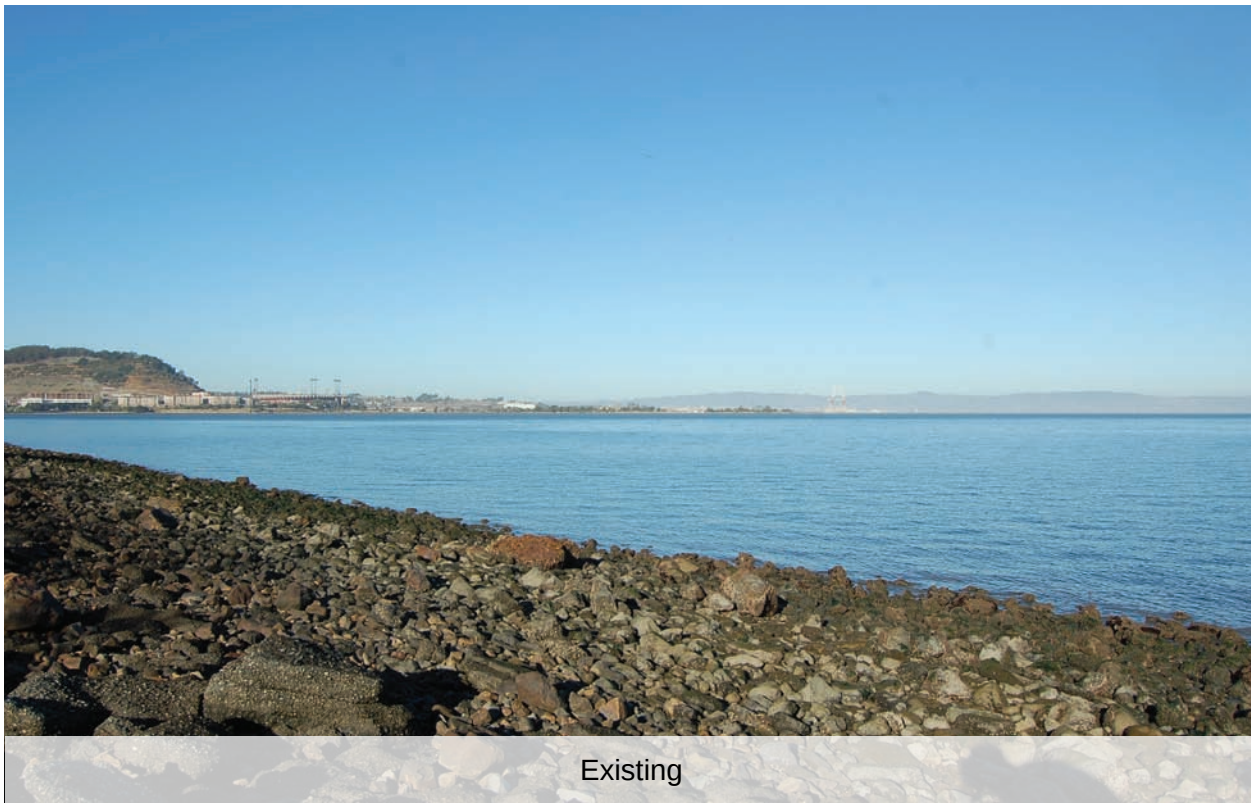
SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16b

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 4: SOUTH FROM POTRERO HILL [NEW]



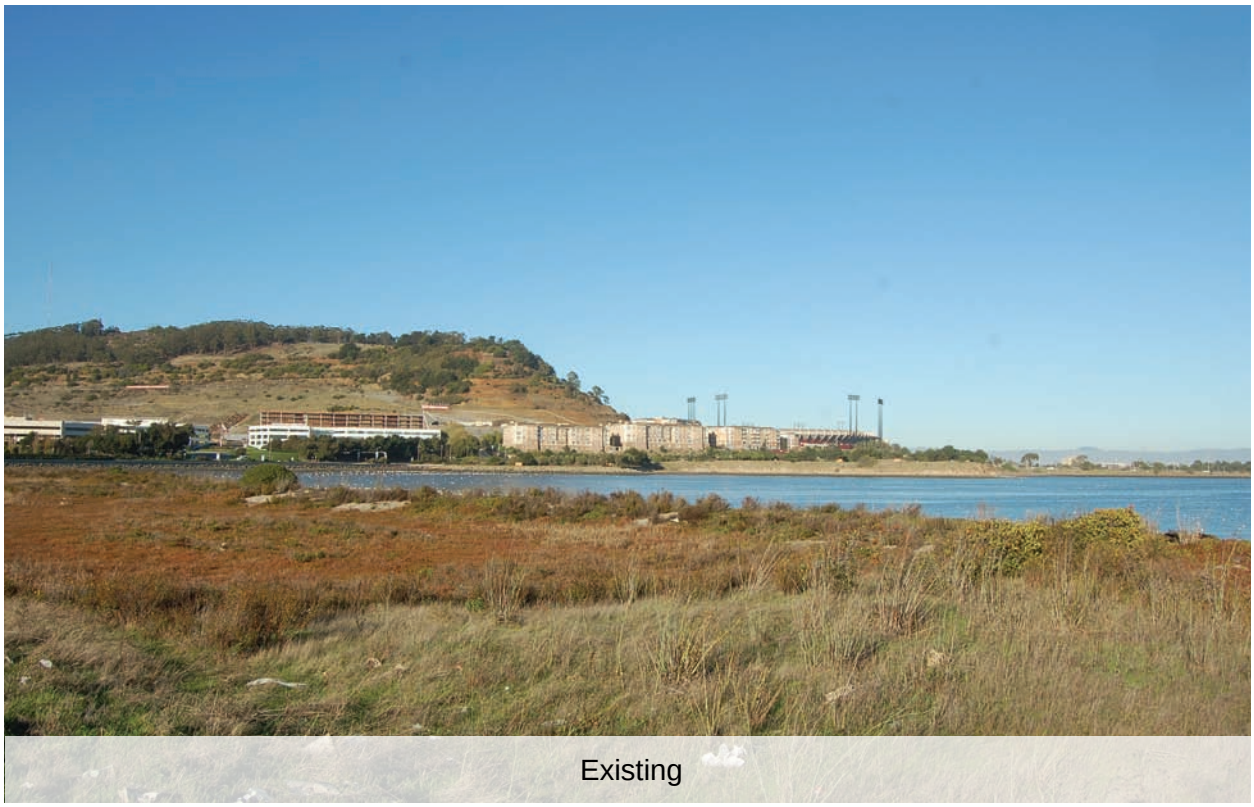
SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16c

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 5: NORTHEAST FROM NORTHBOUND US 101 [NEW]



Existing

Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16d

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 6: NORTHEAST FROM US 101 AT HARNEY WAY OFF-RAMP [NEW]

Existing

Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16e

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 7: NORTHEAST FROM SAN BRUNO MOUNTAIN [NEW]

Existing

Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16f

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 9: NORTH FROM CPSRA SOUTH OF HARNEY WAY [NEW]

Existing

Proposed

SOURCE: Lennar Urban, 2010.

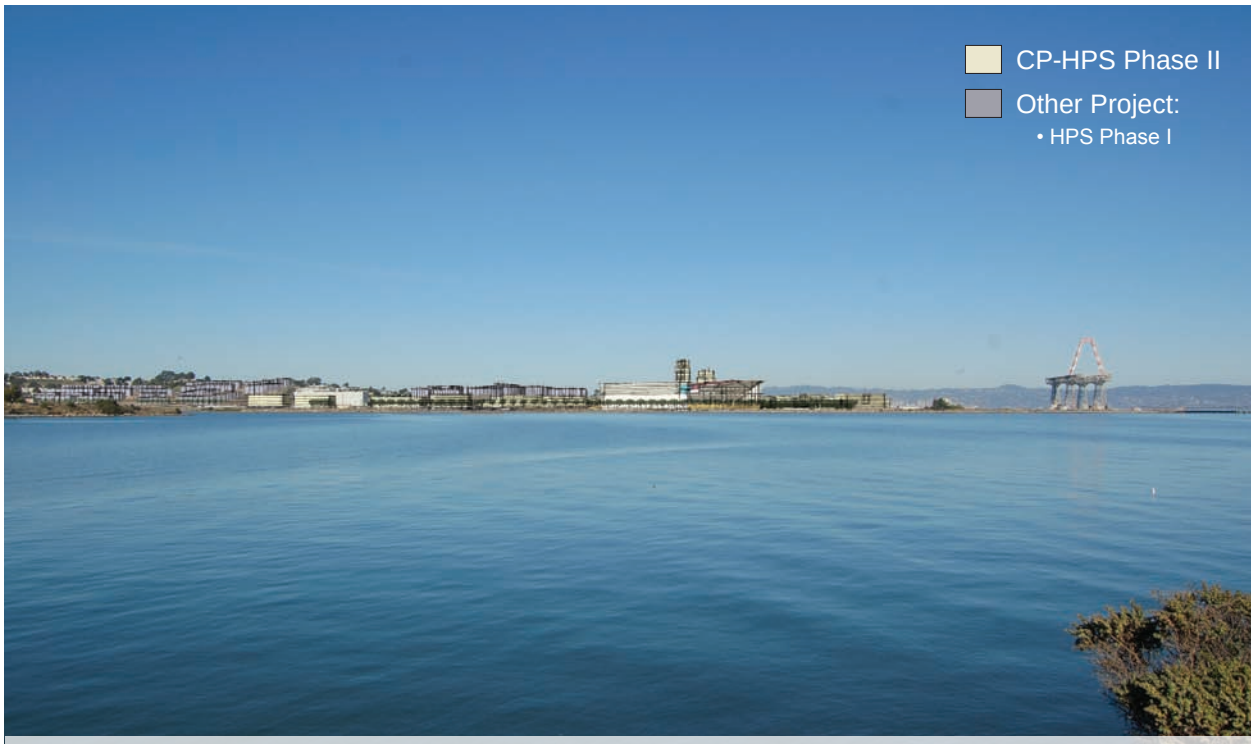
PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16g

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 11: NORTHWEST FROM CPSRA [NEW]

Existing



Proposed

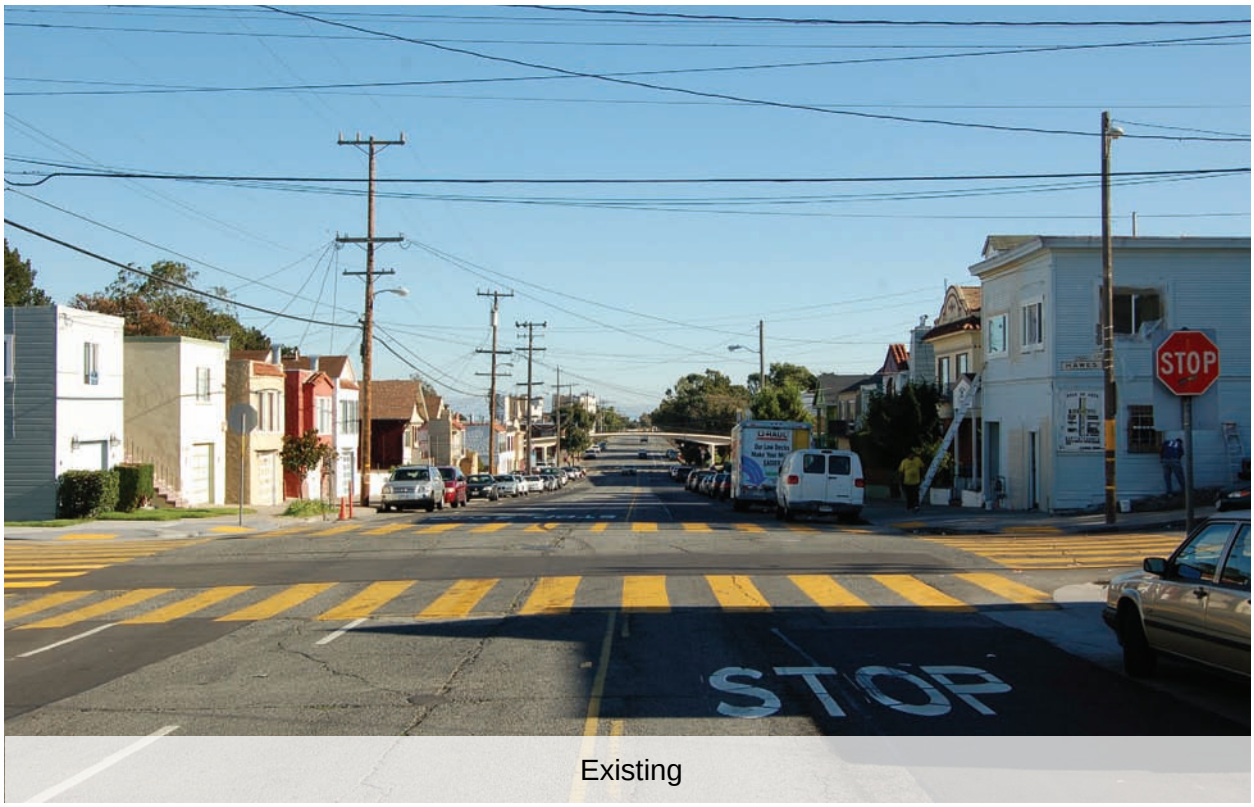
SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16h

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 17: NORTHEAST FROM CPSRA [NEW]



SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16i

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 12: SOUTHEAST FROM GILMAN AVENUE [NEW]

SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16j

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 16: SOUTHWEST FROM MARINER VILLAGE [NEW]

Existing

Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE IV-16k

Candlestick Point — Hunters Point Shipyard Phase II EIR

TOWER VARIANT D
VIEW 19: EAST FROM HUNTERS POINT HILL OPEN SPACE [NEW]

Figure IV-16c (Tower Variant D, View 5: Northeast from Northbound US-101) illustrates the long-range view with Tower Variant D high-rise structures that would be visible on the Candlestick Point portion of the site, ranging from 240 feet to a maximum 420 feet in height, with lower-scale development to the west. Tower Variant D would include an additional 240-foot tower at Candlestick Point Center, visible east of Bayview Hill in Figure IV-16c The towers would appear relatively clustered, compared to conditions with the Project shown in Figure III.E-15 (View 5: Northeast from Northbound US-101). The high-rise buildings would be prominent, but would not obstruct views of Bayview Hill. As with the Project, the easterly towers in this view would be on land that was formerly part of the CPSRA. The shoreline of CPSRA would be visible as the foreground. Bayview Hill would continue as a landmark and the Bay would continue as foreground in this view.

As shown in Figure IV-16d (Tower Variant D, View 6: Northeast from US-101 at Harney Way Off-Ramp), Tower Variant D would introduce high-rise structures that would be visible on the Candlestick Point portion of the site, ranging from 240 feet to a maximum 420 feet in height, with lower-scale development to the west. The high-rise buildings would be prominent, but would not obstruct views of Bayview Hill. Two 32-story towers in Candlestick Point North would be visible east of Bayview Hill. The easterly towers in this view would be on part of the land exchanged with the CPSRA. Conditions would be similar to those with the Project, shown in Figure III.E-16 (View 6: Northeast from US-101 at Harney Way Off-Ramp). The proposed residential development at Executive Park (not a part of the Project), west of Candlestick Point, would be visible against the background of Bayview Hill. The Bay would continue to be visible in the foreground. Bayview Hill would continue as a key visual feature in this view.

As shown in Figure IV-16e (Tower Variant D, View 7: Northeast from San Bruno Mountain), Tower Variant D would introduce high-rise buildings, ranging from 240 feet to a maximum 420 feet in height, at Candlestick Point, and views of the 49ers Stadium, the new marina, and two towers up to 240 feet to 370 feet high at HPS Phase II. Two 32-story towers in Candlestick Point North would be visible east of Bayview Hill. From this viewpoint, the Tower Variant and the Project would have similar effects, as shown in Figure III.E-17 (View 7: Northeast from San Bruno Mountain). The panoramic view of the Bay would still be held from this viewpoint. The shoreline of CPSRA would be visible as the foreground.

Figure IV-16f (Tower Variant D, View 9: North from CPSRA South of Harney Way) is a short-range view from CPSRA towards Candlestick Park stadium, the upper sections of which are visible in the existing setting. The planted areas in the foreground are within the CPSRA. With Tower Variant D and the Project, Candlestick Park stadium would be demolished and residential towers would be visible. From this location in the western part of CPSRA, short- and mid-range views of the stadium would be replaced with Tower Variant development, including the additional 24-story tower at Candlestick Point Center, and the 31-story (reduced from 37 stories) towers in Candlestick Point South. Compared to Project conditions viewed at this location, as shown in Figure III.E-19 (View 9: North from CPSRA South of Harney Way), Tower Variant D would include views of more new development. From other locations in CPSRA, however, views of new development would be reduced, because one tower would be relocated farther away from CPSRA, and three towers adjacent to CPSRA would be reduced in height by three to six stories.

As shown in Figure IV-16g (Tower Variant D, View 11: Northwest from CPSRA), the Tower Variant would introduce residential towers and other structures at Candlestick Point, as seen beyond the

shoreline of the CPSRA, and would obstruct the view of portions of Bayview Hill. West of Candlestick Point, existing and approved residential development at Executive Park would be visible. The Candlestick Point towers, including the additional 24-story tower at Candlestick Point Center, and the 31-story (reduced from 37 stories) towers in Candlestick Point South, ranging from 220 feet to a maximum 420 feet in height, would be a substantial change in the existing low-scale pattern in this view, and would block distant views of neighborhoods to the north. The shoreline of CPSRA would be visible as the foreground. As with Project conditions viewed at this location, shown in Figure III.E-21 (View 11: Northwest from CPSRA), Tower Variant D would include views of new development clustered near Bayview Hill. Views of Candlestick Point development to east would also be similar with Tower Variant D and the Project. The larger, 12,500-square-foot maximum floor sizes with Tower Variant D would be apparent in this view, compared to the 10,500-square-foot maximum floor sizes with the Project; the overall change in views would be similar.

Figure IV-16i (Tower Variant D, View 12: Southeast from Gilman Avenue) shows the residential streetscape on Gilman Avenue looking southeast toward the Candlestick Point site. Tower Variant D would introduce two buildings up to 320 feet in height on the north side of Gilman Avenue visible in the distance. The Project would also have two towers at that location; Tower Variant D would increase the height of one tower closer to the viewpoint from 22 stories to 32 stories. As with the Project, the Tower Variant would include roadway and streetscape improvements, also illustrated in Figure IV-16h. Compared to Project conditions viewed at this location, as shown in Figure III.E-22 (View 12: Southeast from Gilman Avenue), Tower Variant D would have more limited views of 31-story (reduced from 37 stories) towers in Candlestick Point South.

Figure IV-16j (Tower Variant D, View 16: Southwest from Mariner Village) shows a view south from Mariner Village on LaSalle Avenue on Hunters Point Hill. The existing foreground includes undeveloped areas of the Shipyard south of Crisp Road. The existing buildings south of Crisp are UCSF facilities that are not part of the HPS Phase II site. With Tower Variant D, Candlestick Point towers, ranging from 220 feet to 420 feet in height, would be a substantial change in the existing low-scale pattern in this view. The shoreline of CPSRA would be visible as the foreground. Other Candlestick Park development would be visible to the north and on Jamestown Avenue at the base of Bayview Hill. The view would also include the Yosemite Slough bridge, improved open space at HPS Phase II, and buildings on Crisp Road. Compared to Project conditions viewed at this location, as shown in Figure III.E-26 (View 16: Southwest from Mariner Village), Tower Variant D would have similar effects.

Figure IV-16h (Tower Variant D, View 17: Northeast from CPSRA) includes the Bay in the foreground and existing buildings at the Shipyard. Views of Tower Variant D development at the Shipyard would include 49ers Stadium, the new marina, and Research & Development buildings. A residential tower, up to 370 feet in height, would be visible beyond the stadium. As noted in the description of Tower Variant D, above, the only change at HPS Phase II would the maximum 12,500-square-foot residential tower floor sizes, compared to the 10,500-square-foot maximum floor sizes with the Project. As shown in this view, the change in floor sizes with Tower Variant D would not alter visual conditions compared with the Project, illustrated by Figure III.E-27 (View 17: Northeast from CPSRA).

Figure IV-16k (Tower Variant D, View 19: East from Hunters Point Hill Open Space) shows a view from open space on Northridge Road on Hunters Point Hill towards the southeast. Tower Variant D

would replace the existing structures in the mid ground with mid-rise and two residential towers, up to 270 feet to 370 feet in height. New open space at the Shipyard would be visible at the base of the hill. To the south, the approved HPS Phase I development, not part of the Project and currently under construction, would be visible. As noted in the description of Tower Variant D, above, the only change at HPS Phase II would the maximum 12,500-square-foot residential tower floor sizes, compared to the 10,500-square-foot maximum floor sizes with the Project. As shown in this view, the change in floor sizes with Tower Variant would not alter visual conditions with the Project in Figure III.E-29 (View 19: East from Hunters Point Hill Open Space).

Page IV-148, fourth paragraph

Development of a Tower Variant would not substantially degrade the existing visual character or quality of the site or its surroundings. Each of the Tower Variants would change the heights of some the towers or relocate ~~or remove one or two towers residential tower, or would change the location of a tower~~ up to five towers. Tower Variant D would have a maximum 12,500-square-foot residential tower floor size, compared to the 10,500-square-foot maximum floor size with the Project. The Tower Variants' effects on visual character would vary from Project effects, with more potential clustering of towers in Candlestick Point, and changes in visibility of some towers from locations in CPSRA. The change in tower floor sizes would not change the visual effects at HPS Phase II, compared with the Project. ~~Thus, the Project area would still be developed with mixed land uses and buildings of various heights, including towers between 220 and 420 feet in height.~~ The Tower Variants, as with the Project, would have a less-than-significant effect on aesthetics, visual character, scenic resources, or scenic vista, As discussed in Section III.E, Draft EIR pages III.E-56 to 57, overall, development of the Project would not block publicly accessible views of the Bay or other scenic vistas. Public access areas, both City and State parks, would maintain views from the Project site toward the East Bay and the Bay. While development of the Project would include several high-rise towers, these towers are not clustered, and would not substantially obstruct, alter, or degrade the quality of views of the Bay or beyond from any long-range viewpoints.

Pages IV-148 to -152, "Shadows"

A Tower Variant would include one additional residential tower and could change the location of one ~~or two~~ to three towers, depending on the Variant. The introduction of a new tower, the increased or decreased height of some towers, the change in maximum floor sizes from 10,500 square feet to 12,500 square feet, and the changed location of some towers would modify shadow impacts compared to the Project effects.

Construction

As with the Project, construction activities of the Tower Variant would not result in shadow effects on open space.

Operation

Development of a Tower Variant would result in new structures over 40 feet in height ranging up to 420 feet in height and would extend well above surrounding buildings and cast shadows on nearby public

open spaces. Tower Variant A would add ten stories to one of the 22-story residential towers at Candlestick Point North, resulting in a 32-story residential tower, as shown in Figure IV-14. Three other residential towers at Candlestick Point South would have three to four fewer floors. Tower Variant B would have an additional 24-story residential tower at Candlestick Point Center. One 17-story tower at Candlestick Point North would be removed as shown in Figure IV-15. Three other towers at Candlestick Point South would have would have two to four fewer floors. Tower Variant C would have an additional 24-story residential tower at Candlestick Point Center, as with Tower Variant B, as shown in Figure IV-16. Tower Variant C would also add ten stories to one of the 22-story residential towers at Candlestick Point North, as with Tower Variant A, resulting in a 32-story residential tower; one 17-story tower and one 22-story at Candlestick Point North would be removed and at Candlestick Point South, one tower would have would have two fewer floors and one would have six fewer floors. Tower Variant D would reduce one 37-story tower to 31 stories, or six fewer floors, in Candlestick Point South; one 27-story residential tower at Candlestick Point South would be lowered to 24 stories, or three fewer floors; and one 32-story tower would be relocated from Candlestick Point South to Candlestick Point North. This Variant would add 10 stories to one of the 22-story residential towers at Candlestick Point North, resulting in a 32-story residential tower, as with Tower Variants A and C; one 22-story tower and one 17-story tower would be relocated within Candlestick Point North; one residential tower at Candlestick Point North and one residential tower at Candlestick Point South would be lowered to 24 stories, or three fewer floors, as with Tower Variant A. This Variant would have an additional 24-story residential tower at Candlestick Point Center, as with Tower Variants B and C. This Variant would have 12 towers at Candlestick Point, compared to 11 towers with the Project.

Project plans have identified the locations of towers, but tower designs are preliminary. The length and duration of shadows cast would be influenced by elements of building design, such as building height, shape, massing, and setbacks. Potential impacts to shade-sensitive locations, such as parks and open space, would be influenced by the location of shade-sensitive uses within the parks and open spaces. The increase in height of one residential tower, from ~~240~~220 to 320 feet (per Variant A, ~~and~~ Variant C, and Variant D) and the inclusion of one new residential tower (with a height of 240 feet) and the relocation of towers (per Variant B, ~~and~~ Variant C, and Variant D), would increase potential shading impacts on existing parks and open spaces—Gilman Park—and proposed parks and open spaces—Candlestick Point Neighborhood Park; Bayview Gardens/Wedge Park; and Mini Wedge-Park—and in CPSRA areas near the additional towers. The Tower Variants would also remove one or two residential towers (per Variant B and Variant C), and would reduce the number of stories on up to three towers (all Tower Variants).

As discussed in Section III.F (Shadows), *Planning Code* Section 295 prohibits the issuance of building permits for structures over 40 feet in height that would cast shade or shadow on property with the jurisdiction of, or designated to be acquired by, the Recreation and Park Commission between one hour after sunrise to one hour before sunset at any time of year, unless the Planning Commission determines that the shade or shadow would have an insignificant adverse impact on the use of such property.

As required by *Planning Code* Section 295, the Recreation and Park Commission and the Planning Commission have adopted criteria for the review of shadow effects. For parks for which "shadow budgets" have not been adopted, the current criteria allow an additional new shadow budget of

0.1 percent for parks larger than 2 acres with annual shadow loads between 20 and 40 percent, expressed in available square-foot-hours of sunlight compared to square-foot-hours of shade. For larger parks with existing shadow loads less than 20 percent, an additional new shadow budget of 1.0 percent would be allowed. The increase is based on calculations of the "Annual Available Sunlight" (AAS) for that park, expressed in square-foot-hours of sunlight (during each day an hour after sunrise to an hour before sunset summed over the course of a year, ignoring shadow from any surrounding structures, and from clouds, fog, and solar eclipses). The shadow impact of the Project is defined as the shadow in square-foot-hours cast by the Project divided by the AAS, expressed as a percentage.

To evaluate potential effects, a shadow modeling study of Tower Variants C and D was completed by CADP, Inc.[153] Figure IV-17 (Candlestick Point: Tower Variant C Year-Round Shadow Trace) and Figure IV-17a (Candlestick Point: Tower Variant D Year-Round Shadow Trace) are the "shadow fan" or "shadow trace" identifying the maximum extent of all Project-related shadows from one hour after sunrise to one hour before sunset over an entire year, which is the time period specified in *Planning Code* Section 295. The year-round shadow trace is further over-inclusive in that it includes shadow from all buildings within the Project site, including those that would not exceed 40 feet in height and, therefore, would not be subject to the requirements of Section 295. The shadow trace shows that Tower Variant C and Tower Variant D, ~~with an additional residential tower in Candlestick Point North,~~ compared to the Project plans, would shade Gilman Park during the hours specified in Section 295. (As discussed in Section III.F, the Project would add shadows to Gilman Park, but those effects would be from potential 40-foot-high Project buildings south of the park, which are not considered to be adverse effects under Section 295.)

Gilman Park, at 4.4 acres, is a larger park without an adopted shadow budget, and an existing shadow load of less than 20 percent. Therefore, under Section 295, an annual increase of 1.0 percent would be permitted and would not be considered to create a significant effect on the park.

The CADP study also evaluated the Tower Variant C and Tower Variant D effects on Gilman Park with respect to AAS. CADP used computer models to calculate the net increase in square feet, and square-foot-hours, of shade on the park, from one hour after sunrise to one hour before sunset, at 15-minute intervals, at one-week increments, for six months of the year. The calculations are converted to a total annual increase in square-foot-hours of shade, compared to total theoretical square-foot-hours of sun in the park. Because the streets adjacent to the park are bounded by parking lots and low-rise buildings, the analysis conservatively assumed there is no existing shadow load on the park, and that the Tower Variant effects would be net new conditions. The analysis also does not account for existing shading from trees or the service building within the park. On the basis of available observations of Gilman Park, the park is used during mid-day and afternoon periods, by neighborhood residents, and students at adjacent Bret Harte Elementary School. The park is relatively less patronized in morning hours.

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[153] This shadow analysis evaluated Tower Variant C and Tower Variant D, which would include ~~both~~ a 24-story tower at a location near Gilman Park, up to three relocated towers and the additional stories on a tower at Candlestick Point North. Variants C and D would have the greatest differences in increased shadow effects, compared to those with the Project. Tower Variant D would have floor sizes with a maximum of 12,500 square feet, compared to 10,500-square-foot maximum floor sizes with the Project. (CADP, Inc., Gilman Park Shadow Calculations, Variant C, October 2009; CADP, Inc., Gilman Park Shadow Calculations, Variant D, March 2010.)

SOURCE: Lennar Urban, RHAA, CADP, 2010.

Clement Designs 4-9-10

Candlestick Point — Hunters Point Shipyard Phase II EIR

CANDLESTICK POINT: TOWER VARIANT D YEAR-ROUND SHADOW TRACE [NEW]

FIGURE IV-17a

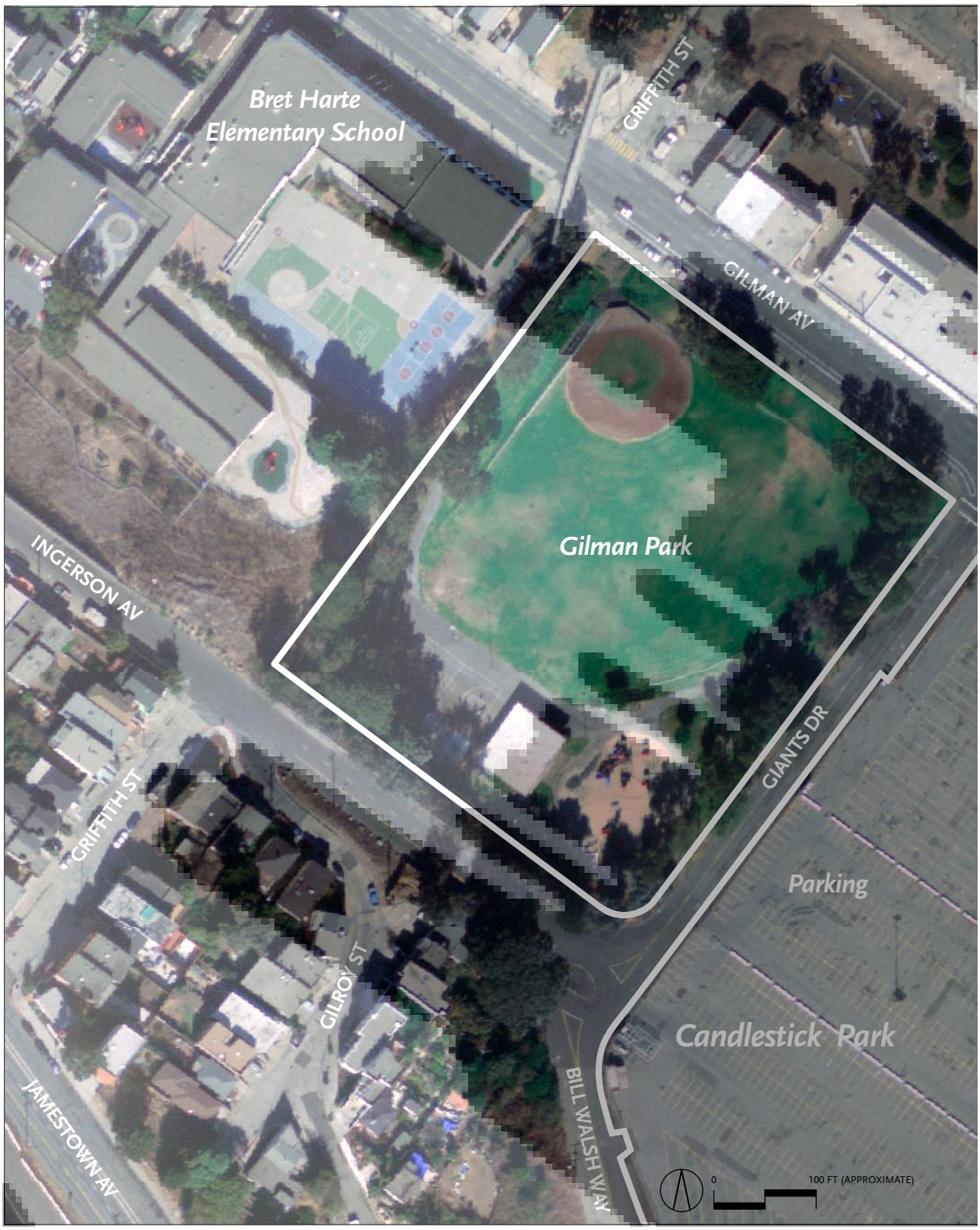
Tower Variant C and Tower Variant D would shade a portion of Gilman Park from morning to mid-day periods throughout the year, in the first ~~75 minutes~~ three to four hours after the sunrise plus one-hour cutoff specified by Section 295.[154] There would be no new shadow from the Tower Variant after about 12:30 P.M. on any day of the year. The effects would vary by season. On June 21, new shadow would occur between about 6:45 A.M. PDT (1 hour after sunrise), and would cover about 21 percent of the park to about 9:45 A.M. on less than 1 percent of the park. On September 21 and March 21, new shadow would occur between about 8:00 A.M. PDT (~~one~~ 1 hour after sunrise), on about 32 percent of the park, to about 11:30 A.M., on less than 1 percent of the park. On December 21, new shadow would occur between about 8:~~15~~00 A.M. PST (1 hour after sunrise), on about 54 percent of the park (Tower Variant C) or 44 percent (Tower Variant D), to about 12:15 P.M. on less than 1 percent of the park. Overall, while those effects would occur for up to four hours after the sunrise plus one-hour cutoff time, in spring, summer, and fall months, the new shade would affect 10 percent or less of Gilman Park by 9:00 A.M. or earlier. In December, the new shade would affect 10 percent or less of Gilman Park by about 10:15 A.M.

Figure IV-18 (Gilman Park—Existing Conditions) is an aerial view showing existing features of Gilman Park. Figure IV-19 (Gilman Park: Tower Variant C Shadows—November 29 [8:05 A.M.]) and Figure IV-20 (Gilman Park: Tower Variant C Shadows—December 20 [8:20 A.M.]) illustrate Tower Variant C shadow at periods of maximum shadow impact, at one hour after sunrise in late fall and winter. Figure IV-20a (Gilman Park: Tower Variant D Shadows—November 8 [7:45 A.M.]) and Figure IV-20b (Gilman Park: Tower Variant D Shadows—December 20 [8:20 A.M.]) illustrate Tower Variant D shadow at periods of maximum shadow impact, at one hour after sunrise in late fall and winter.

Gilman Park is 191,631 square feet (4.4 acres). Tower Variant C would add approximately 21,847,927 new annual square-foot-hours of shadow to the potential of approximately 696,493,920 square-foot-hours of sun, increasing shade square-foot-hours by 3.1 percent. Tower Variant D would add approximately 21,666,526 new annual square-foot-hours of shadow, also increasing shade square-foot-hours by 3.1 percent. This would be greater than the 1.0 percent permitted as new shadow on parks larger than two acres with existing shadow loads less than 20 percent, under current Planning Department criteria.

Therefore, the Tower Variant would add shadows to Gilman Park during the hours between one hour after sunrise and one hour before sunset, with a new shadow load greater than 1.0 percent. This new shadow could have an adverse effect on the use of park. While Tower Variant A would not add shade after late morning or midday periods at any time of year, and the park would not be affected in afternoon periods of use, the shadow effect is conservatively considered to be a significant and unavoidable impact of Tower Variants C and D.

[154] The sunrise plus one hour cutoff on days when the Tower Variant would cast a shadow on the park would range from about 6:50 A.M. PDT on June 20 to about 8:15 A.M. PST on December 20.



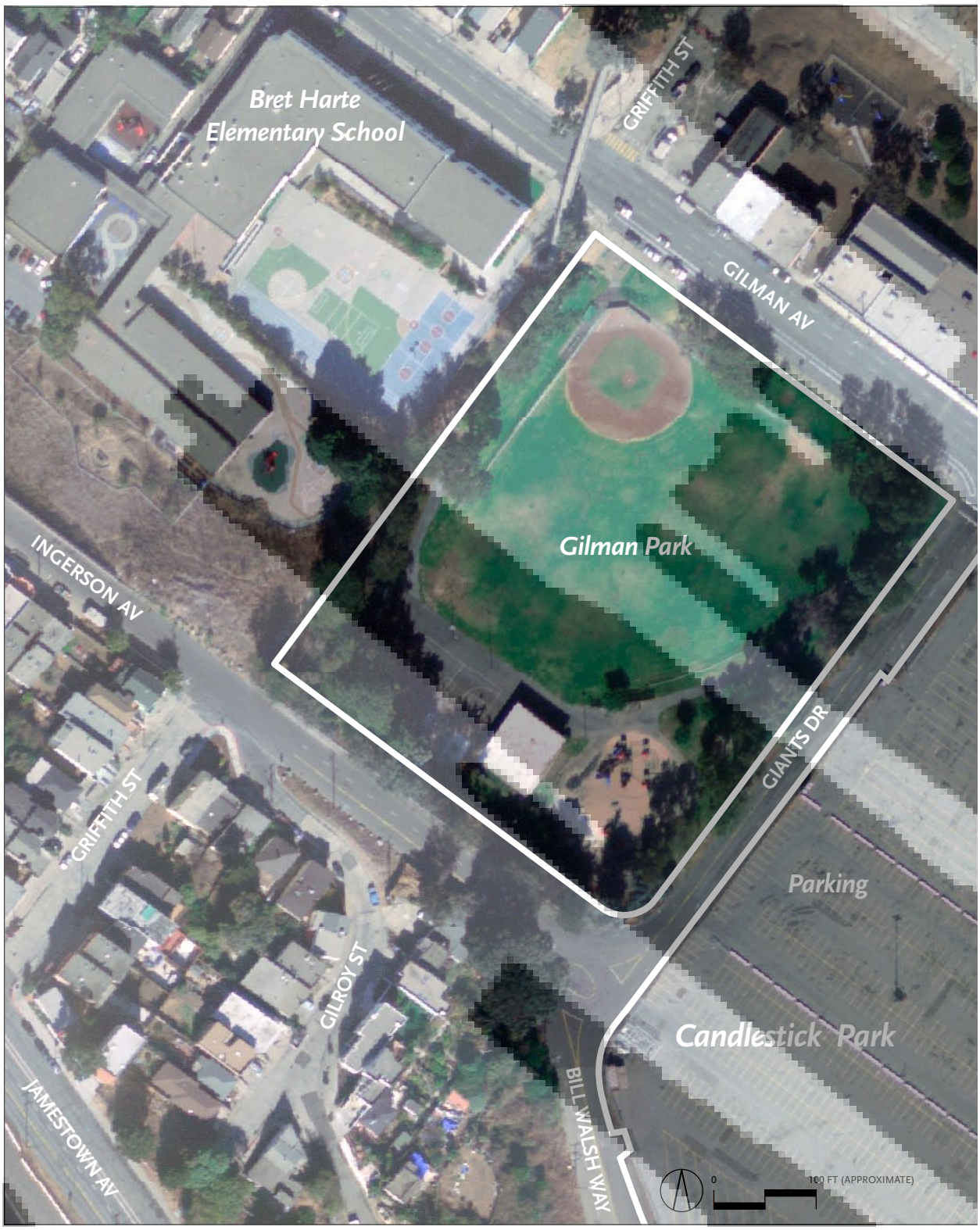
SOURCE: Lennar Urban, RHAA, CADP, 2010.

Clement Designs 4·9·10

Candlestick Point — Hunters Point Shipyard Phase II EIR

GILMAN PARK: TOWER VARIANT D SHADOWS — NOVEMBER 8 (7:45 AM PST) [NEW]

FIGURE IV-20a



SOURCE: Lennar Urban, RHAA, CADP, 2010.

Clement Designs 4·9·10

Candlestick Point — Hunters Point Shipyard Phase II EIR

GILMAN PARK: TOWER VARIANT D SHADOWS — DECEMBER 20 (8:20 AM PST) [NEW]

FIGURE IV-20b

As with the Project, the Tower Variants would shade an area of Bayview Park, owned by the SFRPD, that does not provide any active uses and is relatively steep. The Tower Variants would only shade Bayview Park during the first hour after sunrise in spring, summer, and fall months, and would not create any new shadow by 10:00 A.M. at any time of year. This would not be considered a significant adverse shadow impact on SFRPD open space.

~~Other shadow conditions with the Tower Variants would be as described for the Project in Section III.F. The~~ Tower Variant effects on shadows on the CPSRA would be similar or slightly reduced compared to the Project~~, as~~ depending upon the variant: towers near the CPSRA would be ~~two~~ three to six stories shorter~~, depending upon the variant.~~

As with the Project, the CPSRA would be affected by new shade in the afternoons, but most areas would experience limited to no new shadow from the Project. Other areas of the CPSRA would largely continue to remain in sun throughout the year. Tower Variant D shadow would not interfere with the public's use or enjoyment of the CPSRA. Activities in these areas, such as windsurfing launching, walking, jogging, and fishing, would not be affected by the new shade.

Shadows cast by Tower Variant D, as with the Project, on proposed new neighborhood parks at Candlestick Point throughout the year would range from little or no shading to large areas of certain parks receiving new shade, particularly in the late afternoon during the vernal and autumnal equinoxes. The orientation of the relatively narrow Alice Griffith Neighborhood and Mini-Wedge Parks with respect to the path of the sun and the close proximity of Tower Variant buildings along the parks' southwestern boundaries combine to make them most susceptible to new shade. Tower Variant D, because of changes in tower locations and height, would shade different areas of proposed open space compared to the Project effects. Overall, given the heights, layouts, and orientations of the Tower Variant buildings, the neighborhood parks would experience variable levels of shading throughout the day, generally receiving some new shade from morning until noon in spring, summer, and fall with a lesser increase in the afternoons in winter, spring, and fall. Public use of these proposed new parks would not be expected to be adversely affected by the shade conditions.

Tower Variant D would not change any tower locations or heights at HPS Phase II; the two residential towers at HPS Phase II would have floor sizes with a maximum of 12,500 square feet, compared to 10,500-square-foot maximum floor sizes with the Project. Shadow effects at HPS Phase II with this change in tower dimension would be similar to the Project and would be less than significant, as shown Figure III.F-15 (Hunters Point Shipyard Phase II: Proposed Project Year-Round Shadow Trace) through Figure III.F-27 (Hunters Point Shipyard Phase II: Shadow Patterns—September 21 [3 PM PDT]) for shadow conditions at HPS Phase II with the Project at 10:00 A.M., noon, and 3:00 P.M. Pacific Standard Time (PST) on December 21 and March 21, and Pacific Daylight Time (PDT) on June 21 and September 21, and discussed on pages III.F-26 through -40 of the Draft EIR.

With appropriate design of the proposed parks and open space, to minimize the installation of shade-sensitive uses at locations that would receive the greatest amount of shading, adverse shadow impacts would be minimized, and Tower Variant impacts to proposed new parks would be less than significant.

Pages IV-156, third paragraph

As with the Project, all ~~three~~ four Tower Variants would have the potential to create potentially significant pedestrian-level wind impacts that exceed the identified threshold of 26 miles per hour (mph) equivalent wind speed for a single hour of the year. Implementation of mitigation measure MM W-1a (wind modeling), which would require a ~~design review process~~ wind analysis for buildings greater than 100 feet in height, and if determined to be necessary, would require inclusion of a design criteria to reduce pedestrian-level impacts below the threshold, would reduce impacts to a less-than-significant level, similar to the Project.

Page IV-159, beginning with second full paragraph

In terms of human health risks associated with vehicle emissions, vehicle emissions along local roadways for the Tower Variant (Variant 3) would remain unchanged from the Project. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations from traffic associated with the Tower Variant (Variant 3) were estimated at selected roadways and compared against the 0.2 $\mu g/m^3$ action level to determine the potential health risks on receptors attributed to vehicle emissions from the Tower Variant (Variant 3).~~Potential $PM_{2.5}$ concentrations at select roadways with the addition of future traffic volumes, including the traffic associated with the Tower Variant (which were assumed to be similar to Project traffic), were estimated compared against SFDPH thresholds to determine the potential health risks attributed to vehicle emissions.~~

Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of San Francisco and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of ~~Project~~Variant-related traffic, no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's~~ the 0.2 $\mu g/m^3$ ~~threshold~~ action level.[1252,1252a] ~~As c~~Concentrations would not exceed ~~SFDPH's threshold~~ the action level, and as such, impacts would be less than significant, similar to the Project.

[1252] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix IV, ~~September 28, 2009~~ May 4, 2010.

[1252a] ENVIRON, *Updated Air Quality Analysis, Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3D, Alternative 2, and Subalternative 4A*, April 26, 2010.

F.27 Changes to Section IV.E (Variant 4: Utilities Variant)

Page IV-192, third full paragraph

In terms of human health risks associated with vehicle emissions, vehicle emissions along local roadways for the Utilities Variant (Variant 4) would remain unchanged from the Project. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations from traffic associated with the Utilities Variant (Variant 4) were estimated at selected roadways ~~with the addition of future traffic volumes, including the traffic associated with the Utilities Variant (which were assumed to be similar to Project traffic), were estimated~~ and compared against ~~SFDPH thresholds~~ the 0.2 $\mu g/m^3$ action level to determine the potential health risks on receptors attributed to vehicle emissions from the Utilities Variant.

Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of San Francisco and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of ~~Project~~Variant-related traffic, no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's~~ the 0.2 $\mu g/m^3$ ~~threshold~~ action level.[1265] ~~As c~~Concentrations would not exceed ~~SFDPH's threshold~~ the action level, and as such, impacts would be less than significant, similar to the Project.

[1265] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix IV, ~~September 28, 2009~~ May 4, 2010.

F.28 Changes to Section IV.F (Variant 5: San Francisco 49ers and Oakland Raiders Shared Stadium at Hunters Point Shipyard)

Page IV-214, first paragraph

The San Francisco 49ers and Oakland Raiders Shared Stadium at Hunters Point Shipyard Variant (49ers/Raiders Shared Stadium Variant) assumes that development would occur exactly as proposed for the Project, except that the new stadium would be home to both the San Francisco 49ers and the Oakland Raiders. … For the purposes of this analysis, 20 football games and 20 other events per year were assumed. This assumption assumes a conservative, but possible scenario. It includes two pre-season and eight regular season games, and the possibility that either team could host up to two post-season playoff games. However, a~~A~~ maximum of four post-season games would only occur at the proposed stadium if (1) both teams were in separate conferences (American Football Conference or National

Football Conference), (2) each team hosted and won either a first round wild-card playoff game or a second round divisional playoff game, and (3) each team then hosted a conference championship game. The likelihood of four post-season games occurring is remote; therefore, this EIR analysis only assumes up to two playoff games per year total, for a total of 20 games annually, the same as for the Project.

Page IV-223, second full paragraph

In terms of human health risks associated with vehicle emissions, vehicle emissions along local roadways for the 49ers/Raiders Shared Stadium Variant (Variant 5) would remain unchanged from the Project. The prolonged exposure of receptors to increased vehicle emissions could affect human health. Potential $PM_{2.5}$ concentrations ~~at select roadways with the addition of future traffic volumes, including the~~ from traffic associated with the 49ers/Raiders Shared Stadium Variant (Variant 5) ~~(which were assumed to be similar to Project traffic as an annual average),~~ were estimated compared against ~~SFDPH thresholds~~ the 0.2 $\mu g/m^3$ action level to determine the potential health risks on receptors attributed to vehicle emissions from the 49ers/Raiders Shared Stadium Variant (Variant 5).

Several roadway segments were chosen based on whether Project-related traffic would use these streets to access neighboring freeways and other areas of San Francisco and/or currently or would experience significant truck traffic. The roadways chosen include:

- Third Street
- Innes Avenue/Hunters Point Boulevard/Evans Avenue
- Palou Avenue
- Gilman Avenue/Paul Avenue
- Harney Way
- Jamestown Avenue
- Ingerson Avenue

With the addition of ~~Project~~Variant-related traffic, no receptors along the streets listed above would experience an increase in $PM_{2.5}$ concentrations in excess of ~~SFDPH's~~ the 0.2 $\mu g/m^3$ ~~threshold~~ action level.[1273] ~~As c~~Concentrations would not exceed ~~SFDPH's threshold~~ the action level, and as such, impacts would be less than significant, similar to the Project.

[1273] ENVIRON, *Ambient Air Quality Human Health Risk Assessment: Candlestick Point–Hunters Point Shipyard Phase II Development Plan*, Appendix IV, ~~September 28, 2009~~ May 4, 2010.

Page IV-225, last paragraph

Similar to the Project, development with the 4934s/Raiders Shared Stadium Variant would result in the demolition of Buildings ~~208,~~ 211, 224, 231, and 253, which …

F.29 Changes to Chapter V (Other CEQA Considerations)

Page V-1, third paragraph

Table ES-~~1~~2 (Summary of Environmental Effects and Project Requirements/Mitigation Measures), which is contained in the Executive Summary chapter of this EIR, and Section III.A through

Section III.S of this EIR provide a comprehensive identification of the Project's environmental effects, including the level of significance both before and after mitigation.

Page V-18, first full paragraph

While the first new retail may open as early as ~~2015~~2019, full build-out is expected to be completed in ~~2029~~2027 ~~such that many Project retailers are likely to open and to have a first full year of operations in 2030~~. …

F.30 Changes to Chapter VI (Alternatives)

Page VI-4, second bullet

- **Alternative 4: Reduced CP-HPS Phase II Development; Historic Preservation; No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge**— … This alternative includes preservation of ~~three~~ five potentially historic structures at HPS Phase II.[1318a] This alternative does not include construction of a bridge over Yosemite Slough.

  This alternative was selected to include historic preservation of the five eligible structures on HPS and to provide a reduced development alternative to the Project. This alternative would reduce the area subject to development and would avoid significant impacts to historic resources at HPS Phase II. …

[1318a] Since publication of the Draft EIR, the Project has been revised to incorporate preservation of Building 208.

Page VI-5, the following is inserted above the bulleted item (Alternative 5 description)

> **Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation**— This subalternative to Alternative 4 retains all of the historic buildings, but includes the same land use plan as described for the Project rather than a reduced development plan as under Alternative 4. The Project's land use plan would be implemented under this alternative in terms of total square footage of land uses and district locations. However, unlike the Project, Buildings 211, 224, 231, and 253 would be retained. The R&D square footage that, under the Project, would be built at the location of Buildings 211, 224, 231, and 253 would be distributed throughout other areas of the HPS Phase II development. Consequently, under this subalternative, the total floor area for R&D would remain the same as the Project, at 2,500,000 sf. However, the building heights in the R&D District on HPS Phase II would increase to accommodate the displaced square footage. Buildings 211, 231, and 253 would be rehabilitated under the Secretary of Interior's Standards to accommodate approximately 338,000 gsf of R&D and 1,000 parking spaces. Building 224, the air raid shelter, would be rehabilitated to provide museum space.
>
> Subalternative 4A would also retain existing grades, allowing railroad spurs and other historic elements to remain. A wave protection berm is proposed to accommodate a 36-inch sea level rise. The Bay Trail would run on top of the berm, which would be designed to include seat steps. All other components of Subalternative 4A would remain the same as under the Project.

Page VI-6, Table VI-1 (Summary of Project Alternatives) has been revised

[NOTE: This table has been revised to correct typographical errors as well as to include detailed land use information concerning Subalternative 4A.]

Table VI-1 Summary of Project Alternatives [Revised]

Use	*Project*	*Alternative 1 No Project*[a]	*Alternative 2 No Bridge Alt*	*Alternative 3 49ers at Candlestick*	*Alternative 4 Lesser Build*	*Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation*	*Alternative 5 No Park Agreement*
Candlestick Point							
Residential (units)	7,850	0	7,850	1,210	5,495	7,850	6,500
Retail (gsf):							
Regional Retail	635,000	0	635,000	0	444,500	635,000	635,000
Neighborhood Retail	125,000	0	125,000	0	87,500	125,000	125,000
Retail Subtotal (gsf)	*760,000*	*0*	*760,000*	*0*	*532,000*	*760,000*	*760,000*
Community Services (gsf)[a]	50,000	0	50,000	0	50,000	50,000	50,000
Hotel (gsf)[ba]	150,000	0	150,000	0	105,000	150,000	150,000
Office (gsf)	150,000	0	150,000	0	105,000	150,000	150,000
10,000-seat Arena (gsf)	75,000	0	75,000	0	75,000	75,000	75,000
Football Stadium (seats)	0	70,000	0	70,000	0	0	70,000
HPS Phase II							
Residential (units)	2,650	1,800[eb]	2,650	4,000	1,855	2,650	4,000
Neighborhood Retail (gsf)	125,000	570,000	125,000	125,000	87,500	125,000	125,000
Research & Development (gsf)	2,500,000	1,087,000	2,500,000	2,500,000	1,750,000	2,500,000	2,500,000
Artists' Studios (gsf):							
1:1 Studio Renovation and Replacement (gsf)[dc]	225,000	225,000	225,000	225,000	225,000	225,000	225,000
New Artist Center (gsf)	30,000	0	30,000	30,000	30,000	30,000	30,000
Artist Studio Sub-Total (gsf)	*255,000*	*225,000*	*255,000*	*255,000*	*255,000*	*255,000*	*255,000*
Community Services (gsf)[b]	50,000	0	50,000	50,000	50,000	50,000	50,000
Football Stadium (seats)	69,000	0	69,000	0	0	69,000	0
Mixed-Use	0	580,000	0	0	0	0	0
Cultural and Education	0	330,600	0	0	0	0	0
Marina (slips)	300	0	300	300	0	300	300

Table VI-1 Summary of Project Alternatives [Revised]

Use	*Project*	*Alternative 1 No Project*[a]	*Alternative 2 No Bridge Alt*	*Alternative 3 49ers at Candlestick*	*Alternative 4 Lesser Build*	*Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation*	*Alternative 5 No Park Agreement*
Other Elements							
Yosemite Slough bridge	Bridge	No bridge	No bridge	BRT/Pedestrian bridge	No bridge	Bridge	No bridge
Shoreline Improvements	Yes	No	Yes	Yes	Yes	Yes	Yes
State Parks Agreement/ total acres of State Parkland	Yes/96.7	No/120.2	Yes/96.7	Yes/117.2[ed]	Yes/96.7	Yes/96.7	No/120.2

SOURCE: Lennar Urban, PBS&J, 2009.

~~a. Community Services have not been precisely defined but could include uses such as library, educational facility, police station/substation, or fire station.~~

~~b~~a. Hotel uses include 220 rooms at the proposed Regional Retail Center.

~~c~~b. 1,800 housing units on the entire Shipyard including the Phase I site.

~~d~~c. Existing artist studios would be replaced at a one-to-one ratio under all alternatives.

~~e~~d. Limited exchange of 3.03 acres to construct BRT/pedestrian only Yosemite Slough bridge and Alice Griffith Public Housing

Page VI-10, "Construction Impacts"

Construction activities associated with Alternative 1 would be reduced compared to the Project, depending on the phasing of the development. Localized construction-related traffic impacts would ~~therefore remain significant and unavoidable~~ be less than significant under Alternative 1.

Page VI-30, fourth and fifth paragraphs

Under Alternative 2, ~~motorized traffic~~ transit and non-motorized traffic would be required to circumnavigate Yosemite Slough because no bridge would be constructed. On game days, motorized and non-motorized traffic, which would travel across Yosemite Slough Bridge under the Project, would also be required to circumnavigate Yosemite Slough because no bridge would be constructed under Alternative 2. Figure VI-1 (Alternative 2 Circulation Plan Railroad Right-of-Way for Bus Rapid Transit) illustrates the proposed route. The rest of the street network at Candlestick Point and HPS Phase II would be the same as the Project.

Similar to the Project, under Alternative 2, ~~T~~the primary roadway connection for automobiles and other vehicular traffic between Candlestick Point and HPS Phase II would be west on Carroll Avenue to Ingalls Street, north along Ingalls Street to Thomas Avenue, and east on Thomas Avenue to Griffith Street. Ingalls Street would remain an industrial mixed-use street with two auto lanes and parking and loading zones on its northern and southern sides. The width of sidewalks on that portion of Ingalls Street from Carroll Avenue to Yosemite Avenue would be decreased from 16 feet to 11 feet to create a uniform street width to accommodate the auto lanes, parking, and loading.

Page VI-31, Figure VI-1 (Alternative 2 Circulation Plan Railroad Right-of-Way for Bus Rapid Transit) has been revised

[NOTE: The figure has been revised to show the Alternative 2 BRT route following the RR ROW where the ROW is south of Ingalls Street.]

Existing RR ROW

BRT Path: Using RR ROW for portion of route around Slough

Auto Route Alignment

0 500

Feet

SOURCE: SFMTA, 2010.

PBS&J 04.09.10 02056 | JCS | 10

FIGURE VI-1

Candlestick Point — Hunters Point Shipyard Phase II EIR

ALTERNATIVE 2 CIRCULATION PLAN RAILROAD RIGHT-OF-WAY FOR BUS RAPID TRANSIT [REVISED]

Page VI-33, third full paragraph

Alternative 2 would be the same as the Project, except it would not include the Yosemite Slough bridge. Because vehicular traffic could not use the bridge on non-game days, ~~T~~the main roadway connection between Candlestick Point and HPS Phase II would be the same as with the Project, via Ingalls Street. The bus rapid transit (BRT) route would be along Carroll Avenue, Hawes Street, Armstrong Avenue, and the abandoned railroad right-of-way to provide access between Candlestick Point and HPS Phase II. Alternative 2 would otherwise have the same transportation improvements as proposed with the Project.

Generally, travel demand associated with all Variants and Alternatives studied would be similar with or without the Yosemite Slough bridge. Because the Yosemite Slough bridge would not accommodate auto travel on non-game days, the traffic circulation patterns are expected to be the same under Alternative 2 as the Project. Similarly, since auto traffic would only use the bridge on game days for any Alternative or Variant considered, the typical non-game day travel patterns for any of the Alternatives or Variants that include the bridge would be the same under conditions without the bridge.

Without the bridge across Yosemite Slough, the proposed new BRT route traveling between Balboa Park BART Station and the Hunters Point Shipyard Transit Center would follow a different alignment than under the Project. Instead of a direct route across Yosemite Slough, the BRT route would travel west along Carroll Avenue, north along Hawes Street, and then west on Armstrong Avenue, where it would join the Navy railroad right-of-way. The BRT route would travel in the railroad right-of-way around Yosemite Slough, rejoining the existing roadway network at Shafter Avenue. The route would continue east on Shafter Avenue to Arelious Walker, where it would reassume the same alignment as the Project.

This additional travel distance and travel time would have a notable effect on passengers who use the BRT to travel to or from the Hunters Point Shipyard (the analysis indicates a reduction of 15 percent for these trips). However, because this represents a relatively small portion of overall Project-generated transit riders, the overall change in transit ridership and auto trip generation is negligible. This conclusion applies to any Variant or Alternative that was analyzed assuming a bridge over Yosemite Slough.

Operation of the BRT within the rail right-of-way would not affect study intersection operations. Therefore, the traffic impacts associated with Alternative 2 would be the same as the Project. Similarly, traffic impacts associated with any Variant or Alternative that was analyzed assuming a bridge over Yosemite Slough would be the same as the equivalent Variant or Alternative without the bridge.

Page VI-33, last paragraph on page

Construction activities associated with Alternative ~~1~~2 would be similar to effects with the Project. Localized construction-related traffic impacts would therefore remain significant and unavoidable.

Page VI-34, second paragraph

During game days at the football stadium, with no Yosemite Slough Bridge, the entrance and exiting capacity for vehicles would be reduced about 40 percent compared to the Project; four out of a total of 11 exit lanes would be available without the bridge. As with the Project, a mitigation measure to

implement a Travel Demand Management Plan for stadium events would reduce but not avoid traffic impacts, which would be significant and unavoidable.

Page VI-34, fifth paragraph

Although the alternative BRT route around Yosemite Slough would be technically feasible, it would not be an optimal configuration for a BRT system. BRT service would provide direct, fast, and reliable travel in a dedicated right-of-way, typically with signal priority for ~~V~~BRT vehicles. When these elements are combined, the BRT service takes on a higher quality character than typical local bus service. The Yosemite ~~s~~Slough bridge would provide a dedicated right-of-way and the most direct route between Hunters Point Shipyard and points to the west, including Candlestick ~~p~~Point, the Bayshore Caltrain Station, and Balboa Park BART. Although the route around Yosemite Slough proposed under Alternative 2 would provide exclusive right-of-way, the route would involve a number of right-angle turns and additional signalized intersections and would not ~~accommodate the BRT route~~ provide a comparably direct route as that provided on the bridge proposed ~~with~~ by the Project.

Page VI-59, the following text is inserted after Table VI-4 (Attainment of Project Objectives Alternative 2)

Alternative 2 analyzes the full Project land use program without construction of the Yosemite Slough bridge. Generally, travel demand associated with all Variants and Alternatives studied would be similar with or without the Yosemite Slough bridge. Because the Yosemite Slough bridge would not accommodate auto travel on non-game days, the traffic circulation patterns are expected to be the same under Alternative 2 as the Project. Similarly, since auto traffic would only use the bridge on game days for any Alternative or Variant considered, the typical non-game day travel patterns for any of the Alternatives or Variants that include the bridge would be the same under conditions without the bridge. If Variants 1 (R&D Variant), Variant 2 (Housing Variant), or Variant 2A (Housing/R&D Variant) were approved, and no bridge were constructed, the impacts would not increase from those identified for Variant 1, Variant 2, or Variant 2A with the bridge. In fact, all operational and construction impacts associated with the bridge, although identified as less than significant, would be eliminated.

Without the bridge across Yosemite Slough, the proposed new BRT route traveling between Balboa Park BART Station and the Hunters Point Shipyard Transit Center would follow a different alignment than under the Project. Instead of a direct route across Yosemite Slough, the BRT route would travel west along Carroll Avenue, north along Hawes Street, and then west on Armstrong Avenue, where it would join the Navy railroad right-of-way. The BRT route would travel in the railroad right-of-way around Yosemite Slough, rejoining the existing roadway network at Shafter Avenue. The route would continue east on Shafter Avenue to Arelious Walker, where it would reassume the same alignment as the Project.

This additional travel distance and travel time would have a notable effect on passengers who use the BRT to travel to or from the Hunters Point Shipyard (the analysis indicates a reduction of 15 percent for these trips). However, because this represents a relatively small portion of overall Project-generated transit riders, the overall change in transit ridership and auto trip generation is negligible. This conclusion applies to any Variant or Alternative that was analyzed assuming a bridge over Yosemite Slough.

Operation of the BRT within the rail right-of-way would not affect study intersection operations. Therefore, the traffic impacts associated with Alternative 2 would be the same as the Project. Similarly, traffic impacts associated with any Variant or Alternative that was analyzed assuming a bridge over Yosemite Slough would be the same as the equivalent Variant or Alternative without the bridge.

Page VI-65, fourth full paragraph

Construction activities associated with Alternative ~~1~~3 would be similar to effects with the Project. Localized construction-related traffic impacts would therefore remain significant and unavoidable.

Page VI-93, first paragraph

Alternative 4 is a reduced-development alternative. … This alternative also includes preservation of ~~three~~ four potentially historic structures at HPS Phase II. …

Page VI-93, third paragraph

As stated above, retail and R&D floor area would be approximately 30 percent less under this alternative in comparison to the Project. This alternative proposes the expansion of the existing historic district at Drydocks 2 and 3 to include Drydock 4 and Buildings 208, 211, 224, 231, and 253. These buildings would be rehabilitated under Secretary of Interior Standards to accommodate a mix of uses, primarily R&D (refer to Section III.J for more information on ~~b~~Buildings 208, 211, 224, 231, and 253 as historic resources). …

Page VI-97, last paragraph

~~Without a State Parks land agreement, there would be no changes to State Parks land use within the Project site and no development would occur on the CPSRA. Therefore, because State Parks land would not be developed with any structural uses under Alternative 4, there would be no impacts to the land use character of State Parks, which would less than the Project. Also worth noting is that the land use character of the CPSRA would not benefit from the improvements as proposed under the Project. However, because all of the existing State Parks land would ultimately remain undeveloped, this is considered a lesser impact than the Project from a visual standpoint.~~

Page VI-98, last paragraph

Construction activities associated with Alternative ~~1~~4 would be similar to effects with the Project. Localized construction-related traffic impacts would therefore remain significant and unavoidable.

Page VI-102, second full paragraph

~~Without a State Parks land agreement, there would be no established funding mechanism for future maintenance of the State Parks on site from the Project Applicant, and no development or park improvements would occur in the CPSRA. The CPSRA would essentially remain in its current condition. However, increased use of the CPSRA as a result of population and employment growth associated with Alternative 4 could result in deterioration of the areas currently used by the public for recreation activities in the CPSRA. This could potentially result in a substantial adverse impact on the visual~~

~~character and quality of the Project site. Without an established funding mechanism to address the increased use, improvements and maintenance of the CPSRA would be the responsibility of CDPR. In addition, new and improved parkland in the CPSRA would not occur as proposed under the Project. Therefore, development of Alternative 4 would result in greater impacts to the visual character of CPSRA compared to the Project, unless a funding mechanism is established.~~

Page VI-103, first full paragraph

~~The State Parks agreement would not occur under Alternative 4, which would result in a reduced density of development at Candlestick Point compared to the Project because the development area would be smaller and the development program would be reduced.~~ Vertical development under Alternative 4 would have a reduced bulk and mass compared to the Project. Alternative 4 would include four towers at Candlestick Point, compared to 11 towers with the Project, and the average tower height would be similar under Alternative 4. …

Page VI-106, last paragraph

Compared to the Project, development under Alternative 4 would not result in the demolition of Buildings 211, 224, 231, and 253, which are potential historic resources in the CRHR-eligible Hunters Point Commercial Dry Dock and Naval Shipyard Historic District (refer to Appendix V1 [Page & Turnbull Feasibility Report]). ~~The Project Applicant would rehabilitate these buildings in accordance with the Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings.~~ … The buildings occupy approximately 10 acres in the R&D district and would consist of approximately 880,000 gsf of floor area. Building 208 would be mothballed, the same as under the Project. Building ~~211~~231 would be rehabilitated to accommodate parking and Buildings ~~231~~211 and 253 would be rehabilitated to accommodate R&D uses ~~9~~(refer to Appendix ~~V2~~V1 [~~CBRE Consulting Financial Feasibility Analysis~~Page & Turnbull Hunters Point Shipyard Feasibility Study, Revised September 9, 2009]). …

Page VI-108, third full paragraph

Alternative 4 would not include construction of the Yosemite Slough Bridge, which would avoid impacts associated with disturbance of potentially radiologically impacted soils at HPS Phase II in the vicinity of Parcels E and E-2. Also, because Alternative 4 would preserve historically significant buildings on HPS Phase II proposed for demolition under the Project (Buildings 211, 224, 231, and 253), this Alternative would result in less land disturbance in the area of the site where these buildings are located as compared to the Project, thus reducing the potential for exposure to hazardous materials in soil or groundwater in this area.

Page VI-108, the following paragraph is inserted prior to the last paragraph

As part of Alternative 4, the retained historic buildings would require abatement of existing hazardous materials such as asbestos, PCBs from electric fixtures, and lead-based paint. Those abatement activities would be a typical step in a reuse and rehabilitation plan. In addition, any contaminated soil or groundwater at the site of those buildings would be remediated or encapsulated under methods subject to the various legal or administrative requirements outlined in Draft EIR Section III.K. Those

remediation activities would not preclude rehabilitation or reuse of the buildings in the identified Hunters Point Commercial Dry Dock and Naval Shipyard Historic District if they have been cleared for reuse by the Navy. The Navy has identified Buildings 211 and 253 as radiologically impacted buildings. The Navy would not make a determination as to whether these buildings can be cleared for reuse until at the earliest, fall 2010, but all required radiological remediation would be completed before the Navy transfers the property to the Agency. As noted in Draft EIR Section III.K, pages III.K-27 to -28, "Basewide Historical Radiological Assessment" section:

> The overall conclusion of the Historical Radiological Assessment (HRA) was that although low levels of radioactive contamination exist at HPS, no imminent threat or substantial risk exists to tenants, the environment of HPS, or the local community.[313] This conclusion has been reinforced by subsequent Finding of Suitability for Lease (FOSL)[314] issued by the Navy for areas in Parcel B and Building 606 in Parcel D and approved by the regulatory agencies authorizing leases for various uses involving hundreds of employees, artists, and visitors in close proximity to various "impacted" sites each day. A Basewide Radiological Work Plan was subsequently prepared, describing survey and decontamination approaches to be implemented in support of radiological release of buildings and areas.[315]

Alternative 4 would place housing in the area of the HPS Phase II site proposed for the stadium and stadium parking. …

Page VI-117, first full paragraph

Implementation of Alternative 4 would include parks and open space areas similar to the Project~~, except it would not include a State Parks land agreement, resulting in a different configuration of parks at Candlestick Point and no improvements to the CPSRA. Compared to the Project, the CPSRA would remain 120.2 acres, compared to the 23.5-acre reduction under the Project~~ and the same State Parks land agreement, which would result in improvements to the CPSRA. Construction activities associated with the proposed parks and recreational facilities are considered part of the overall development footprint. … ~~In addition, because the State Parks agreement would not occur, the improvements to the CPSRA as proposed under the Project would not be constructed. Therefore, construction activities at Candlestick Point would be reduced and c~~Construction impacts associated with development of new parks and recreational facilities would be less than significant.

At build-out of Alternative 4, the projected population within the Project site would increase from approximately 1,113 residents to approximately 17,126 residents, while employment would increase from 529 jobs to approximately 7,219 jobs. Similar to the Project, parks and open space included in Alternative 4 would provide a ratio of about ~~13.7~~20.4 acres of parkland per thousand residents, which is substantially higher than the benchmark ratio of 5.5 acres per thousand residents (refer to Section III.P). …

The following text is inserted in its entirety following page VI-126. Although this text is new, for readability, it is not underlined.

VI.C.4a Subalternative 4A: CP-HPS Phase II Development Plan with Historic Preservation

Alternative 4 (Reduced CP-HPS Phase II Development; Historic Preservation; No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge) analyzes a reduced-development alternative while preserving the five historic structures (Buildings 208, 211, 224, 231, and 253) that are part of the California Register of Historical Resources (CRHR)-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District. Subalternative 4A includes the Project's full land use program and the historic preservation component of Alternative 4. Refer to Figure VI-3a (Subalternative 4A Land Use Plan) for an illustration of the proposed Subalternative 4A land use plan.

This subalternative, like the Project, would retain Drydocks 2 and 3 and four buildings (Buildings 140, 204, 205, and 207) previously identified as historic resources in National Register of Historic Places (NRHP)-eligible Hunters Point Commercial Drydock Historic District, This subalternative and the Project would also retain Drydock 4, considered individually eligible for the NRHP, and Building 208, part of the CRHR-eligible historic district. Like Alternative 4, Subalternative 4A would retain Buildings 208, 211, 224, 231, and 253. Building 208 would be mothballed, the same as under the Project. Buildings 211, 231, and 253 would be rehabilitated under the Secretary of the Interior Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings (Secretary's Standards) to accommodate approximately 338,000 gsf of R&D and 1,000 parking spaces. The rehabilitation would occur generally as recommended by Page & Turnbull's *Hunters Point Shipyard Feasibility Study* (July 1, 2009, included in the EIR as part of Appendix J). Total floor area for R&D would remain the same as the Project, i.e., 2,500,000 gsf. Building 231 would be reused for parking. Buildings 211 and 253 would accommodate R&D uses. The feasibility study proposed parking uses for Building 231, to accommodate parking as part of the overall HPS Phase II land use program, and as a use appropriate for the large volume of Building 231. Building 224, the air raid shelter, would be retained as museum space. All mitigation measures for the Project would also be applied to Subalternative 4A except for MM CP-1b.1, which requires documentation of demolished buildings.

Because Subalternative 4A proposes the Project's land use program, except for Impact CR-1b, the impacts identified for the Project would also occur with Subalternative 4A. Preservation of these buildings would change some of the analysis in Aesthetics, Hydrology and Water Quality, and Greenhouse Gas Emissions, but not the impact conclusions in these sections. The impacts and analysis identified for the Project in the following issue areas would be the same for Subalternative 4A as identified for the Project:

- Land Use and Plans
- Population, Housing, and Employment
- Transportation and Circulation
- Air Quality
- Noise
- Paleontological Resources

- Hazards and Hazardous Materials
- Geology and Soils
- Hydrology and Water Quality (except sea level rise)
- Public Services
- Recreation
- Utilities
- Energy

The impacts and analysis identified for Alternative 4 in the following issue area would be the same for Subalternative 4A as identified for the Project, as Subalternative proposes the historic preservation component of Alternative 4:

- Cultural Resources

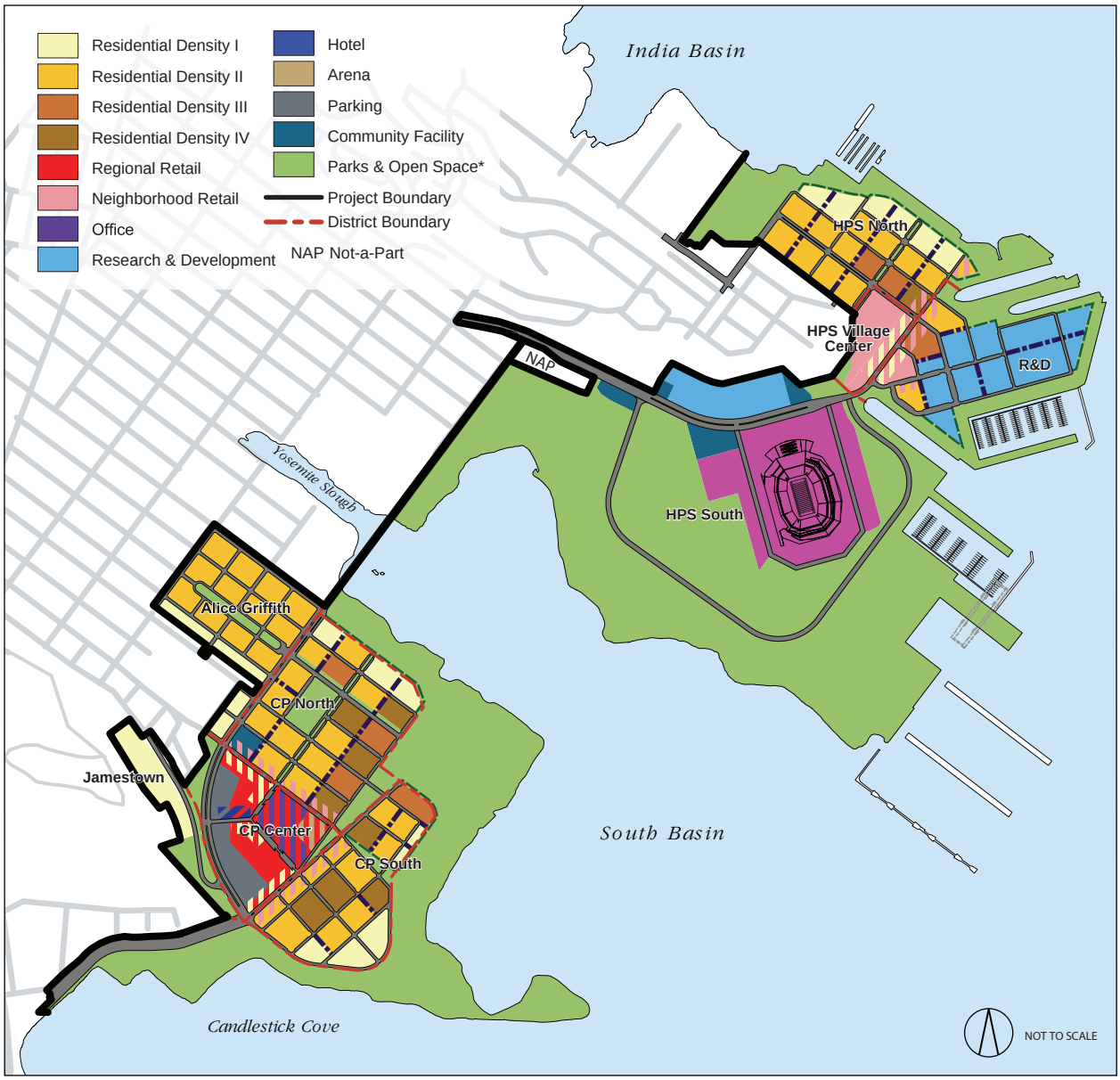
To document that there would be no change with respect to Transportation and Circulation, Air Quality, or Greenhouse Gas Emissions, refer to Appendix T4 (ENVIRON, Updated Air Quality Analysis Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Updated Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, April 26, 2010), Appendix T5 (ENVIRON, Updated Greenhouse Gas Emissions Calculation for Candlestick Point–Hunters Point Shipyard Phase II Development Plan—Variants 2A and 3 [Tower Variant D], Alternative 2, and Subalternative 4A, March 12, 2010), and Appendix T7 (LCW Consulting, CP-HPS Phase II Development Plan Transportation Study—Subalternative 4A, March 15, 2010).

Revised analyses for Aesthetics, Hydrology, and Greenhouse Gases are discussed, below.

Aesthetics

To provide for the same land use program as the Project, the height of some buildings in the R&D District of HPS Phase II would be greater than that analyzed under the Project to accommodate the displaced R&D resulting from preserving Buildings 211, 224, 231, and 253. The structures in the R&D District immediately west of the buildings to be preserved would increase from 85 feet maximum with the Project to 120 feet maximum with Subalternative 4A. Refer to Figure VI-3b (Subalternative 4A Maximum Building Heights) above, showing areas that would have maximum heights of 65 feet, 85 feet, or 120 feet, compared to 65 feet to 105 feet with the Project. For reference, existing Building 211 is about 45 feet in height, Building 231 is about 80 feet, and Building 253 ranges from 70 feet to 122 feet (and to 158 feet at the top of its tower element).

Figure VI-3c (Subalternative 4A View 18a: Southeast from Hilltop Open Space) is a visual simulation of building height and massing of Subalternative 4A from a viewpoint on Hillpoint Park. As noted in this figure, the proposed building heights with Subalternative 4A would still preserve expansive Bay views. From long distances, the change would be relatively unnoticeable, and, thus, would not adversely affect scenic vistas. From mid-range views as identified for the Project, the changes in height would be noticeable, but the residential towers at HPS would remain a predominant feature in the views from and to the north. The scale of development would be similar to other areas of San Francisco, such as parts of downtown or Rincon Hill. Development of Subalternative 4A would provide a continuation of the



SOURCE: Lennar Urban, 2010.

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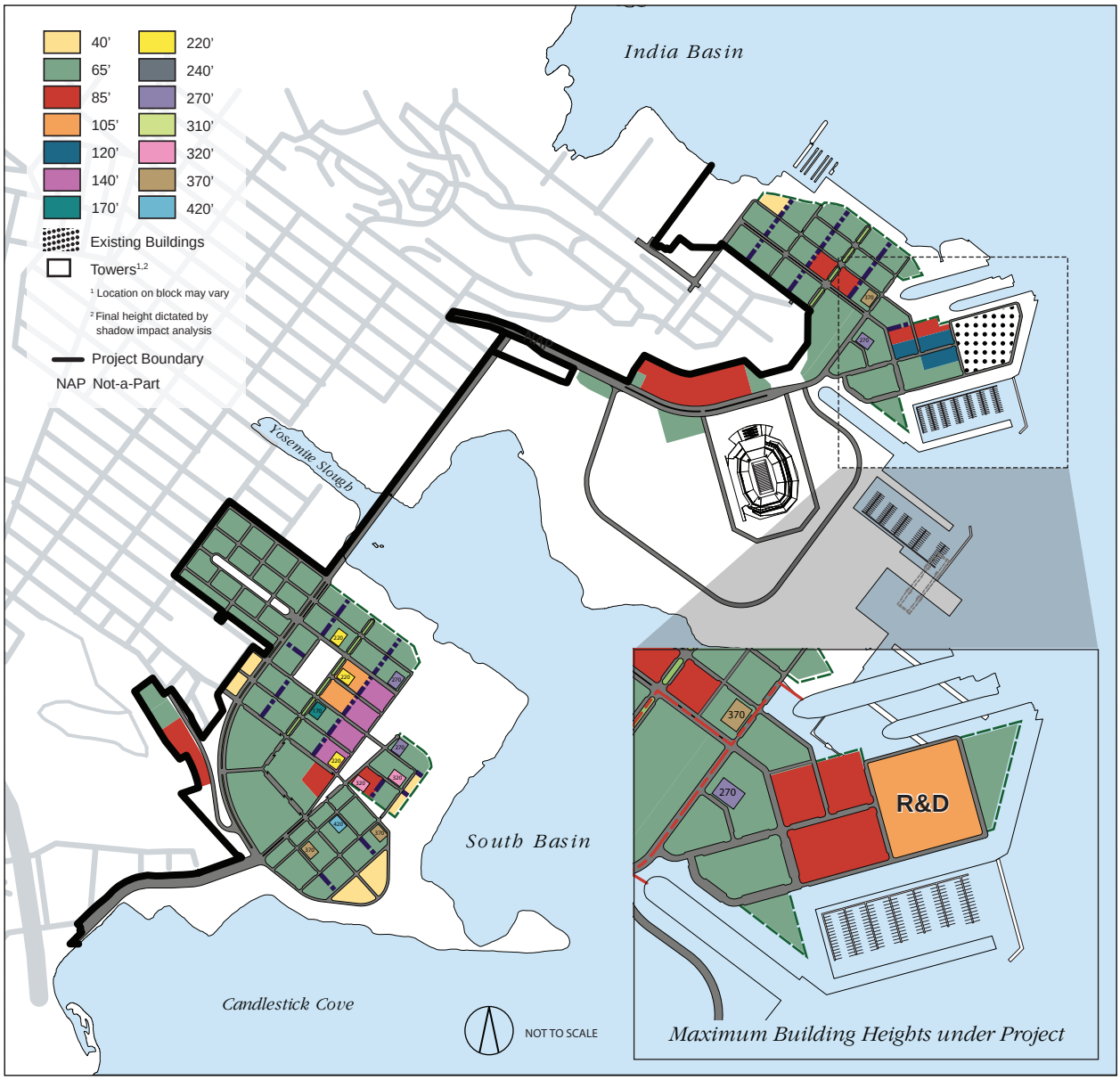
FIGURE VI-3a

Candlestick Point — Hunters Point Shipyard Phase II EIR

SUBALTERNATIVE 4A LAND USE PLAN [NEW]



SOURCE: Lennar Urban, 2010.

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FIGURE VI-3b

Candlestick Point — Hunters Point Shipyard Phase II EIR

SUBALTERNATIVE 4A MAXIMUM BUILDING HEIGHTS [NEW]

Existing

Proposed

SOURCE: Lennar Urban, 2010.

PBS&J 04.19.10 02056 | JCS | 10

FIGURE VI-3c

Candlestick Point — Hunters Point Shipyard Phase II EIR

SUBALTERNATIVE 4A
VIEW 18a: SOUTHEAST FROM HILLTOP OPEN SPACE [NEW]

existing street grid, thereby maintaining existing view corridors to the Bay and East Bay hills. Public access areas, both City and State parks, would maintain views from the Project site toward the East Bay and the Bay. Subalternative 4A would not result in additional tower clustering or other structures that would substantially obstruct, alter, or degrade the quality of views of the Bay or beyond from any long-range viewpoints. Views of Bayview Hill and Hunters Point Hill from the East Bay would be partially obstructed from Alameda and the Oakland area by Subalternative 4A structures; however, the amount of the obstruction would be minimal and not considered to be significant because of the distance across the Bay. Subalternative 4A development would not obstruct, alter, or degrade the quality of any existing views of the site from these locations. The impact on scenic vistas would remain less than significant, the same as for the Project.

With regard to impacts on scenic resources such as the Yosemite Slough, the Re-gunning crane, Double Rock, Bayview Hill, and Hunters Point Hill, the somewhat taller building heights in the R&D District are far from all of these features except the gantry crane and Hunters Point Hill. Hunters Point Hill is a prominent scenic resource west of the HPS Phase II site and would remain intact with development of Subalternative 4A. Views of Bayview Hill would not be significantly obstructed by Subalternative 4A development in HPS Phase II except from close-in vantage points. Subalternative 4A would retain structures in the CRHR-eligible Hunters Point Commercial Drydock and Naval Shipyard Historic District, as well as the Re-gunning crane, a highly visible feature. The Re-gunning crane is so large and visible that an increase in some building heights of 35 feet at the center of the R&D District would have no discernable impact on this visual resource. Development of the HPS Phase II site would also include about 240 acres of new and renovated parkland with improved public access, thereby improving the scenic quality of the area. The proposed shoreline improvements and construction of the new marina would improve the aesthetic quality of the shoreline along HPS Phase II, reducing erosion, including marsh plantings where appropriate, and removing debris. These improvements would represent a beneficial impact of the development, improving the overall visual character of the shoreline.

The CRHR-eligible historic district as part of Subalternative 4A would be bounded by new R&D development to the west and by the shoreline areas of HPS and San Francisco Bay to the north and south. Structures in the historic district, including Buildings 208, 211, 224, 231, and 253, are large-scale industrial buildings ranging from 45 feet to 122 feet, with part of Building 253 rising to 158 feet. While R&D development up to 120 feet in height would be a different design than most of the existing structures in the historic district, that new development would not alter the visual setting of the historic district such that its integrity would be impaired. In addition, the historic district would retain its waterfront setting, including the drydocks. Therefore, development at the HPS Phase II site under Subalternative 4A, as for the Project, would not have significant adverse impacts on scenic resources or other features that contribute to a scenic public setting, and the impact would be less than significant. No mitigation is required.

The height modifications in the R&D District under Subalternative 4A would not increase any impacts to visual character. The towers to be developed on HPS Phase II would remain the predominant visual element in terms of buildings, and the additional heights of some of the R&D buildings would not affect the planned urban character of the site. Subalternative 4A would replace deteriorating structures, vacant parcels, expanses of asphalt and dirt, and piles of rubble and debris with a high-quality environment that

would include a variety of architectural styles and open space. Therefore, Subalternative 4A, in replacing existing uses and structures, and in light of the analysis of changes in visual conditions presented throughout Section III.E (Aesthetics) of the EIR, would not substantially degrade the visual quality or character of the HPS Phase II site or its surroundings and the impact would be less than significant. No mitigation is required.

The wave protection berm for the historic district and the grade change from the remainder of HPS development would result in a "step-down" effect from the western portions of the R&D District to this area. The resulting visual change would be less than significant.

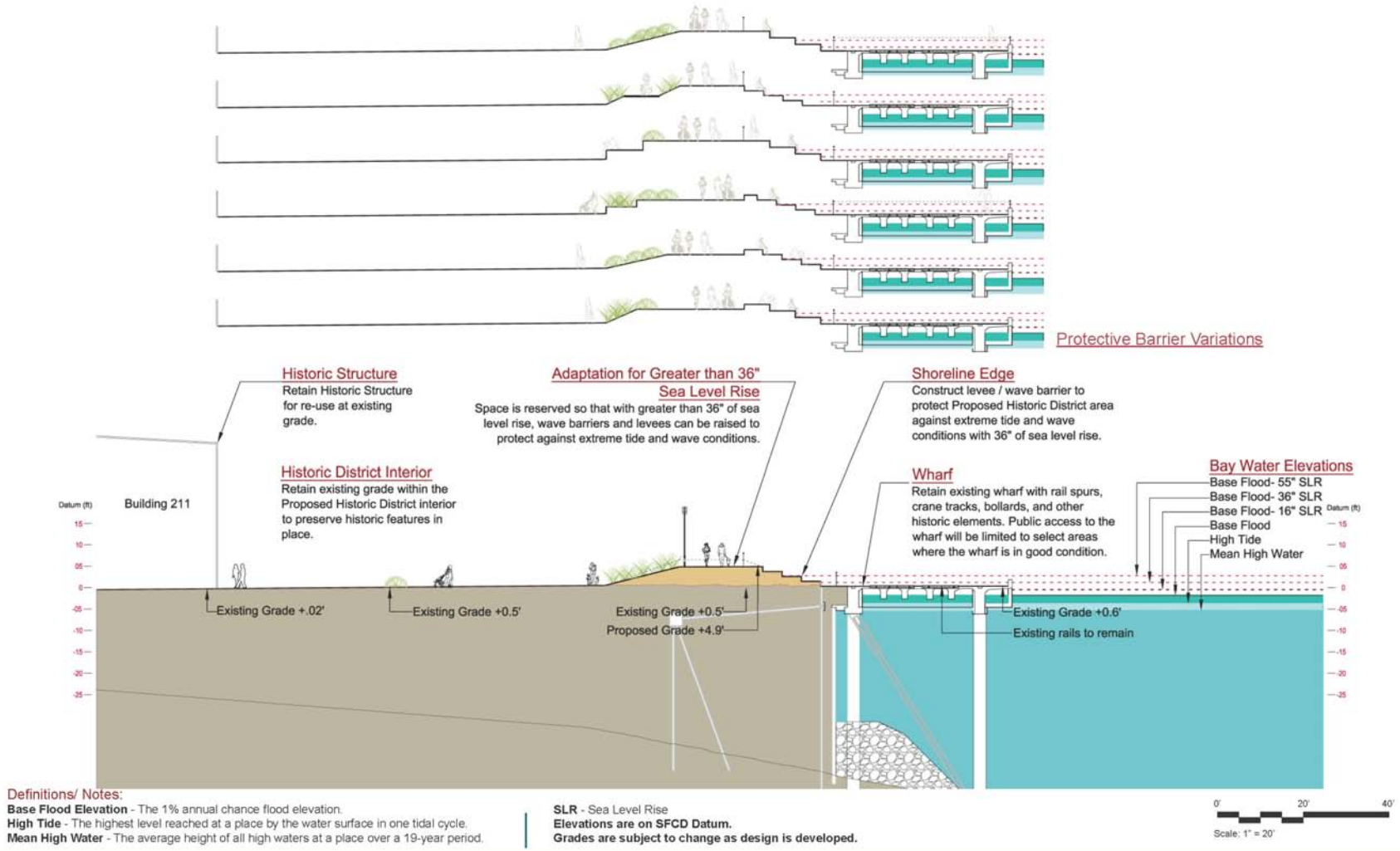
The wave protection berm would alter the view of visitors and employees in the area of the rehabilitated buildings toward the Bay, but since the berm is only 3 feet high, it would not block views. The Bay Trail would be located on top of this berm in some areas, and outside the berm in others. Refer to Figure VI-3d (Subalternative 4A: Conceptual Berm Design for Historic Preservation Area) for a conceptual drawing of the proposed berm. The impacts would be less than significant, the same as for the Project.

Hydrology and Water Quality (Sea Level Rise)

To address sea level rise, Alternative 4 would raise the grade at the site of Buildings 208, 211, 224, 231, and 253 to match the grade on the remainder of the development at HPS Phase II, i.e., 3.5 feet above the Base Flood Elevation, as required by mitigation measure MM HY-12a.1. Subalternative 4A, instead, would maintain the existing grade at the site of Buildings 208, 211, 224, 231, and 253, allowing railroad spurs and other historic elements such as bollards, to remain. To protect the historic district from potential sea level rise, a wave protection berm would be constructed around the eligible historic district to accommodate a 36-inch sea level rise, on top of which the Bay Trail would be constructed. The remainder of the site would be graded in accordance with MM HY-12a.1. The impact would be less than significant, the same as for the Project.

Greenhouse Gas Emissions

Implementation of Subalternative 4A would result in baseline GHG emissions similar to the Project and would include the GHG emission reductions associated with mitigation measures, including MM GC-1 through MM GC-4, which require the implementation of the Project Applicant's conceptual commitments to (1) reduce energy use to 15 percent below Title 24 2008 standards for all development components, and (2) use ENERGY STAR appliances for all appliances installed by builders in residential units. This subalternative would also be required to comply with the City's Green Building Ordinance, per Chapter 13C of the *Environment Code*. The existing building space may not be as energy efficient as newly built structures. Therefore, there may be a slight increase in GHG emissions compared to the Project due to this small amount of R&D building space that is contained in the historic buildings. Otherwise, there would be no difference in the greenhouse gas emissions impacts of Subalternative 4A compared to the Project.



SOURCE: RHAA, 2010.

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FIGURE VI-3d

Candlestick Point — Hunters Point Shipyard Phase II EIR

SUBALTERNATIVE 4A: CONCEPTUAL BERM DESIGN FOR HISTORIC PRESERVATION AREA [NEW]

Page VI-160, second paragraph

Alternative 1 (No Project) would reduce Project impacts because development would only occur at HPS Phase II, resulting in reduced construction-related impacts and fewer or less substantial operational impacts due to the reduced population and employment growth. Alternative 2 (CP-HPS Phase II Development Project, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge) would avoid Project impacts related to biological resources, water quality, and hazardous materials because the Yosemite Slough bridge would not be constructed. However, because the Yosemite Slough bridge would not be constructed, Alternative 2 would result in increased traffic-related impacts~~,~~ ~~particularly~~ on game days. … Alternative 4 (Reduced CP-HPS Phase II Development, Historic Preservation, No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge) would reduce the most significant Project impacts to a less-than-significant level (reduced traffic-related air quality and noise impacts, avoidance of historic resource impacts, and avoidance of construction-related impacts to water quality and biological resources because the bridge and marina would not be constructed). Subalternative 4A (CP-HPS Phase II Development Plan with Historic Preservation) would avoid the significant Project impacts to historic resources, but all other impacts would be the same as for the Project. Alternative 5 (Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge) would avoid Project impacts related to biological resources, water quality, and hazardous materials because the Yosemite Slough bridge would not be constructed. However, because the Yosemite Slough bridge would not be constructed, Alternative 5 would result in increased traffic-related impacts resulting from population and employment growth at HPS Phase II. Alternative 4 would be the environmentally superior alternative. However, this Alternative would not meet the objectives to the same extent as the Project.

Page VI-173, Table VI-12 (Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised to correct typographical errors. Table VI-12 is identical Table ES-1d; however, Table VI-12 only includes those rows with text that has changed, whereas Table ES-1d contains all of the significant and unavoidable impacts, similar to Table VI-12 in the Draft EIR.]

Table VI-12 Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
Impact TR-1 The Project would result in construction-related transportation impacts in the Project vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Project vicinity. Mitigation measure MM TR-1 would reduce but not avoid construction-related transportation impacts during construction activities. Therefore, construction transportation impacts would remain significant.					
Significance of Alternative Compared to Project	<	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/~~SU~~LTS	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-12 Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Impact TR-2 Implementation of the Project would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts. Although implementation of a Travel Demand Management Plan was assumed in developing Project travel demand estimates, and would be essential to ensure that impacts at additional locations do not occur, traffic congestion caused by the Project and the Project's contribution to cumulative impacts would still be significant.					
Significance of Alternative Compared to Project	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-3 The Project would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Project vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Project	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact TR-4 At the intersection of Tunnel/Blanken, the Project would result in significant Project AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Project	~~<~~=	=	~~<~~=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/~~LTS~~SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
Impact TR-10 The Project would result in significant Project traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Project	<	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/~~SU~~LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					
Impact TR-27 The Project would increase congestion at the intersection of Geneva Avenue and Bayshore Boulevard. This would increase travel times and impact operations of the 28L-19th Avenue/Geneva Limited. Implementation of mitigation measures MM TR-27.1 and MM TR-27.2 would reduce impacts to transit operations. However, since feasibility of MM TR-27.1 is uncertain, and since MM TR-27.2, without MM TR-27.1, would reduce, but not completely avoid, impacts on the 28L-19th Avenue/Geneva Limited, Project impacts and Project contributions to cumulative impacts on the 28L-19th Avenue/Geneva Limited would remain significant.					
Significance of Alternative Compared to Project	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Project/Alternative)	SU/~~NI~~SU	SU/SU	SU/SU	SU/SU	SU/SU
…					

Table VI-12 Comparison of the Significant and Unavoidable Impacts of the Project to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
NOISE					
Impact NO-2 Construction activities associated with the Project would create excessive groundborne vibration levels in existing residential neighborhoods adjacent to the Project site and at proposed on-site residential uses should the latter be occupied before Project construction activity on adjacent parcels is complete. Although the Project's construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Project	~~<~~=	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Project/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Impact NO-3 Construction activities associated with the Project would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Project	<	=	~~<~~=	~~<~~=	=
Level of Significance after Mitigation (Project/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Impact NO-6 Operation of the Project would generate increased local traffic volumes that could cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes.					
Significance of Alternative Compared to Project	<	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Project/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

…

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-180, Table VI-13 (Comparison of the Significant and Unavoidable Impacts of Variant 1: No Stadium, Additional R&D to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table VI-13 Comparison of the Significant and Unavoidable Impacts of Variant 1: No Stadium, Additional R&D to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge All*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The R&D Variant would result in construction-related transportation impacts in the R&D Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the R&D Variant vicinity.					
Significance of Alternative Compared to Variant	<	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/~~SU~~LTS	SU/SU	SU/SU	SU/SU	SU/SU
Implementation of the R&D Variant would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The R&D Variant would result in significant impacts and would contribute to significant cumulative impacts at intersections in the R&D Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the R&D Variant would result in significant Project AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
The R&D Variant would result in significant traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	<	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/~~SU~~LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					

Table VI-13 Comparison of the Significant and Unavoidable Impacts of Variant 1: No Stadium, Additional R&D to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
AIR QUALITY					
Operation of the R&D Variant would violate BAAQMD CEQA significance thresholds for mass criteria pollutant emissions from mobile and area sources and contribute substantially to an existing or projected air quality violation at full build-out ~~in the year 2029~~.					
Significance of Alternative Compared to Variant	<	<=	<=	>=	>=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
NOISE					
Construction activities associated with the R&D Variant would create excessive groundborne vibration levels in existing residential neighborhoods adjacent to the Project site and at proposed on-site residential uses should the latter be occupied before Project construction activity on adjacent parcels is complete. Although the R&D Variant's construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Variant	<=	=	<=	=	<=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Construction activities associated with the R&D Variant would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	<=	<=	<=	<=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Operation of the R&D Variant would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes.					
Significance of Alternative Compared to Variant	<	=	<=	<=	<=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

…

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-185, Table VI-14 (Comparison of the Significant and Unavoidable Impacts of Variant 2: No Stadium, Relocation of Housing to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table VI-14 Comparison of the Significant and Unavoidable Impacts of Variant 2: No Stadium, Relocation of Housing to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The Housing Variant would result in construction-related transportation impacts in the Housing Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Housing Variant vicinity.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Implementation of the Housing Variant would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing Variant would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Housing Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the Housing Variant would result in significant Project AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Housing Variant contributions at some study area intersections that would operate at LOS E or LOS F under 2030 No Project conditions were determined to be significant, and no feasible mitigation measures have been identified.					
Significance of Alternative Compared to Variant	=	<=	<=	<=	<=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
The Housing Variant would result in significant traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					

Table VI-14 Comparison of the Significant and Unavoidable Impacts of Variant 2: No Stadium, Relocation of Housing to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
AIR QUALITY					
Operation of the Housing Variant would violate BAAQMD CEQA significance thresholds for mass criteria pollutant emissions from mobile and area sources and contribute substantially to an existing or projected air quality violation at full build-out ~~in the year 2029~~.					
Significance of Alternative Compared to Variant	<	=	<=	<=	<=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
NOISE					
…					
Construction activities associated with the Housing Variant would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	=	<=	<=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Operation of the Housing Variant would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes.					
Significance of Alternative Compared to Variant	<	=	<=	<=	<=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-194, new Table VI-14a (Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant to Each of the Alternatives) has been inserted (for readability, text is not underlined)

[NOTE: This table has been inserted to include information concerning Variant 2A.]

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The Housing/R&D Variant would result in construction-related transportation impacts in the Housing/R&D Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Housing/R&D Variant vicinity.					
Significance of Alternative Compared to Variant	<	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Implementation of the Housing/R&D Variant would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Housing/R&D Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the Housing/R&D Variant would result in significant Project AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Housing/R&D Variant contributions at some study area intersections that would operate at LOS E or LOS F under 2030 No Project conditions were determined to be significant, and no feasible mitigation measures have been identified.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant's contributions at the intersections of Geneva/US-101 Southbound Ramps and Harney/US-101 Northbound Ramps, which would operate at LOS F under 2030 No Project conditions, were determined to be significant, and a mitigation measure has been identified to avoid this impact. However, implementation of mitigation measure MM TR-6 is uncertain, and this impact would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge All*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Housing/R&D Variant contributions at the intersections of Bayshore/Geneva, which would operate at LOS F under 2030 No Project conditions, were determined to be significant, and a mitigation measure has been identified to avoid this impact. However, implementation of mitigation measure MM TR-8 is uncertain, and this impact would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would result in significant traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	<	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would contribute to significant traffic impacts on freeway conditions.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would result in significant impacts at four freeway on-ramp locations. No feasible traffic mitigation is available.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would contribute to significant cumulative traffic impacts at freeway ramp locations. No feasible traffic mitigation is available.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would result in significant impacts related to freeway diverge queue storage at the Harney/US-101 Northbound Off-ramp. Mitigation measure MM TR-6 has been identified to avoid this impact, but its implementation is uncertain. Therefore, this impact would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would contribute to significant cumulative traffic impacts related to freeway diverge queue storage at some off-ramp locations. Mitigation measure MM TR-6 has been identified to avoid this impact at the US-101 Northbound off-ramp to Harney Way, and US-101 Southbound Off-ramp to Harney Way/Geneva Avenue. However, implementation is uncertain. For the other ramps, no feasible mitigations have been identified. Therefore, this impact would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
The Housing/R&D Variant would increase congestion and contribute to cumulative conditions at intersections along San Bruno Avenue, which would increase travel times and impact operations of the 9-San Bruno. Implementation of mitigation measures MM TR-21.1 and MM TR-21.2 could reduce impacts to transit operations. However, since feasibility of MM TR-21.1 is uncertain, and since MM TR-21.2, without MM TR-21.1, would reduce, but not completely avoid, impacts on the 9-San Bruno, Project impacts and Project contributions to cumulative impacts on the 9-San Bruno would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion and contribute to cumulative conditions at intersections, which would increase travel times and impact transit operations of the 23-Monterey, 24-Divisadero, and the 44-O'Shaughnessy. Feasibility of mitigation measures is unclear or would not completely avoid impacts.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion at intersections along Gilman Avenue and Paul Avenue, which would increase travel times and would impact operations of the 29-Sunset. Implementation of mitigation measures MM TR-23.1 and MM TR-23.2 would reduce impacts to transit operations. However, since feasibility of MM TR-23.1 is uncertain, and since MM TR-23.2, without MM TR-23.1, would reduce, but not completely avoid, impacts on the 29-Sunset, Project impacts and Project contributions to cumulative impacts on the 29-Sunset would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion at intersections along Evans Avenue, which would increase travel times and impact operations of the 48-Quintara-24th Street. Implementation of mitigation measures MM TR-24.1 and MM TR-24.2 would reduce impacts to transit operations. However, since feasibility of MM TR-24.1 is uncertain, and since MM TR-24.2, without MM TR-24.1, would reduce, but not completely avoid, impacts on the 48-Quintara-24th Street, Housing/R&D Variant impacts and Housing/R&D Variant contributions to cumulative impacts on the 48-Quintara-24th Street would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion at intersections in the study area, and make a considerable contribution to cumulative impacts that would increase travel times and impact operations of the 54-Felton. Implementation of mitigation measure MM TR-25 would reduce, but not avoid impacts.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge All*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
The Housing/R&D Variant would increase congestion at intersections along Third Street, and make a considerable contribution to cumulative impacts that would increase travel times and impact operations of the T-Third. Implementation of mitigation measures MM TR-26.1 and MM TR-26.2 would reduce impacts to transit operations. However, since feasibility of MM TR-26.1 is uncertain, and since MM TR-26.2, without MM TR-26.1, would reduce, but not completely avoid, impacts on the T-Third, Project impacts and Project contributions to cumulative impacts on the T-Third would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion at the intersection of Geneva Avenue and Bayshore Boulevard. This would increase travel times and impact operations of the 28L-19th Avenue/Geneva Limited. Implementation of mitigation measures MM TR-27.1 and MM TR-27.2 would reduce impacts to transit operations. However, since feasibility of MM TR-27.1 is uncertain, and since MM TR-27.2, without MM TR-27.1, would reduce, but not completely avoid, impacts on the 28L-19th Avenue/Geneva Limited, Project impacts and Project contributions to cumulative impacts on the 28L-19th Avenue/Geneva Limited would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion on US-101 mainline and ramps, which would increase travel times and impact operations of the 9X, 9AX, 9BX-Bayshore Expresses, and 14X-Mission Express. The Project would also contribute to cumulative impacts on these transit routes on US-101.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant would increase congestion and contribute to cumulative congestion on US-101 and on Bayshore Boulevard, which would increase travel times and adversely affect operations of SamTrans bus lines on these facilities.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The Housing/R&D Variant's proposed transit preferential treatments and significant increases in traffic volumes on Palou Avenue would result in impacts on bicycle travel on Bicycle Routes #70 and #170 between Griffith Street and Third Street. The effectiveness of mitigation is uncertain. Therefore, the impact would remain significant.					
Significance of Alternative Compared to Variant	<	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
For as many as 12 times a year 49ers games at the proposed stadium would result in significant impacts on study area roadways and intersections. Implementation of mitigation measure MM TR-38 would lessen game-day impacts; however, traffic impacts would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/NI	SU/NI

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
The existing game day service and transit improvements would not be adequate to accommodate projected transit demand. Implementation of mitigation measure MM TR-39 would reduce game-day impacts on transit capacity; however, traffic impacts on transit operations would remain significant.					
Significance of Alternative Compared to Variant	=	=	=	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/NI	SU/NI
Weekday evening secondary events at the stadium would result in increased congestion at intersections, freeway mainline, and freeway ramps already operating at unacceptable LOS under Project conditions without a secondary event, and result in significant impacts at nine additional intersections and one additional freeway off-ramp. Implementation of mitigation measure MM TR-46 would reduce but not avoid impacts.					
Significance of Alternative Compared to Variant	<	=	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
The existing transit service and Housing/R&D Variant improvements would not be adequate to accommodate projected transit demand during secondary events with attendance of 37,500 spectators. In addition, transit lines serving the area would experience additional delays due to traffic generated by the secondary event.					
Significance of Alternative Compared to Variant	<	=	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
Weekday evening events at the arena would exacerbate congestion at intersections, freeway mainline, and freeway ramps already operating at unacceptable LOS under Housing/R&D Variant conditions without an arena event, and result in significant traffic impacts at Harney Way and Jamestown Avenue, which was operating acceptably under Housing/R&D Variant conditions without an arena event. Mitigation measure MM TR-51 would reduce but not avoid impacts.					
Significance of Alternative Compared to Variant	<	=	<	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/SU	SU/SU
Sell-out weekday evening events at the arena could impact existing and proposed transit service.					
Significance of Alternative Compared to Variant	<	=	<	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/SU	SU/SU
AIR QUALITY					
Operation of the Housing/R&D Variant would violate BAAQMD CEQA significance thresholds for mass criteria pollutant emissions from mobile and area sources and contribute substantially to an existing or projected air quality violation at full build-out.					
Significance of Alternative Compared to Variant	<	=	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-14a Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge All*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
NOISE					
Construction of the Housing/R&D Variant would create excessive groundborne vibration levels in existing residential neighborhoods adjacent to the Project site and at proposed on-site residential uses should the latter be occupied before construction activity on adjacent parcels is complete. Although the construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Variant	=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Construction activities associated with the Housing/R&D Variant would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	=	<	<	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Operation of the Housing/R&D Variant would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes.					
Significance of Alternative Compared to Variant	<	=	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Noise during football games and concerts at the proposed stadium would result in temporary increases in ambient noise levels that could adversely affect surrounding residents for the duration of a game or concert.					
Significance of Alternative Compared to Variant	=	>	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	NI/NI	NI/SU	NI/NI	NI/NI	NI/NI
CULTURAL RESOURCES					
The Housing/R&D Variant would result in a substantial adverse change in the significance of a historical resource. Implementation of mitigation measure MM CP-3b would reduce the impact, but not to a less-than-significant level. The impact would be significant and unavoidable.					
Significance of Alternative Compared to Variant	<	=	=	<	=
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/SU	SU/LTS	SU/SU

Table VI-14a	Comparison of the Significant and Unavoidable Impacts of Variant 2A: Housing/R&D Variant, No Stadium, Relocation of Housing, Additional R&D to Each of the Alternatives [New]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development; Historic Preservation; State Parks Agreement: No HPS Phase II Stadium, Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-194, Table VI-15 (Comparison of the Significant and Unavoidable Impacts of Variant 3: Candlestick Point Tower to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table VI-15	Comparison of the Significant and Unavoidable Impacts of Variant 3: Candlestick Point Tower to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The Tower Variants would result in construction-related transportation impacts in the Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Variant vicinity. Mitigation measure MM TR-1 would reduce but not avoid construction-related transportation impacts during construction activities. Therefore, construction transportation impacts would remain significant.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Implementation of the Tower Variants would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts. Although implementation of a Travel Demand Management Plan was assumed in developing Variant travel demand estimates, and would be essential to ensure that impacts at additional locations do not occur, traffic congestion caused by the Variant and the Variant's contribution to cumulative impacts would still be significant.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-15 Comparison of the Significant and Unavoidable Impacts of Variant 3: Candlestick Point Tower to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
The Tower Variants would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the Tower Variants would result in significant AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	<	=	<=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					
The Tower Variants would result in significant Tower Variants traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
NOISE					
Construction of the Tower Variants would create excessive groundborne vibration levels in existing residential neighborhoods adjacent to the Project site and at proposed on-site residential uses should the latter be occupied before construction activity on adjacent parcels is complete. Although the construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Construction activities associated with the Tower Variants would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	=	<=	<=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Operation of the Tower Variants would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes.					
Significance of Alternative Compared to Variant	<	=	<=	<=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					

Table VI-15	Comparison of the Significant and Unavoidable Impacts of Variant 3: Candlestick Point Tower to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]

< Alternative does lessen the severity of the impact
> Alternative increases the severity of the impact
= Alternative impact is similar to the Project impact
NI = No Impact
LTS = Less-Than-Significant impact
SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-201, Table VI-16 (Comparison of the Significant and Unavoidable Impacts of Variant 4: Utilities to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table VI-16	Comparison of the Significant and Unavoidable Impacts of Variant 4: Utilities to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The Utilities Variant would result in construction-related transportation impacts in the Utilities Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the Utilities Variant vicinity. Mitigation measure MM TR-1 would reduce but not avoid construction-related transportation impacts during construction activities. Therefore, construction transportation impacts would remain significant.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Implementation of the Utilities Variant would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts. Although implementation of a Travel Demand Management Plan was assumed in developing Utilities Variant travel demand estimates, and would be essential to ensure that impacts at additional locations do not occur, traffic congestion caused by the Utilities Variant and the Utilities Variant's contribution to cumulative impacts would still be significant.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-16 Comparison of the Significant and Unavoidable Impacts of Variant 4: Utilities to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
The Utilities Variant would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the Utilities Variant would result in significant AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	<	=	<=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					
The Utilities Variant would result in significant Variant traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
AIR QUALITY					
Operation of the Utilities Variant would violate BAAQMD CEQA significance thresholds for mass criteria pollutant emissions from mobile and area sources and contribute substantially to an existing or projected air quality violation at full build-out ~~in the year 2029~~.					
Significance of Alternative Compared to Variant	<	=	<=	<=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SUSU	SU/SU	SU/SU
NOISE					
Construction of the Utilities Variant would create excessive groundborne vibration levels in existing residential neighborhoods adjacent to the Project site and at proposed on-site residential uses should the latter be occupied before construction activity on adjacent parcels is complete. Although the construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Variant	<=	=	<=	<=	<=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Construction activities associated with the Utilities Variant would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	=	<=	<=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-16 Comparison of the Significant and Unavoidable Impacts of Variant 4: Utilities to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Operation of the Utilities Variant would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes.					
Significance of Alternative Compared to Variant	<	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

…

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= Alternative impact is similar to the Project impact
NI = No Impact
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SU = Significant and Unavoidable Impact

a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

Page VI-208, Table VI-17 (Comparison of the Significant and Unavoidable Impacts of Variant 5: 49ers/Raiders Shared Stadium to Each of the Alternatives) has been revised (only those rows where there are changes are shown)

[NOTE: This table has been revised at the request of City/Agency staff to correct a typographical error.]

Table VI-17 Comparison of the Significant and Unavoidable Impacts of Variant 5: 49ers/Raiders Shared Stadium to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
TRANSPORTATION					
The 49ers/Shared Stadium Variant would result in construction-related transportation impacts in the 49ers/Shared Stadium Variant vicinity due to construction vehicle traffic and roadway construction and would contribute to cumulative construction impacts in the 49ers/Shared Stadium Variant vicinity. Mitigation measure MM TR-1 would reduce but not avoid construction-related transportation impacts during construction activities. Therefore, construction transportation impacts would remain significant.					
Significance of Alternative Compared to Variant	~~<~~=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU

Table VI-17 Comparison of the Significant and Unavoidable Impacts of Variant 5: 49ers/Raiders Shared Stadium to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
Implementation of the 49ers/Shared Stadium Variant would cause an increase in traffic that would be substantial relative to the existing and proposed capacity of the street system, and result in significant and unavoidable impacts. Although implementation of a Travel Demand Management Plan was assumed in developing 49ers/Shared Stadium Variant travel demand estimates, and would be essential to ensure that impacts at additional locations do not occur, traffic congestion caused by the 49ers/Shared Stadium Variant and the 49ers/Shared Stadium Variant's contribution to cumulative impacts would still be significant.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
The 49ers/Shared Stadium Variant would result in significant impacts and would contribute to significant cumulative impacts at intersections in the Variant vicinity where no feasible traffic mitigation measures have been identified.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
At the intersection of Tunnel/Blanken, the 49ers/Shared Stadium Variant would result in significant AM peak hour traffic impacts, and contribute to cumulative PM peak hour traffic impacts, for which a feasible mitigation measure has been identified. The identified mitigation measure would improve traffic operations, but not to acceptable levels of service.					
Significance of Alternative Compared to Variant	<	=	<=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
…					
The 49ers/Shared Stadium Variant would result in significant Variant traffic spillover impacts and contribute to cumulative traffic spillover impacts. The identified mitigation measures would reduce, but not avoid, traffic spillover impacts.					
Significance of Alternative Compared to Variant	<=	=	=	=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
…					
For as many as 24 times a year 49ers/Raiders games at the proposed stadium would result in significant impacts on study area roadways and intersections. Implementation of mitigation measure MM TR-38 would lessen game-day impacts; however, traffic impacts would remain significant.					
Significance of Alternative Compared to Variant	<	<=	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
The existing game day service and 49ers/Shared Stadium Variant transit improvements would not be adequate to accommodate projected transit demand. Implementation of mitigation measure MM TR-39 would reduce game-day impacts on transit capacity; however, traffic impacts on transit operations would remain significant.					
Significance of Alternative Compared to Variant	<	<=	<	<	<
Level of Significance after Mitigation (Variant/Alternative)	SU/NI	SU/SU	SU/NI	SU/NI	SU/NI
…					

Table VI-17 Comparison of the Significant and Unavoidable Impacts of Variant 5: 49ers/Raiders Shared Stadium to Each of the Alternatives [Revised]

	Alternative 1 No Project[a]	*Alternative 2 No Bridge Alt*[b]	*Alternative 3 49ers at Candlestick*[c]	*Alternative 4 Lesser Build with Historic Preservation*[d]	*Alternative 5 No Park Agreement*[e]
AIR QUALITY					
Operation of the 49ers/Shared Stadium Variant would violate BAAQMD CEQA significance thresholds for mass criteria pollutant emissions from mobile and area sources and contribute substantially to an existing or projected air quality violation at full build-out ~~in the year 2029~~.					
Significance of Alternative Compared to Variant	<	~~<~~=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
NOISE					
Construction of the 49ers/Shared Stadium Variant would create excessive groundborne vibration levels in existing residential neighborhoods adjacent to the Project site and at proposed on-site residential uses should the latter be occupied before construction activity on adjacent parcels is complete. Although the construction vibration impacts would be temporary, would not occur during recognized sleep hours, and would be consistent with the requirements for construction activities that exist in Sections 2907 and 2908 of the *Municipal Code*, vibration levels would still be significant.					
Significance of Alternative Compared to Variant	~~<~~=	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/SU	SU/SU	SU/SU	SU/SU	SU/SU
Construction activities associated with the 49ers/Shared Stadium Variant would result in a substantial temporary or periodic increase in ambient noise levels.					
Significance of Alternative Compared to Variant	<	=	~~<~~=	~~<~~=	=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU
Operation of the 49ers/Raiders Shared Stadium Variant would generate increased local traffic volumes that would cause a substantial permanent increase in ambient noise levels in existing residential areas along the major Project site access routes.					
Significance of Alternative Compared to Variant	<	=	~~<~~=	~~<~~=	~~<~~=
Level of Significance after Mitigation (Variant/Alternative)	SU/LTS	SU/SU	SU/SU	SU/SU	SU/SU

…

< Alternative does lessen the severity of the impact
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a. No Project
b. CP-HPS Phase II Development Plan, HPS Phase II Stadium, State Parks Agreement, and without the Yosemite Slough Bridge
c. Reduced CP-HPS Phase II Development, San Francisco 49ers Stay at Existing Candlestick Park Stadium, with Limited State Parks Agreement, and Yosemite Slough Bridge Serving Only Transit, Bicycles, and Pedestrians
d. Reduced CP-HPS Phase II Development~~,~~; Historic Preservation; State Parks Agreement; No HPS Phase II Stadium, ~~no State Parks Agreement, and without the~~ Marina, or Yosemite Slough Bridge
e. Reduced CP-HPS Phase II Development, No HPS Phase II Stadium, No State Parks Agreement, and without the Yosemite Slough Bridge

F.31 Changes to Chapter VIII (Acronyms/Abbreviations and Glossary)

Pages VIII-1 through -13

[NOTE: The acronyms/abbreviations table has been revised to add new acronyms included in responses to comments.]

Acronym/ Abbreviation	*Definition*
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
AB 32	California Global Warming Solutions Act of 2006
ABAG	Association of Bay Area Governments
ACB	Articulated Concrete Block
ACBM	Asbestos Containing Building Materials
ACORN	Association of Community Organizations for Reform Now
ADA	American Disabilities Act
ADMP	Asbestos Dust Mitigation Plan
ADRP	Archaeological Data Recovery Plan
AEP	Association of Environmental Professionals
AERMOD	American Meteorological Society/Environmental Protection Agency Regulatory Model
Agency	San Francisco Redevelopment Agency
Agency Commission	San Francisco Redevelopment Agency Commission
AGO	California Attorney General's Office
ALS	Advanced Life Support
AMI	Area Median Income
AMP	Archaeological Monitoring Program
ANSI	American National Standards Institute
AOC	Administrative Order of Consent
ARB	California Air Resources Board
ARDTP	Agency for Toxic Substances and Disease Registry
ARIC	Area Requiring Institutional Controls
AST	Above-Ground Storage Tank
AT&T Park	San Francisco Giants Ballpark
ATCM	Asbestos Airborne Toxic Control Measure
ATP	Archaeological Testing Plan
ATSDR	Agency for Toxic Substances and Disease Registry
AWSC	All-Way Stop Controlled
AWSS	Auxiliary Water Supply System
BAAQMD	Bay Area Air Quality Management District
BART	Bay Area Rapid Transit
Basin Plan	San Francisco Bay Basin Water Quality Control Plan
BASMAA	Bay Area Stormwater Management Agencies Association
BAT	Best Available Technology Economically Achievable
BAU	Business as Usual
Bay	San Francisco Bay
Bay Area	San Francisco Bay Area

Acronym/ Abbreviation	*Definition*
Bay Plan	San Francisco Bay Plan
Bay Trail	San Francisco Bay Trail
Bay Trail Plan	San Francisco Bay Trail Plan
BayCAMP	Bayview Community Air Monitoring Project
BCDC	San Francisco Bay Conservation and Development Commission
BCT	Best Conventional Pollutant Control Technology
BERA	Baseline Ecological Risk Assessment
BFE	Base Flood Elevation
BIT	Bayview Industrial Triangle
BLIP	Branch Library Improvement Program
BLS	Basic Life Support
BMPs	Best Management Practices
Board of Supervisors	San Francisco Board of Supervisors
BOE	Bureau of Engineering
Boundaries Analysis	San Francisco Police Department District Station Boundaries Analysis
BRAC	Base Realignment and Closure
Brisbane Baylands North	Brisbane Baylands Future Phase Area
Brisbane Baylands South	Brisbane Baylands Phase I Specific Plan Area
BRT	Bus Rapid Transit
BTI	Bayview Transportation Improvements
BTIP	Bayview Transportation Improvements Project
BVHP	Bayview Hunters Point
BVHP Area Plan	Bayview Hunters Point Area Plan
BVHP Redevelopment Plan	Bayview Hunters Point Redevelopment Plan
BWWF	Bayside Wet Weather Facilities
C&D	Construction and Demolition
C&R	Comment and Response
C-1 Baylands	Commercial Mixed-Use Zoning District
C_2F_6	PFC: Hexafluoroethane
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAC	Citizens Advisory Committee
CAFE	Corporate Average Fuel Economy
Cal/EPA	California Environmental Protection Agency
Cal/OSHA	California Department of Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CAP	Climate Action Plan (as used in the Greenhouse Gas Emissions section)
CAP	Corrective Action Plan
CAPCOA	California Air Pollution Control Officers Association
CARE	Community Air Risk Evaluation
CAT	Climate Action Team
CBC	California Building Code
CCAR	California Climate Action Registry
CCBA	Core Community Benefits Agreement
CCCC	California Climate Change Center

Acronym/ Abbreviation	*Definition*
CCR	California Code of Regulations
CCSF	City and County of San Francisco
CCTA	Contra Costa Transportation Authority
CDC	Centers for Disease Control
CDFG	California Department of Fish and Game
CDPH	California Department of Public Health
CDPR	California Department of Parks and Recreation
CEC	California Energy Commission
CEG	Certified Engineering Geologist
Central Bay	San Francisco Bay Central
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Cleanup and Liability Act
CESA	California Endangered Species Act of 1984
CEUS	California Commercial End-Use Survey
CF_4	PFC: Tetrafluoromethane
CFCs	Chlorofluorocarbons
CFD	Community Facilities District
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH_4	Methane
CHP	California Highway Patrol
CIE	Cultural/Institutional/Educational
City	City and County of San Francisco
CIWMB	California Integrated Waste Management Board
CMP	Congestion Management Program
CMTP	Construction Management Traffic Plan
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CNRA	California Natural Resources Agency
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COG	Council of Governments
Concept Plan	Bayview Hunters Point Community Revitalization Concept Plan
Construction General Permit	NPDES General Permit for Storm Water Discharges Associated with Construction Activity
Corps	United States Army Corps of Engineers
CP	Candlestick Point
CP-HPS Phase II	Candlestick Point–Hunters Point Shipyard Phase II
CPSRA	Candlestick Point State Recreation Area
CPSRA General Plan	Candlestick Point State Recreation Area General Plan
CPUC	California Public Utilities Commission
CPX	Candlestick Point Downtown Express
CRHR	California Register of Historic Resources
CSLC	California State Lands Commission

Acronym/ Abbreviation	*Definition*
CSMP	Construction Site Monitoring Program
CSO	Combined Sewer Overflow
CTC	California Transportation Commission
CTMP	Construction Transportation Management Plan
CTTP 2000	Census 2000 Transportation Planning Package
CWA	Clean Water Act of 1977
CY	Cubic Yards
D4D	Design for Development
dBA	A-weighted decibel scale
DBH	Diameter at Breast Height
DBI	Department of Building Inspection
DCP	Dust Control Plan
DDA	Disposition and Development Agreement
DDC	Deep Dynamic Compaction
DDT	Dichlro-diphenyl-trichloroethane
DEIS	Draft Environmental Impact Statement
Demand Report	2004 San Francisco Retail Water Demands and Conservation Potential Report
DHS	California Department of Health Services
DMMO	Dredged Material Management Office
DOD	Department of Defense
DOE	United States Department of Energy
DOT	United States Department of Transportation
DPH	Department of Public Health
DPM	Diesel Particulate Matter
DPR	California Department of Parks and Recreation
DPS	Distinct Population Segment
DPW	Department of Public Works
DTSC	California Department of Toxic Substances Control
Dust Ordinance	Construction Dust Control Ordinance
DWR	Department of Water Resources
EAM	Early Action Measure
eb	East Bound
EC	Elemental carbon
EE	Environmental Evaluation
EFH	Essential Fish Habitat
EHS	Electromagnetic hypersensitivity
EHSP	Environmental Health and Safety Plan
EIR	Environmental Impact Report
EIS	Environmental Impact Statement
EISA	Energy Independence and Security Act of 2007
EMFAC	Emission Factor Model
EMS	Emergency Medical Services
EMS	Environmental Management System (as used in the Utilities section)
ENA	Exclusive Negotiations Agreement
ENVIRON	ENVIRON International Corporation

Acronym/ Abbreviation	*Definition*
EPA	United States Environmental Protection Agency
ERA	Ecological Risk Assessment
ERM	Effects Range Median
ERO	Environmental Review Officer
ESA	Environmental Site Assessment (as used in the Hazards and Hazardous Materials section)
ESA	Endangered Species Act (as used in the Biological Resources section)
ESCP	Erosion and Sediment Control Plan
ESUs	Evolutionary Significant Units
ETCA	Early Transfer Cooperation Agreement
F	Fahrenheit
FAA	Federal Aviation Administration
FAC	Facultative
FACW	Facultative Wetland
FARR	Final Archaeological Resources Report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act of 1973
FFA	Federal Facilities Agreement
FHWA	Federal Highway Administration
Findings	Findings of Fact
FIRM	Flood Insurance Rate Map
FMP	Fisheries Management Plan
FOSET	Finding of Suitability for Early Transfer
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability Transfer
FS	Feasibility Study
FTA	Federal Transit Administration
FTE	Full-time Equivalent
g	Gravity
GCMs	General Circulation Models
GE	California Registered Geotechnical Engineer
General Plan	San Francisco General Plan
Geomatrix	Geomatrix Consultants, Inc.
GGBHTD	Golden Gate Bridge, Highway, and Transportation District
GGNRA	Golden Gate National Recreation Area
GHG	Greenhouse Gas
GIS	Geographic Information Systems
GMP	Gas Monitoring Probe
GP Guidelines	General Plan Guidelines 2003
GPM	Gallons Per Minute
GPR	Green Point Rated
GPRC	Geotechnical Peer Review Committee
GRACE	Gravity Recovery and Climate Experiment
gsf	Gross Square Feet
GWP	Global Warming Potential
HABS	Historic American Building Survey

Acronym/ Abbreviation	*Definition*
HAER	Historic American Engineering Record
HASP	Health and Safety Plan
HBO	Home Based Other Trip
HBS	Home Based Shopping
HBW	Home Based Work
HCD	Housing and Community Development
HCM	Highway Capacity Manual
HCM	Highway Capacity Manual
HFCs	Hydrofluorocarbons
HHRA	Human Health Risk Assessment
HHWP	Hetch Hetchy Water and Power
HI	Hazard Index
HMBP	Hazardous Materials Business Plan
HMFRA	Housing and Fair Market Development Metro Fair Market Rent Area
Housing Program	Citywide Tax Increment Housing Program
Housing Variant	Variant 2: No Stadium – Housing Variant
HOV	High Occupancy Vehicle
HPRP	Hunters Point Redevelopment Plan
HPS	Hunters Point Shipyard
HPS Phase II	Hunters Point Shipyard Phase II
HPS Redevelopment Plan	Hunters Point Shipyard Redevelopment Plan
HPX	Hunters Point Shipyard Downtown Express
HR 2764	The Consolidated Appropriations Act of 2008
HRA	Historical Radiological Assessment
HRE	Historic Resource Evaluation
HSRA	High-Speed Rail Authority
HTL	High Tide Level
HUD	US Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
I-280	Interstate 280
IB	India Basin
IBC	International Building Code
IBIP	India Basin Industrial Park
ICBO	International Conference of Building Officials
ICC	International Code Council
ICs	Institutional Controls
IEPR	Integrated Energy Policy Report
Industrial General Permit	NPDES General Industrial Permit for Discharges of Storm Water Associated with Industrial Activities
Interim CIP	Wastewater Enterprise Interim Capital Improvement Program
IPCC	Intergovernmental Panel on Climate Change
IR Sites	Installation Restoration Sites
IRP	Installation Restoration Program
IS	Initial Study
ITE	Institute of Transportation Engineers

Acronym/ Abbreviation	*Definition*
ITL	Interim Target Level
JARPA	Joint Aquatic Resources Permit Applications
JPB	The Peninsula Corridor Joint Powers Board
K	Kindergarten (as used in the Public Services section)
KJ	Franciscan Complex
Kyoto Protocol	United Nations' Framework Convention on Climate Change Agreement
lbs	pounds
LCA	Life Cycle Assessment
LCFS	Low Carbon Fuel Standard
LEED®	Leadership in Energy and Environmental Design
Lennar Urban	Lennar/Bayview Hunters Point Limited Liability Corporation
L_{eq}	Average Noise Level
LID	Low Impact Development
LIFOC	Lease in Furtherance of Conveyance
L_{max}	Highest Peak Noise
L_n	Statistical Sound Level
LOMR-F	Letter of Map Revision Based on Fill
LOS	Level of Service
Lower Bay	San Francisco Bay Lower
LRT	Light Rail Transit
LRV	Light-Rail Vehicle
LRV	Light Rail Vehicle
LTMS	Long-Term Management Strategy for the Placement of Dredged Material in the San Francisco Bay Region
LTS	Less-Than-Significant Impact
LTS/M	Less-Than-Significant Impact with Mitigation
LUCRD	Land Use Control Remedial Designs
LUPs	Linear Underground/Overhead Projects
LWCF	Land and Water Conservation Fund
LWCFA	Land and Water Conservation Fund Act of 1965
M	Moment Magnitude (as used in the Geology and Soils section)
M	Manufacturing
M-1	Light Industrial District
M-2	Heavy Industrial District
MBRs	Membrane Bioreactors
MBTA	Migratory Bird Treaty Act
MBtu	Million British Thermal Units
MC	Motor Coach
MEA	Major Environmental Analysis
MED	Medical and Health Services
MEI	Maximally Exposed Individual
MEP	Maximum Extent Practicable (as used in the Hydrology and Water Quality section)
MEP	Maximum Extent Possible (as used in the Hydrology and Water Quality section)
MGD	Million Gallons per Day

Acronym/ Abbreviation	*Definition*
MHW	Mean High Water
MID	Modesto Irrigation District
MIP	Management and Information Professional Services
Mitigation Monitoring Plan	Wetland and Jurisdictional Waters Mitigation Monitoring Plan
MLD	Most Likely Descendant
MLLW	Mean Lower Low Water
MM	Mitigation Measure
MMI	Modified Mercalli Intensity
MMPA	Marine Mammal Protection Act
MMRP	Mitigation Monitoring and Report Program
$MMTCO_2E$	Million Metric Tons of CO_2-Equivalent
MOA	Memorandum of Agreement
MPH	Miles per hour
MPO	Metropolitan Planning Organization
MS4	Municipal Separate Storm Sewer System
MSA	Magnuson-Stevens Act
MT	Metric Tonnes
MTC	Metropolitan Transportation Commission
MTS	Metropolitan Transportation System
MU	Mixed-Use
Muni	San Francisco Municipal Railway
Municipal Stormwater General Permit	Phase II NPDES General Permit for the Discharge of Storm Water from Small MS4s
N_2O	Nitrous Oxide
NAHC	Native American Heritage Commission
NALs	Technology-Based Numeric Action Levels
NASA	National Aeronautics and Space Administration
NAT	No Action Taken
NAVD88	North American Vertical Datum of 1988
Navy	United States Navy
nb	North Bound
NC	Neighborhood Commercial
NC-1	Neighborhood Commercial Cluster
NC-2	Small-Scale Neighborhood Commercial
NCD-IB	Neighborhood Commercial District, India Basin
NCP	National Contingency Plan
NEHRP	National Earthquake Hazards Reduction Program
NELs	Technology-Based Numeric Effluent Limitations
NEP	New Expenditure Plan
NEPA	National Environmental Policy Act
NFA	No Further Action
NFIP	National Flood Insurance Program
NFL	National Football League
NGVD29	National Geodetic Vertical Datum
NHB	Non-home Based

Acronym/ Abbreviation	*Definition*
NHPA	National Historic Preservation Act of 1966
NHTSA	National Highway Traffic Safety Administration
NI	No Impact
NMFS	National Marine Fisheries Services
NO_2	Nitrogen Dioxide
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NOP	Notice of Preparation
NO_X	Nitrogen Oxides
NPDES	National Pollutant Discharge Elimination System
NPL	National Priorities List
NPRA	National Parks and Recreation Association
NPS	National Park Service
NPSs	Nonpoint Sources (as used in the Hydrology and Water Quality section)
NPWWF	North Point Wet Weather Facility
NRC	National Resource Council
NRDL	Naval Radiological Defense Laboratory
NRHP	National Register of Historic Places
NSC	No Significant Contribution
NSMCSD	North San Mateo County Sanitation District
NTP	Neighborhood Transportation Plan
NURP	Nationwide Urban Runoff Program
NWIC	California Archaeological Site Survey Northwest Information Center
O&G	Oil and Grease
O_3	Ozone
OAL	Office of Administrative Law
OBL	Obligate
^oF	degrees Fahrenheit
OHW	Ordinary High Water
OPA	Owner Participation Agreement
OPR	California Office of Planning and Research
OS	Open Space
OSHA	Occupational Safety and Health Agency
P	Public
PA	Programmatic Agreement
PA	Public Address System (as used in the Noise and Vibration section)
PA&ED	Project Approval and Environmental Document
PA/SI	Preliminary Assessment and Site Identification
PAC	Bayview Hunters Point Project Area Committee
PAHs	Polycyclic Aromatic Hydrocarbons
Pathogens	Bacteria and Viruses
Pb	Lead
pc/h	Passenger cars per hour
pc/mi/ln	Passengers cars per mile per lane
PCBs	Polychlorinated Biphenyls

Acronym/ Abbreviation	*Definition*
PCC	Portland Concrete Cement
PCEs	Primary Constituent Elements
PCOs	Parking Control Officers
PCWQCA	Porter-Cologne Water Quality Control Act
PDF	Project Design Feature
PDR	Production, Distribution, and Repair
PDT	Pacific Daylight Time
PE	Professional Engineer
PEIR	Program Environmental Impact Report
Peninsula	San Francisco Bay Area Peninsula
PFCs	Perfluorocarbons
PG&E	Pacific Gas and Electric
Phase I ESA	Phase I Environmental Site Assessment
PI	Project Impact
Pier 80 Outfall	Southeast Pollution Control Outfall
Planning Code	San Francisco Planning Code
Planning Commission	San Francisco Planning Commission
Planning Department	San Francisco Planning Department
PM	Particle Matter
PM_{10}	Respirable Particulate Matter
$PM_{2.5}$	Fine Particulate Matter
Port	Port of San Francisco
ppm	Parts per Million
PPRF	Pulse Plasma Rock Fragmentation
PRC	Public Resources Code
PRDs	Permit Registration Documents
PRMMP	Paleontological Resources Monitoring and Mitigation Program
Project	Candlestick Point–Hunters Point Shipyard Phase II Development Plan Project
PSSG	Public Safety Strategies Group
PST	Pacific Standard Time
PV	Photovoltaic
Qaf	Artificial Fill
Qc	Colma Formation
Qm	Bay Mud Deposits
QMS	Quality Management System
QSD	Qualified SWPPP Developer
QSP	Qualified SWPPP Practitioner
Qsr	Slope Debris and Revise Fill
Qu	Undifferentiated Sedimentary Deposits
R Value	Rainfall Erosivity Value
R&D	Research and Development
R&D Variant	Variant 1: No Stadium – Additional Research and Development Variant
RAP	Rammed Aggregate Piers
RBCA	Risk Based Corrective Action
RCRA	Resource Conservation and Recovery Act

Acronym/ Abbreviation	*Definition*
RD	Remedial Design
REAP	Rain Event Action Plan
REB	Resource Efficient Building
RECs	Recognized Environmental Conditions
Recycled Water General Permit	General Waste Discharge Requirements for Landscaping Irrigation Uses of Municipal Recycled Water
RET	Retail
RFS	Renewable Fuel Standard
RFS	Renewable Fuel Standard
RH-1	Residential House One-Family District
RH-1D	Residential House Character District
RH-2	Residential House Two-Family District
RHNA	Regional Housing Needs Assessment
RHNP	Regional Housing Needs Plan
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
RIC	Rapid Impact Compaction
RM-1	Residential, Mixed District
RM-2	Residential, Mixed Moderate Density District
RMP	Risk Management Plan
ROD	Record of Decision
ROG	Reactive Organic Gas
ROWD	Report of Waste Discharge
RPD	San Francisco Recreation and Park Department
RPP	Residential Permit Parking
RPS	Renewables Portfolio Standard
RTAC	Regional Targets Advisory Committee
RTPs	Regional Transportation Plans
RUSLE	Revised Universal Soil Loss Equation
RV	Recreational Vehicle
RWMP	Recycled Water Master Plan
RWQCB	Regional Water Quality Control Board
RWS	Regional Water System
RWSAP	Retail Water Shortage Allocation Plan
SACOG	Sacramento Area Council of Governments
SamTrans	San Mateo County Transit Districts
SAP	Special Area Plan
SB	Senate Bill
sb	South Bound
SC	Specific Conductance
SC	Standard Condition (as used in the Climate Change section)
SC/PI	Significant Contribution/Project Impact
SCBA	Self-Contained Breathing Apparatus
SCC	California State Coastal Conservancy
SCP	Stormwater Control Plan
SDMP	Stormwater Drainage Master Plan

Acronym/ Abbreviation	*Definition*
Seaport Plan	San Francisco Bay Area Seaport Plan
SEIS	Supplemental Environmental Impact Statement
SF_6	Sulfur Hexafluoride
SFBAAB	San Francisco Bay Area Air Basin
SFBC	San Francisco Building Code
SFCAP	San Francisco Climate Action Plan
SFCD	San Francisco City Datum
SF-CHAMP	San Francisco County's travel demand model
SFCTA	San Francisco County Transportation Authority
SFDPH	San Francisco Department of Public Health
SFDPW	San Francisco Department of Public Works
SFEI	San Francisco Estuary Institute
SFFD	San Francisco Fire Department
SFGSP	San Francisco Groundwater Supply Project
SFHA	San Francisco Housing Authority
SFHA	Special Flood Hazard Area (as used in the Hydrology and Water Quality section)
SFMTA	The San Francisco Municipal Transportation Agency
SFO	San Francisco International Airport
SFPD	San Francisco Police Department
SFPL	San Francisco Public Library
SFPUC	San Francisco Public Utilities Commission
~~SFPUC~~	~~San Francisco Public Utilities Commission~~
SFRPD	San Francisco Recreation and Park Department
SFRWQCB	San Francisco Bay Regional Water Quality Control Board
SFUSD	San Francisco Unified School District
SGMP	Soil and Groundwater Management Plan
SHPO	State Historic Preservation Officer
SI	Site Identification
SIC	Standard Industrial Classification
SIP	State Implementation Plan
SLERA	Screening-Level Ecological Risk Assessment
SO_2	Sulfur Dioxide
SoMa	South of Market
SP	Service Population
SPP	Spill Prevention Plans
SPT	Standard Penetration Test
SRA	State Recreation Area
SRRE	Source Reduction and Recycling Element
SSSC	Side-Street Stop Controlled
Stormwater Design Guidelines	Draft San Francisco Stormwater Design Guidelines
SU	Significant and Unavoidable Impact
SUD	Special Use District
SVE	Soil Vapor Extraction System
SVOCs	Semi-Volatile Organic Compounds

Acronym/ Abbreviation	*Definition*
SVP	Society for Vertebrate Paleontology
SWIS	Solid Waste Information
SWMP	Site Waste Management Plan (as used in the Utilities section)
SWMP	Stormwater Management Plan (as used in the Hydrology and Water Quality section)
SWPCP	Southeast Water Pollution Control Plant
SWPPP	Storm Water Pollution Prevention Plans
SWRCB	State Regional Water Quality Control Board
TAC	Toxic Air Contaminants
TAR	Third Assessment Report
TAZ	Traffic Analysis Zones
TBD	To Be Determined
TC	Trolley Coach
TCRA	Time Critical Removal Action
TDM	Transportation Demand Management
TDM Plan	Transportation Demand Management Plan
TDS	Total Dissolved Solids
TEP	Transit Effectiveness Project
TEPHd	Total Extractable Petroleum Hydrocarbons as Diesel
Tg	Teragram
TMDL	Total Maximum Daily Load
TMP	Transportation Management Plan
TNM	Traffic Noise Model
TOC	Total Organic Carbon
Tower Variants	Candlestick Point Tower Variants
TPH	Total Petroleum Hydrocarbons
TPS	Transit Preferential Street
TPS	Transit Preferential Street
Triple A	Triple A Machine Shop
TSDs	Treatment, Storage, and Disposal Facilities
TSS	Total Suspended Solids
UCSF	University of California, San Francisco
UPC	Universal Paragon Corporation
URBEMIS	Urban Emissions Model
US	United States
USDA	United States Department of Agriculture
US DOT	United States Department of Transportation
US EPA Levels	Information of Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety
US-101	United States Highway 101
USACE	United States Army Corps of Engineers
USC	United States Code
US EPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGBC	United States Green Building Council
USGS	United State Geological Survey

Acronym/ Abbreviation	*Definition*
UST	Underground Storage Tank
UWMP	Urban Water Management Plan
v/c	Volume/Capacity
VCA	Voluntary Cleanup Agreement
VdB	Vibration Decibels
VDECS	Verified Diesel Emission Control Strategies
VIS	Visitor Lodging
VMT	Vehicle Miles Traveled
VOCs	Volatile Organic Compounds
VOR	Vehicle Occupancy Rate
VTA	Santa Clara Valley Transportation Authority
V-Zones	Coastal High Hazard Areas
Waterfront Plan	Port of San Francisco Waterfront Land Use Plan
wb	West Bound
WDR	Waste Discharge Requirement
WEPA	Worker Environmental Awareness Program
WETA	San Francisco Bay Area Water Emergency Transportation Agency
WETA	Water Emergency Transit Authority
WHO	World Health Organization
WSA	Water Supply Assessment
WSAP	Water Shortage Allocation Plan
WSAS	Water Supply Availability Study
WSIP	Water Supply Improvement Program
WTP	Water Treatment Plant
WWII	World War II
XII	Total Destruction on the Modified Mercalli Intensity Scale
ZVI	Zero-Valent Iron

F.32 Changes to Draft EIR Appendices

Appendices A1 through A5 have been added

[NOTE: Since publication of the Draft EIR, modifications have been made in the Project Development Schedule, as outline in Section B.1 (Project Refinements) of this document. These appendices present memoranda supporting the fact that the changes do not result in new or substantially more severe environmental impacts.]

Appendix D1 has been added

[NOTE: Since publication of the Draft EIR, some transit travel time increases associated with the Project have changed. A memorandum supplementing the Transportation Impact Study (Appendix D of the Draft EIR) is now included as Appendix D1.]

Appendix H3 has been revised

[NOTE: Appendix H3 has been revised in the main text and Attachment IV to conform to the revised text in Section III.H (Air Quality) and the text provided in Master Response 19 (Proposed BAAQMD Guidelines). While the

other components of Appendix H3 remain unchanged [Attachments I, II, III, V, and VI], the date of Appendix H3 has been changed in the footnotes and citations from September 28, 2009, which was the date of the appendix in the Draft EIR, to May 2010, to reflect the most current updates.]

Appendix H4 has been added

[NOTE: Appendix H4 presents additional analysis related to cumulative impacts and compliance with Article 38 of the San Francisco Health Code.*]*

Appendices J1 through J4 have been added

[NOTE: Two of the historical resources reports relied upon in the Draft EIR have been added as appendix material, rather than provided only as reference material, and two new historic resources reports (one related to the stadium and the other to the buildings and structures at HPS Phase II) have been added.]

Appendix N2 has been revised

[NOTE: Appendix N2 has been revised to include Yosemite Slough bridge plans and profiles for both the stadium and non-stadium options.]

Appendix Q2 has been revised

[NOTE: Appendix Q2 has been revised to include an additional water demand memorandum that presents results and analysis for Variant 2A (Housing/R&D Variant).]

Appendices T4 through T7 have been added

[NOTE: Since publication of the Draft EIR, modifications have been made to Variant 3 and Alternative 2, and Variant 2A and Subalternative 4A have been added. These appendices present memoranda supporting the fact that the changes do not result in new or substantially more severe environmental impacts.]

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