# H. Parks, Recreation and Open Space

# **Environmental Setting**

The San Francisco Recreation and Park Department maintains more than 200 parks, playgrounds, and open spaces throughout the City. The City's park system also includes 15 recreation centers, nine swimming pools, five golf courses as well as tennis courts, ball diamonds, athletic fields and basketball courts. The Recreation and Park Department manages the Marina Yacht Harbor, Candlestick (Monster) Park, the San Francisco Zoo, and the Lake Merced Complex. In total, the Department currently owns and manages roughly 3,380 acres of parkland and open space. Together with other city agencies and state and federal open space properties within the city, about 6,360 acres of recreational resources (a variety of parks, walkways, landscaped areas, recreational facilities, playing fields and unmaintained open areas) serve San Francisco.<sup>172</sup>

San Franciscans also benefit from the Bay Area regional open spaces system. Regional resources include public open spaces managed by the East Bay Regional Park District in Alameda and Contra Costa counties; the National Park Service in Marin, San Francisco and San Mateo counties as well as state park and recreation areas throughout. In addition, thousands of acres of watershed and agricultural lands are preserved as open spaces by water and utility districts or in private ownership. The Bay Trail is a planned recreational corridor that, when complete, will encircle San Francisco and San Pablo Bays with a continuous 400-mile network of bicycling and hiking trails. It will connect the shoreline of all nine Bay Area counties, link 47 cities, and cross the major toll bridges in the region. To date, approximately 240 miles of the alignment—over half the Bay Trail's ultimate length—have been completed. A segment of the Bay Trail passes through the Central Waterfront planning area along Third Street. This trail segment is classified as an "unimproved Bay Trail (on-street), with no bike lanes and/or sidewalks."<sup>173</sup>

Within San Francisco, publicly accessible open spaces and recreational facilities are categorized according to their size and particular amenities as serving the city, district, neighborhood, or subneighborhood. Several larger open space areas, including Golden Gate Park (1, 017 acres), the Lake Merced complex (700 acres; 368-acre lake) and John McLaren Park (317 acres) compose about one-half of the total city-owned acreage in recreational use. Unlike neighborhood facilities, these larger areas provide programs, activities or recreation opportunities that serve the city as a whole. These spaces, in addition to smaller areas with unique attributes such as water features or hilltop vista points, function as city-serving open spaces because they attract residents from the entire city.

<sup>&</sup>lt;sup>172</sup> Recreational resource acreages taken from the San Francisco Recreation and Park Department inventory, May 2006.

<sup>&</sup>lt;sup>173</sup> More information related to the Bay Trail is available at the Association of Bay Area Government's website, http://baytrail.abag.ca.gov/overview.html

In addition to the larger open spaces, Recreation and Park Department land comprises more than one hundred parks and recreational facilities (both outdoor and indoor), which function mainly for neighborhood use. These smaller facilities are primarily used by residents in the immediate surrounding area and are categorized by size and intended service area. District-serving parks are generally larger than 10 acres and have a service area consisting of a three-eighths-mile radius around the park, while neighborhood-serving parks are generally one to 10 acres and have a service area of one-quarter of a mile. Subneighborhood-serving open spaces, often referred to as mini parks, are too small to accommodate athletic facilities. These parks tend to include seating areas, small landscaped spaces, totlots targeting pre-school age children, and playgrounds with amenities generally for elementary school age children. The service area for subneighborhood parks is one-eighth of a mile.

As discussed in Section IV.B, Plans and Policies, the *San Francisco General Plan* establishes a goal of serving every neighborhood with adequate public open space and recreational facilities. Policies in the *General Plan*'s Recreation and Open Space Element state that access is a key factor in park utilization and that every San Franciscan "should be serviced with a park within walking distance of their home." As illustrated in the proceeding analysis, existing open space and recreational facilities are unequally distributed throughout the city and many of the underserved communities are within the four Eastern Neighborhoods.

## **Open Space and Facilities Inventory**<sup>174</sup>

There are 24 parks and open spaces within the boundaries of the Eastern Neighborhoods. These include 19 parks under the jurisdiction of the Recreation and Park Department, three parks under jurisdiction of the Port of San Francisco, one community garden owned by the San Francisco Redevelopment Agency, and one open space owned by Muni (see Section IV.A, Land Use). Five existing parks are located outside the Eastern Neighborhoods but whose service areas fall within the project area, including Yerba Buena Gardens north of East SoMa, the Howard and Langton Mini Park west of East SoMa, Mission Dolores Park east of the Mission, and Precita and Bernal Heights Parks south of the Mission.<sup>175</sup> Two approved redevelopment Plan areas, the Mission Bay North Redevelopment Plan and the Mission Bay South Redevelopment Plan, are located in an area surrounded by the Eastern Neighborhood project area to the north, west and south (approximately between King, Seventh and Mariposa Streets and the Bay). Together these plans,

<sup>&</sup>lt;sup>174</sup> The majority of the park and open space acreages in this Section were taken from *Green Envy: Achieving Equity in Open Space* published in December of 2003 by the Neighborhood Parks Council and cross-checked with the Recreation and Parks Department: http://www.sfneighborhoodparks.org/publications/greenenvy.html. Other sources of acreages include the *Recreation and Open Space Element* of the *General Plan* and various project status reports published by the Recreation and Park Department: http://www.sfgov.org/site/recpark\_index.asp.

<sup>&</sup>lt;sup>175</sup> The Recreation and Open Space Element of the *General Plan* establishes open space services area as "acceptable walking distance" from a recreational resource boundary. They are defined by varying radii from a park's edge depending on the size and type of open space as well as the surrounding topography. These are ½ mile (approximate ten minute walk) for city-serving open spaces, <sup>3</sup>/<sub>8</sub> mile (seven and a half minute walk) for district-serving open spaces, <sup>1</sup>/<sub>4</sub> mile (five minute walk) for neighborhood-serving open spaces and <sup>1</sup>/<sub>8</sub> mile for subneighborhood-serving open spaces.

which are currently under development, include over 40 acres of open space, a portion of which would serve areas in East SoMa, Showplace Square/Potrero Hill and the Central Waterfront Neighborhoods.<sup>176</sup> In addition to publicly owned and managed open space areas, there are several privately owned but publicly accessible open spaces within and servicing East SoMa.

The Recreation and Park Department conducted a gap analysis for the 2006 Recreation and Park Acquisition Policy (see *Regulatory Setting*), which revealed areas of the City considered to be underserved by parklands and open spaces, based on an analysis of neighborhood service area radii from each park's edge as established in the *General Plan*'s Recreation and Open Space Element.<sup>177</sup> Each of the four Eastern Neighborhoods includes areas found to be in need of recreational resources. Existing resources and deficiencies are described below.

**Figure 20** depicts the recreational facilities and/or open space resources in and adjacent to the Eastern Neighborhoods project area, along with their service radii.

## East SoMa

There are five existing facilities totaling approximately five acres of recreational resources within the boundaries of the East SoMa Neighborhood, three of which are managed by the Recreation and Park Department. **Table 52** lists existing parks and recreational facilities in East SoMa.

Park or Facility	Size (Acres)	Classification
South of Market Recreation Center	1.02	neighborhood
South Park	0.85	subneighborhood
Victoria Manalo Draves Park	2.00	neighborhood
Alice Street Community Gardens <sup>a</sup>	0.4 (est.)	subneighborhood
South Beach Park <sup>a</sup>	0.27	neighborhood
Total	4.55	

 TABLE 52

 OPEN SPACE AND RECREATIONAL FACILITIES IN EAST SOMA

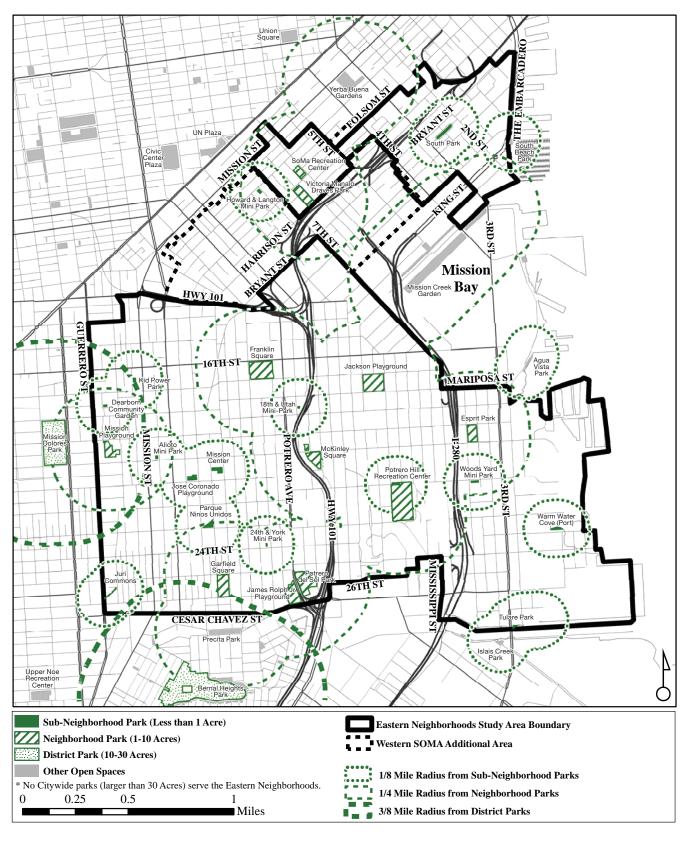
<sup>a</sup> These facilities managed by the San Francisco Redevelopment Agency.

SOURCES: San Francisco Recreation and Park Department, Parks Inventory, May 2006; and Recreation and Park Department Acquisition Policy Maps.

 <sup>&</sup>lt;sup>176</sup> San Francisco Redevelopment Agency, *Redevelopment Plan for the Mission Bay North Redevelopment Project*, October 26, 1998. San Francisco Redevelopment Agency, *Redevelopment Plan for the Mission Bay South Redevelopment Project*, November 2, 1998.

<sup>&</sup>lt;sup>177</sup> The Recreation and Park Department gap analysis methodology assumed open space service areas as established in the Recreation and Open Space Element of the *General Plan*. An exception is the Recreation and Park Department definition of city-serving parks as 30 acres in size and larger. A copy of the gap analysis can be found on the San Francisco Department of Recreation and Park website,

http://www.parks.sfgov.org/site/recpark\_page.asp?id=38780, last accessed December 4, 2006.



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Figure 20 Parks and Recreation Facilities and Service Areas

SOURCE: Seifel Consulting, Inc.

East SoMa also benefits from recently developed privately owned and publicly accessible open spaces concentrated in the South Beach area along Embarcadero, Beale, Delancey and Townsend Streets.

- The City and County of San Francisco has applied for a \$15 million grant administered by the state's Housing and Community Development Department's Infill Infrastructure Grant program to renovate the South of Market/Eugene Friend Recreation Center located at Sixth and Folsom Streets. The grant also seeks to fund construction of bulbouts and a signalized crossing across Folsom Street, which would connect the SoMa/Eugene Friend Recreation Center to the Victoria Manolo Draves park and the Bessie Carmichael school. Additionally, the grant proposal would provide supplemental funding for streetscaping improvements along Russ Street.
- East SoMa is also served by Yerba Buena Gardens north of the project area (4 acres between Mission, Folsom, Third and Fourth Streets) and Howard and Langton Mini Park west of the project area (0.23 acres on Howard Street between Seventh and Eighth Streets). Two redevelopment project areas immediately south of East SoMa, known as Mission Bay North and Mission Bay South, are currently under development. These redevelopment areas are planned to include over 40 acres of programmed open space, which would be accessible to area residents, employees and visitors.

According to a Gap Analysis conducted for the 2006 Recreation and Park Acquisition Policy (see *Regulatory Setting*, p. 370), East SoMa exhibits a current need for additional facilities and open space. The area considered deficient or underserved is north of Bryant Street from approximately Beale Street to approximately Fifth Street. However, the gap analysis did not include Yerba Buena Gardens, a district-serving open space under jurisdiction of the Redevelopment Agency, which would serve a portion of the project area south of Folsom Street between Hawthorne and Fifth Streets.

## Mission

As illustrated in **Table 53**, 11 Recreation and Park Department properties are within the boundaries of the Mission plan area, including six parks clustered in the southeastern portion of the neighborhood, one in the southwest and four parks in the northern Mission.

Park or Facility	Size (Acres)	Classification
Jose Coronado Playground	0.78	subneighborhood
The Mission Center	0.63	subneighborhood
Parque Ninos Unidos	0.53	subneighborhood
Garfield Square	2.93	neighborhood
James Rolph Jr. Playground	2.93	neighborhood
24th and York Mini Park	0.12	subneighborhood
Franklin Square	4.44	neighborhood
KidPower Park	0.24	subneighborhood
Mission Playground	2.02	neighborhood
Alioto Mini Park	0.16	subneighborhood
Juri Commons	0.32	subneighborhood
Total	15.09	

 TABLE 53

 OPEN SPACE AND RECREATIONAL FACILITIES IN THE MISSION

SOURCES: San Francisco Recreation and Park Department, Parks Inventory, May 2006; and Recreation and Park Department Acquisition Policy Maps.

The Recreation and Park Department also manages four larger open spaces with service areas that fall within the Mission neighborhood though outside the study area boundaries, including Dolores Park (13.38 acres between 18th, 20th, Dolores and Church Streets), Precita Park (2.21 acres one block south of the project area, between Folsom and Alabama Streets), McKinley Square (3 acres on 20th and Vermont Streets in the Showplace Square/Potrero Hill Neighborhood) and Bernal Heights Park (19.33 acres atop Bernal Hill one quarter-mile south of the project area).

The 2006 gap analysis, which included all of the above mentioned parks and recreation facilities, cited existing geographic deficiencies within the Mission, most notably north of 15th Street between Guerrero and Folsom Streets. This gap in service extends south to the area between KidPower Park and Franklin Square (between South Van Ness Avenue and Folsom Street from 15th to 19th Street). Other identified areas with existing deficiencies include an approximate sixblock area between Alabama and Hampshire Streets along 23rd Street and an area between Guerrero Street and South Van Ness Avenue and 22nd and 25th Streets.

## Showplace Square/Potrero Hill

The Showplace Square/Potrero Hill neighborhood contains four facilities managed by the Recreation and Park Department within its boundaries, which are presented in **Table 54**.

Park or Facility	Size (Acres)	Classification
Jackson Playground	4.41	neighborhood
McKinley Square	3.00	neighborhood
Potrero Playground	9.56	neighborhood
Potrero del Sol Park	4.36	neighborhood
Total	21.33	č

TABLE 54 OPEN SPACE AND RECREATIONAL FACILITIES IN SHOWPLACE SQUARE/POTRERO HILL

SOURCES: San Francisco Recreation and Park Department, Parks Inventory, May 2006; and Recreation and Park Department Acquisition Policy Maps.

Although there are relatively few parks within this neighborhood, they are generally large in size and have service area radii that cover the majority of the project area, according to the 2006 Gap Analysis. When considering the service areas of parks beyond the Showplace Square/Potrero Hill boundaries, nearly the entire neighborhood is served by recreational facilities including Esprit Park and Woods Yard Playground (see below) located east of the neighborhood as well as portions of both the Mission Bay North and South Redevelopment Areas (described above). The exception is in the northern portion in the neighborhood between U.S. 101, 15th, Channel, and Seventh Streets, which is underserved by recreational facilities.

## **Central Waterfront**

There are currently four parks within the Central Waterfront neighborhood, listed in Table 55.

Park or Facility	Size (Acres)	Classification
Esprit Park	2.00	neighborhood
Woods Yard Mini Park <sup>a</sup>	0.25	subneighborhood
Warm Water Cove <sup>a</sup>	0.57	neighborhood
Tulare Park <sup>a</sup>	0.21	subneighborhood
Total	3.03	-

#### TABLE 55 OPEN SPACE AND RECREATIONAL FACILITIES IN THE CENTRAL WATERFRONT

<sup>a</sup> Woods Yard Mini Park, at 22nd and Indiana Streets, is owned and managed by the San Francisco Municipal Railway. Warm Water Cove, on the Bay at the foot of 24th Street, and Tulare Park, on Islais Creek between Third and Illinois Streets, are under Port jurisdiction.

SOURCES: San Francisco Recreation and Park Department, Parks Inventory, May 2006; and Recreation and Park Department Acquisition Policy Maps.

Similar to East SoMa and Showplace Square/Potrero Hill neighborhoods, the open spaces in the Mission Bay South Redevelopment area serve existing and future residents of the Central Waterfront.

Though the population in the Central Waterfront is low and the ratio of residents to recreational resources is relatively high (roughly 1.5 acres per 1,000 residents), the geographic extent of the areas underserved by parks and open spaces is the largest of the Eastern Neighborhoods. The 2006 Gap Analysis found that most of the southern edge of the neighborhood, from César Chávez north to 25th Street, does not have sufficient park space within walking distance. In the eastern portion of the neighborhood, underserved areas extend north past 23rd Street and east to Michigan Street, although the area east of Illinois Street is not generally accessible because of Port and other industrial activities. Additionally, the entire northeast portion of the Central Waterfront (approximately 23rd and Michigan Street to the Bay) lacks park space as defined by accepted standards of geographic proximity; parts of this area, too, are largely inaccessible because of industrial operations.

## **Regulatory Setting**

## General Plan

The *San Francisco General Plan* provides general policies and objectives to guide land use decisions and development throughout the City, including the Eastern Neighborhoods. *General Plan* objectives and policies relevant to recreation and public space, including those in existing area plans, are discussed in Section IV.B, Plans and Policies, of this EIR.

## Proposition C and the Recreation and Park Acquisition Policy

In 2000, San Francisco voters approved Proposition C, extending the Open Space Fund that is used to finance acquisitions and capital improvements for Recreation and Park Department. The legislation created an annual set-aside of two and one-half cents for each one hundred dollars assessed valuation from the property tax levy. The Open Space Fund is funded through Fiscal Year 2030-2031. The legislation stipulates that at least five percent of the revenue raised through the set-aside be allocated to new land acquisition. In 2006, the Department, at the request of the Recreation and Park Commission, published the *Recreation and Park Acquisition Policy* to provide clear guidelines for the expenditure of acquisition funds under the Recreation and Park Commission.

The first objective stated in this policy is to align Recreation and Park Department acquisition priorities with Map 9 of the *General Plan* Recreation and Open Space Element, which identifies high need areas based on population, density, age, and income.<sup>178</sup> However, the Department ultimately used a separate map modeled after Map 9 and included demographic statistics (high residential, senior, and children densities per net acre, as well as and low household incomes relative to the city median household income) from Census 2000 data to determine high and highest priority need areas. In addition, using neighborhood service areas, the Recreation and Park Department conducted a gap analysis for the policy report. Ultimately, the Department produced Neighborhood Recreation and Open Space Improvement Priority Plan Maps showing the areas of highest need according to demographic statistics and that are also underserved in terms of existing recreational resources.<sup>179</sup> The Department map showing the overlay of high priority areas and service area gaps is depicted in **Figure 21**. Note that this map does not include Yerba Buena Gardens, a district-serving open space under jurisdiction of the Redevelopment Agency, which would serve a portion of the project area south of Folsom Street between Hawthorne and Fifth Streets.

## • Proposition A

• As part of the City's 10-Year Capital Plan, the Recreation and Park Department and the Port of San Francisco introduced a parks and open space general obligation capital bond ("Proposition A") on the February 2008 ballot to address the significant capital needs of the City's open space system. In planning for the bond, the Recreation and Park Department developed an inventory of the system's physical needs, which allowed for the systematic evaluation of the capital needs in over 200 parks, estimated to be approximately \$1.7 billion. The Department engaged in a stakeholder outreach process throughout 2007 around the City's overall parks and recreation facilities capital needs, which sought to identify priorities and develop criteria used to determine

<sup>&</sup>lt;sup>178</sup> City and County of San Francisco, Recreation and Park Department. *Recreation and Park Acquisition Policy*, May 2006. Available on the internet at: http://www.parks.sfgov.org/site/recpark\_page.asp?id=38780.

<sup>&</sup>lt;sup>179</sup> City and County of San Francisco, Recreation and Park Department. *Recreation and Park Acquisition Policy Appendix B: Revised Open Space Element High Need Areas Maps*, May 2006. Available on the internet at: http://www.parks.sfgov.org/site/recpark\_page.asp?id=38780.

the bond proposal, including project and program selection. The bond passed with 71 percent of the vote, exceeding the 66.7 percent required threshold.

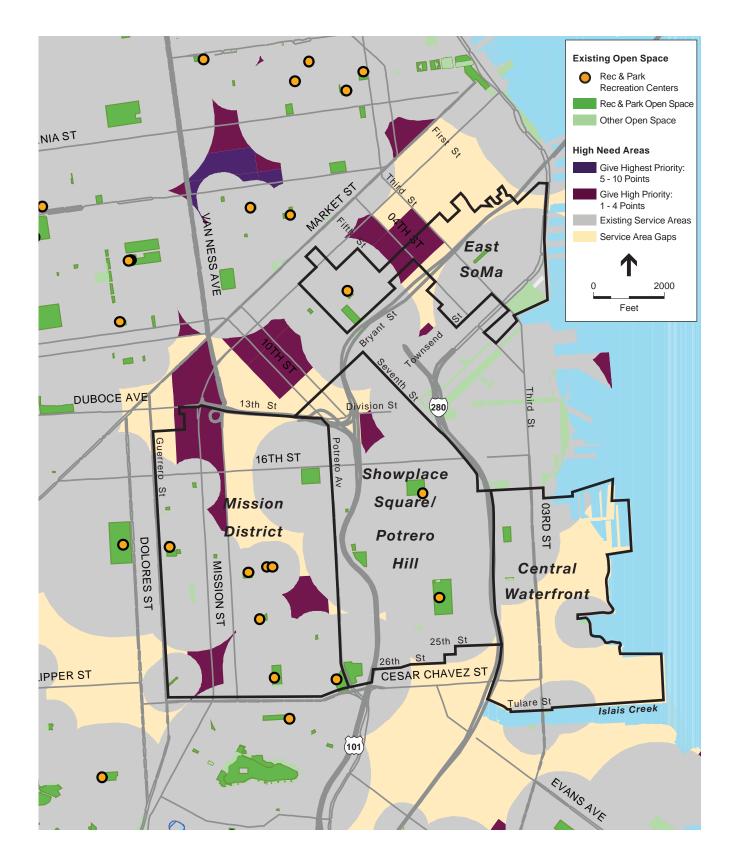
- Some of the facilities identified within the bond program are within the Eastern Neighborhoods planning area, including: Mission Playground (Mission); Brannan Street Wharf (East SoMa); and Crane Cove Park, Warm Water Cove, and Islais Creek (Central Waterfront). Mission Playground improvements would entail renovation of courts and existing fields, lawns and seating areas, repairs to the playground, equipment, and clubhouse restrooms, as well as seismic upgrades to the pool entrance area. The proposed improvements along the City's eastern waterfront, known as "the Blue Greenway," entail replacing dilapidated piers and creating a public wharf and open space between Piers 34 and 36 (Brannan Street Wharf); renovation of historic maritime structures adjacent to the Pier 70 shipyard and an expansion of public access and recreational water uses at Islais Creek. In addition, funding for restroom upgrades has been programmed for the Potrero Hill Recreation Center and the Victoria Manalo Draves Park in East SoMa.
- The general obligation bond was determined to be exempt from CEQA under CEQA Guidelines 15378(b)(4), which excludes projects that create government funding mechanisms or other government fiscal activities that do not involve a commitment to any specific project which may result in a potentially significant physical impact on the environment. Specific park, recreation and open space improvements that could be funded under this bond would be subject to project-specific environmental review as part of the permitting process.

## Waterfront Land Use Plan (Port of San Francisco, 1997)

The Port's land use policies with respect to parks, recreation, and open space for Port lands are set forth in the Waterfront Land Use Plan, adopted by the Port Commission in 1997. This Plan is discussed in Section IV.B, Plans and Policies, of this EIR.

## Planning Code

The Planning Code requires usable open space in conjunction with development projects. As a part of the permitting process, project sponsors are required to incorporate certain amounts of



SOURCE: San Francisco Planning Department
Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091)
Figure 21
Service Area Gaps and
Areas of Highest Need

open space, dependant on a proposed project's use and size as well as zoning district in which the site is located, to serve future project residents and/or employees. Planning Code Section 135 indicates the square footage of open space required for new residential units, ranging from 36 to 300 square feet per unit. The requirement is generally higher in single-use residential districts than in mixed-use residential districts. Commonly accessible open space (designed for use jointly by two or more units) is permitted at a ratio typically 1.33 square feet of the required amount of private open space. Additionally, Section 135.3 requires minimum usable open space requirements for uses other than dwellings in the South of Market mixed-use districts, with open space requirements ranging from 1 square foot per 90 square feet of occupied office floor area to 1 square foot of open space is not generally required for non-residential uses outside the South of Market districts (and the C-3, Downtown districts).

# **Impact Analysis**

## Significance Criteria

The proposed project would have a significant effect on the environment in terms of parks, recreation and open spaces if it were to:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated;
- Require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment; or
- Physically degrade existing recreational resources.

## Methodology

This analysis focuses on the residential growth projections assigned to each of the proposed rezoning options and future No-Project condition and how potential zoning changes, particularly in terms of geographic distribution and intensity of future residential areas could affect the demand for parks and recreational facilities. The analysis of recreational facilities and potential rezoning impacts is based on the Planning Department's housing and population projections for the Eastern Neighborhoods described in Chapter III, Project Description.

Although the National Park and Recreation Association (NPRA) formerly called for 10 acres of open space per 1,000 city residents, the association no longer recommends a single absolute "average" of park acreage per population, in recognition of the fact that it is more relevant that each area plan and program facilities based upon community need. More important than raw acreage is accessibility (location, walking distance) and whether the facility provides needed services to the population in question.

The City, State and Federal property permanently dedicated to open space uses total approximately 4,090 acres, or 5.5 acres per 1,000 San Francisco residents. This is about half the standard of NPRA, which as stated above, formerly called for 10 acres of open space per 1,000 population in cities. The *San Francisco General Plan* Recreation and Open Space Element recognizes that San Francisco is likely to provide less open space acreage than many communities, given land constraints, high population density and existing urban development. The City does not establish an acceptable level of service related to population density in terms of district-, neighborhood- and subneighborhood-serving parks or provision of recreational facilities.

## Proposed Zoning and Neighborhood Area Plans

The proposed project, a regulatory program, would not directly physically degrade any existing recreational resources within the project area or citywide, nor would the proposed project result in any specific alterations to infrastructure, such as new park or recreational facility development. As such, no adverse physical impacts associated with the construction or expansion of recreational facilities is expected, as none would be undertaken as part of plan adoption. Specific proposals for the development of park space or recreation facilities would be subject to subsequent project-level environmental review. The potential for secondary effects related to physical deterioration resulting from population increases and/or use attributable to the project's rezoning options is addressed in the following discussion.

The *General Plan*'s guideline of 5.5 acres per 1,000 residents for city-serving spaces is currently met under existing conditions, and would continue to be met under each of the three rezoning options.<sup>180</sup> Although no city-serving open space currently exists within the project area, and no such spaces are currently envisioned, these facilities, by definition, need not be located specifically within in the project area, since they are used by residents citywide. As such, the amount of city-serving recreational facilities is considered sufficient to meet the future demands of the proposed Eastern Neighborhoods rezoning options, and thus the project would not result in a substantial increase in use of city-serving parks such that physical deterioration would occur or be accelerated.

The Eastern Neighborhoods are collectively served by about 50 acres of neighborhood parks and facilities (district- neighborhood- and subneighborhood-serving parks). With a baseline (2000) population of approximately 67,000 residents, the existing resources provided approximately 0.75 acres of neighborhood parks per 1,000 residents under baseline conditions. This is slightly less than the citywide average for park acreage (excluding the largest citywide parks) of approximately 1.1 acres per 1,000 residents.<sup>181</sup> The Eastern Neighborhoods have just over 1

<sup>&</sup>lt;sup>180</sup> As described in Section IV, Analysis Assumptions, this EIR assumes a baseline (year 2000) citywide population of 756,967 and estimated citywide population of 836,490 under Option A, 834,448 under Option B, 834,750 under Option C and 799,217 under a future No-Project Option. The existing 4,772 acres of parks would yield a ratio of roughly 5.72 acres per 1,000 residents in each of the three Options.

<sup>&</sup>lt;sup>181</sup> Calculation includes Recreation and Park Department parks and open spaces, as well as open spaces under the jurisdiction of other City, state, and federal agencies, but excludes "city-serving" parks of 30 acres or more.

million square feet of recreational facilities, about 16 square feet per resident, which is also less than the citywide average of about 22 square feet per resident. Each of the rezoning options would accommodate more residential development within the Eastern Neighborhoods, thereby increasing the demand for parks and recreational facilities. An unmet demand for parks and recreational resources, in itself, would not be considered a significant impact on the environment. Based on the CEQA significance criteria, the proposed project would have an adverse environmental impact if it were to cause the deterioration of existing recreational resources through increased use or require the construction or expansion of recreational facilities that may have an adverse effect on the environment. It can be anticipated that increases in the number of permanent residents without development of additional recreational resources could result in proportionately greater use of parks and recreational facilities in and near portions of the Eastern Neighborhoods, which may result in physical deterioration. In particular, the Mission District, with an existing shortfall in both neighborhood parks and recreational facilities, some physical degradation of both parks and recreational facilities may occur due to the cumulative demands on those facilities. However, population increases are only one factor in determining whether parks and recreational facilities would deteriorate through increased used. Other variables include park design, age, infrastructure, how the park is being used, as well as whether adequate levels of upkeep are maintained.

Although the proposed area plans do not include specific parks or recreational facilities that would be developed as part of the rezoning effort, the Planning Department, in conjunction with the proposed rezoning efforts, has developed draft area plans for East SoMa, the Mission, Showplace Square/Potrero Hill, and the Central Waterfront for inclusion in the *General Plan*. Each of the four draft area plans seeks to address the potential future open space and recreational facility space needs through a set of goals, objectives and policies (see Appendix B). Policies include a proposal to convert to open space surplus rights-of-way on streets, alleys and sidewalks, as well as to identify sites for land acquisition. The policies also provide guidance in terms of location, size, accessibility, landscape design and maintenance guidelines. The draft East SoMa, Mission, and Showplace Square/Potrero Hill Area Plans encourage additional Planning Code requirements for new development including the provision of publicly accessible open space. All of the draft area plans include a policy to "identify [open space] sites for possible acquisition" and indicate in an illustrative manner, where future park, open space and recreational facilities should be developed based on neighborhood needs.

The Planning Department has begun an effort with the Recreation and Parks Department as well as interested members of the public to further this policy by examining potential sites for future open space and/or recreation facility development. The neighborhood specific policies and open space improvement plans as published in the current draft area plans and maps are summarized below.

## East SoMa

To meet the needs of residents, workers and visitors, the East SoMa draft area plan sets the objective of increasing the amount of open space by examining the amount and type of open space contributions required by new development and by identifying sites for possible acquisition. The proposed policies seek to amend the Planning Code requirements for new development in the proposed new mixed-use districts such that residential projects would provide 80 square feet of usable open space per dwelling unit and commercial projects would increase their contribution to publicly accessible open space. The draft area plan also identifies four generalized locations for possible new park acquisition. These locations, as illustrated in the draft area plan open space map, include the area between Fourth, Fifth, Howard and Folsom Streets, the area between Bryant and Townsend Streets on either side of Fourth Street, the area around Ninth and Folsom Streets and the area between Ninth, 11th, Folsom and Market Streets. Although a neighborhood park in one or all of these regions could fall outside the boundary of the East SoMa neighborhood, open space resources in these areas would serve the East SoMa population.

Recognizing the constraints of a built-out environment, the draft East SoMa area plan encourages creation of non-traditional open-space resources in addition to land acquisition and improvements to existing park facilities. Specifically, the draft area plan highlights Folsom Street, from the Bay through to the Mission District, as a potential link from the waterfront to and between nodes of open space. By adding streetscape amenities to Folsom Street as well as to portions of Second and Seventh Streets, these streets could function as green connector streets available to pedestrians and cyclists. Planned amenities include widened sidewalks with street trees, tree-planted medians, and pocket parks. In addition, the draft area plan targets alleyways and underutilized public rights-of-way on wide streets for either temporary or permanent conversion to public plazas. No specific physical improvements are proposed as part of the project, and subsequent proposals would be subject to CEQA review. In general, however, such relatively minor physical changes as landscaping and creation of pocket parks typically would be exempt from CEQA. However, it is anticipated that greater physical alterations, such as major alterations to physical infrastructure such as streets and sidewalks, would require subsequent analysis under CEQA.

Finally, the draft area plan policies encourage maximized use of existing facilities by setting renovation and maintenance goals, promoting community involvement and exploring use of recreational and community spaces during non-operating hours.

## Mission

As noted above, the Mission has the greatest share of the Eastern Neighborhood's residential population and consequently exhibits the greatest ratio of residents to existing acres of recreational resources. The current draft area plan addresses the need for open space through a set of goals and policies similar to those stated in the East SoMa draft area plan. The illustrative open

space map included in the plan targets three regions for new park acquisition and development efforts. These include the area west of Valencia Street just north of 16th Street, the area west of Valencia Street just north of 24th Street, and in the vicinity of 22nd and Alabama Streets. With the intension of maximizing usability, the plan policies discuss renovation and maintenance priorities of existing open space resources including efficiency of use, storage for maintenance equipment and community involvement.

Faced with the constraints of a historically industrial built environment over many parts of the district, the Mission draft area plan also includes non-traditional means of providing open space resources. First, the notion of Folsom Street as a civic boulevard connecting Bernal Hill from the south, through the Mission to East SoMa (as described above) to the Bay is supported in the policy language as well as the illustrative open space map. Additionally, three east-west streets, 17th, 20th and 25th Streets, are targeted for landscaping improvements to establish a visual and physical connection to topography and natural features surrounding the Mission neighborhood. Finally, the plan calls for adjusted requirements for new development including a minimum of 80 square feet of private open space per new residential unit, design of open space according to the needs of the anticipated population, and additional requirements for new non-residential and non-PDR development. The plan states that new standards for landscaping, such as green roofs or rainwater harvesting, also would be required of new development. (See discussion of the "San Francisco Green Factor" on p. 378 for more information.)

As described in Chapter III, Project Description, two community-based variants have been put forth for the Northeast Mission Industrial Zone (NEMIZ). These are the *People's Plan for Jobs, Housing, and Community*, put forth by the Mission Anti-Displacement Partnership, and a plan from the Mission Coalition for Economic Justice & Jobs (MCEJJ), published as *An Alternative Future for the North East Mission Industrial*. The *People's Plan* calls for improved open space resources in the NEMIZ using methods similar to those proposed in the draft area plan including maximized use of existing recreational and educational facilities and transformed rights-of-way into usable open space. Additional policies calling for improvements to the public realm, such as landscaping, lighting and plaza design treatments, are also listed. The *People's Plan* does not identify specific sites or regions within the NEMIZ for new park development. The MCEJJ plan does not directly address open space provision but encourages the use of streets as a public amenity with a focus on 16th, 17th and 20th Streets.

As stated previously, no specific physical improvements are proposed as part of the project, and subsequent proposals would be subject to CEQA review, although it is anticipated that minor physical changes as landscaping typically would be exempt from CEQA.

## Showplace Square/Potrero Hill

The open space objectives and policies proposed in the Showplace Square/Potrero Hill draft area plan are, again, similar to those listed in the East SoMa and Mission draft area plans. They

include a combination of new park acquisition goals, generation of non-traditional of open space, regulatory amendments for new development, ecological standards for public and private open space design, and creation of an open space network. The goals set forth in the draft area plan focus primarily on the northern portion of the neighborhood where the open space deficiencies that currently exist. The first open space objective calls for the acquisition and redevelopment of one of several large lots in the northern half of the neighborhood. In addition, two intersections, Townsend Circle (the intersection of Townsend, Division and Eighth Streets) and Eighth and 16th Streets, are targeted for reconfiguration and installation of new urban plazas. Wide streets throughout the neighborhood are cited as opportunities to reallocate portions of the right-of-way for pedestrians in the form of plazas or green linear corridors. Two additional policies call for landscaping 16th Street and "daylighting" (uncovering) of potions of Mission Creek's historical channel with the intent of enhancing the neighborhood's visual and physical connection to the San Francisco Bay.

The draft area plan addresses the need for open space resources, in part, by proposing an increased contribution from new development. Similar to the East SoMa and Mission proposed policies, the Showplace Square/Potrero Hill draft policies include an 80-square-foot-per-unit minimum for new residential and mixed-use buildings as well as new requirements for non-residential and non-PDR projects to contribute public open space.

As stated previously, no specific physical improvements are proposed as part of the project, and subsequent proposals would be subject to CEQA review, although it is anticipated that minor physical changes as landscaping typically would be exempt from CEQA.

## **Central Waterfront**

Though the policies were drafted several years prior (see draft policies in Appendix B), the Central Waterfront draft area plan contains concepts similar to those presented in the other Eastern Neighborhoods plans with a focus on enlivening public rights-of-way for pedestrians, improving accessibility to open space resources and establishing an open space network. The plan encourages transforming the neighborhood streets into an extension of the open space system as means of overcoming limited opportunity for new park development. East-west streets such as Mariposa, 18th, 19th, 20th, 22nd and 24th Streets and north-south streets such as Third Street and a portion of Tennessee Street are highlighted as potential pedestrian connections in need of open space improvements.

The plan also identifies specific sites for possible private or public acquisition and improvement including Pier 70 at the east end of 18th Street, Irish Hill on 22nd and Michigan Streets, the abandoned rail alignments at 20th Street at the Caltrain Station, the area marking the former Tubbs Cordage Factory alignment between Tubbs and Third Streets, and the area behind the I.M. Scott School on Tennessee Street between 20th and 22nd Streets. With the intention of developing a welcoming connection to the rest of the neighborhood, the plan also calls for north

and south expansion of Warm Water Cove and a continuous loop of open space along Islais Creek.

As stated previously, no specific physical improvements are proposed as part of the project, and subsequent proposals would be subject to CEQA review, although it is anticipated that minor physical changes as landscaping typically would be exempt from CEQA.

## Conclusion

As described above, the Planning Code requires a specified amount of new usable open space (either private or common) for each new residential unit. Draft area plan policies indicate that the code's minimum of 36 square feet of private open space per unit (for most residential districts) could in some instances increase to a minimum of 80 square feet, thereby increasing the amount of on-site open space required as part of private development projects compared to baseline conditions, which would offset some open space needs generated by the development of new residential uses in the Eastern Neighborhoods. Future uses could also be required to provide privately owned, publicly accessible open spaces. While future private open spaces may not alleviate the existing deficiencies in each or any of the neighborhoods, proposed changes to the Planning Code would offset some of the additional need generated by increase population to the project area. However, the Recreation and Open Space Element points out that city parks and public open spaces increase neighborhood livability, even in areas well served by private open space.

Although open space is not currently required for non-residential uses outside the existing South of Market mixed-use districts (and in downtown and Chinatown), it is anticipated that open space requirements for non-residential development could be adopted as part of the proposed Eastern Neighborhoods rezoning in certain new use districts so that new development would provide either on-site publicly accessible open space, or would contribute to an open space fund. This approach would be similar to that now employed in the South of Market mixed-use districts. The intent would be to compensate for the fact that portions of the project area proposed for new residential or mixed-use (including residential) zoning have historically been in non-residential use and therefore were not expected to, and did not, provide substantial open space.

As noted above, draft area plan policies not only propose changes to the amount of open spaces required as part of future projects, but also to qualitative factors related to the appearance, quality and functionality of such spaces. The draft area plans include policies which would "require minimum ecological standards for urban landscaping for all new development and provide incentives for existing development to meet these standards," which would essentially function as a landscaping ordinance. This would be achieved through implementation of a "San Francisco Green Factor," which is a flexible system that provides project sponsors with a range of options to meet minimum standards related to onsite landscaping that "incorporates rainwater retention and filtration through permeable surfaces, green roofs, semi-open surfaces and vertical greenery."

Implementation of such a program in the Eastern Neighborhoods would comport with the basic tenets of the Sustainability Plan (see Chapter IV. B, Plans and Policies) and could result in incremental, beneficial effects related to a reduction in stormwater runoff, increases in groundwater recharge, reductions in the urban heat island effect, increased carbon sequestration, as well as potential aesthetic benefits related to increases in neighborhood greenery.

Implementation of the aforementioned goals for new park and open space development, existing park renovation, and public realm improvements would require funding sources beyond what currently exist today. The Public Benefits Analysis (described in Chapter I, Introduction) includes a compilation of tools that could potentially meet some future community needs, including for recreational resources. Among the tools are planning policies, zoning requirements, taxes and impact fees, establishment of service and/or assessment districts, and direct provision of facilities by developers. Additionally, beginning prospectively in late 2007, the Planning Department, in conjunction with the Recreation and Park Department is planning an update to the General Plan's Recreation and Open Space Element. The primary focus of this update will be to identify opportunity areas for the acquisition of new park and recreational facilities, to examine methods to acquire future and to maintain existing facilities, such as through the development of impact fees or though public/private partnerships as well as to link open space and recreation planning to ongoing greening efforts in other city departments along public streets and right-of-ways ("living streets"). The update will occur through a public process that would provide opportunity for public comment and input.<sup>182</sup> It should be noted that future proposals for the development of park and/or recreational facilities would undergo site-specific environmental review.

The Implementation Plan and Funding Strategy produced from the Public Benefits Analysis, along with the product of the Recreation and Open Space Element update process, are anticipated to describe additional potential contributions to the existing Open Space Fund (described above in the Regulatory Setting) and other bond measures supporting the Recreation and Park Department Capital Improvement Plan. Together, these efforts should establish a variety of tools to achieve the open space objectives set forth in each of the Eastern Neighborhoods draft area plans. Additionally, implementation of draft area plan policies geared toward amending Planning Code requirements of new development would implement the appropriate controls to ensure existing and future neighborhood workers, visitor and permanent residents would be served with parks and open spaces. In light of the above, it can be concluded that none of the proposed rezoning options, nor the No-Project scenario, would result in substantial or accelerated deterioration of existing recreational resources or require the construction or expansion of recreation facilities that might have an adverse physical effect on the environment.

<sup>&</sup>lt;sup>182</sup>Personal conversation, Sarah Dennis, Senior Planner, San Francisco Planning Department, March 14, 2007.

# I. Shadow

This section describes shadow effects on publicly accessible areas, including public parks, publicly-accessible private open spaces, and sidewalks.

# **Environmental Setting**

## **Existing Parks and Open Space**

There are 24 parks within the boundaries of the Eastern Neighborhoods project area (see **Figure 20** in Section IV.H, Parks, Recreation, and Open Space, p. 366). Nineteen parks are under the jurisdiction of the San Francisco Recreation and Park Department. One public open space is owned by the San Francisco Redevelopment Agency and maintained by the Tenants and Owners Development Corporation, the Alice Street Community Gardens (on Lapu Lapu Street between Folsom, Harrison, Third and Fourth Streets), a public open space for seniors that includes garden plots and benches.

Three public open spaces in the study area are under the jurisdiction of the Port of San Francisco: South Beach Park, located along San Francisco Bay north of AT&T Park; Warm Water Cove, at the foot of 24th Street in the Central Waterfront; and Tulare Park, an open space area along the north side of Islais Creek between Third and Illinois Streets. Finally, one small open space is owned by the Municipal Transportation Authority (Muni), in front of Muni's Woods Division bus yard in the Central Waterfront.

Two Recreation and Park Department parks are outside of but near the project area, including Precita Park one block south of César Chávez Street in the Mission, and the Howard and Langton Mini Park one block east of East SoMa. Additionally within East SoMa, are a number of small, privately-owned, publicly accessible open spaces that were established in conjunction with recent housing developments in the South Beach area. These open spaces are located along the Embarcadero at Beale, Delancey (First), and Townsend streets.

# Planned Parks

The 2005 Annual Update to the Recreation and Park Department's Capital Plan lists two sites within the project area for potential future acquisition and park development.<sup>183</sup> Both are located within the Central Waterfront neighborhood.

• The I. M. Scott School site, a vacant former school building and grounds located at 1060 Tennessee Street near 22nd Street, has been identified in the Draft Central Waterfront Plan as a potential recreational facility. The Recreation and Park Department has contacted the San Francisco Unified School District to explore the possibility of transferring or using a portion of the property for playgrounds and other recreational uses.

<sup>&</sup>lt;sup>183</sup>These proposals would be subject to a separate CEQA process and are not part of the Eastern Neighborhoods Rezoning and Area Plans project.

• The Recreation and Park Department is pursuing the transfer of a 0.44-acre parcel located at Third Street and 20th Street (the former location of Bayview Police Station). The property would be transferred from the San Francisco Police Department, which has identified it as surplus property. The property would temporarily be used as office space and long-term as a recreational facility.

## **Regulatory Setting**

The San Francisco Planning Code regulates shadow impacts on parks and other publicly accessible spaces. The Code's height and bulk districts establish maximum building heights throughout the city. The Planning Code also contains specific provisions to ensure sunlight in public parks, and to ensure sunlight on sidewalks in the greater Downtown area, including part of East SoMa. These specific sections of the Planning Code are discussed in detail in Section IV.B, Plans and Policies, and summarized briefly here.

Planning Code Section 295, the Sunlight Ordinance, generally prohibits buildings greater than 40 feet tall that would shade City parks (under the jurisdiction of the Recreation and Park Department), except during early morning and late afternoon hours, if the shadow would adversely affect use of the park, unless the Planning Commission determines that the effect would be insignificant. In practice, therefore, Section 295 acts as a kind of overlay that further limits heights and/or shapes of certain buildings around protected parks: the Section 295 limit is in addition to the height limits in the Height and Bulk districts. Privately-owned open spaces and those under the jurisdiction of other entities, such as the Redevelopment Agency, are not subject to Section 295.

Planning Code Section 147, applicable to C-3 (downtown) use districts and in South of Market mixed-use districts where heights greater than 40 feet are permitted (RSD, SLR, SLI, and SSO), requires that new buildings and additions greater than 50 feet tall be shaped to minimize shadow on public plazas or other publicly accessible open spaces, subject to design considerations and without unduly restricting development potential. Section 147 applies to the following locations within the project area:

- A portion of one block in East SoMa located between Folsom, Harrison, Third, and Hawthorne streets, designated C-3-S.
- Much of the area between Harrison, Townsend, First and Fourth streets in East SoMa, zoned SLI or SSO.
- The majority of the area in blocks between Fourth, Seventh, Market and Harrison streets in East SoMa, zoned RSD or SLR.
- In Showplace Square/Potrero Hill, a few properties located between Bryant, Brannan, Seventh and 10th streets, zoned SLI.

# Impact Analysis

## Significance Criteria

Implementation of the proposed project would have a significant shadow impact if it were to:

• Create new shadow in a manner that substantially affects outdoor recreation facilities or other public areas.

In addition, shadow effects would be significant if they would affect, in an adverse manner, the use of any park or open space under the jurisdiction of the Recreation and Park Department, or significantly detract from the usability of other existing publicly accessible open space, or alter temperature so as to substantially affect public areas, or change the climate either in the community or region.

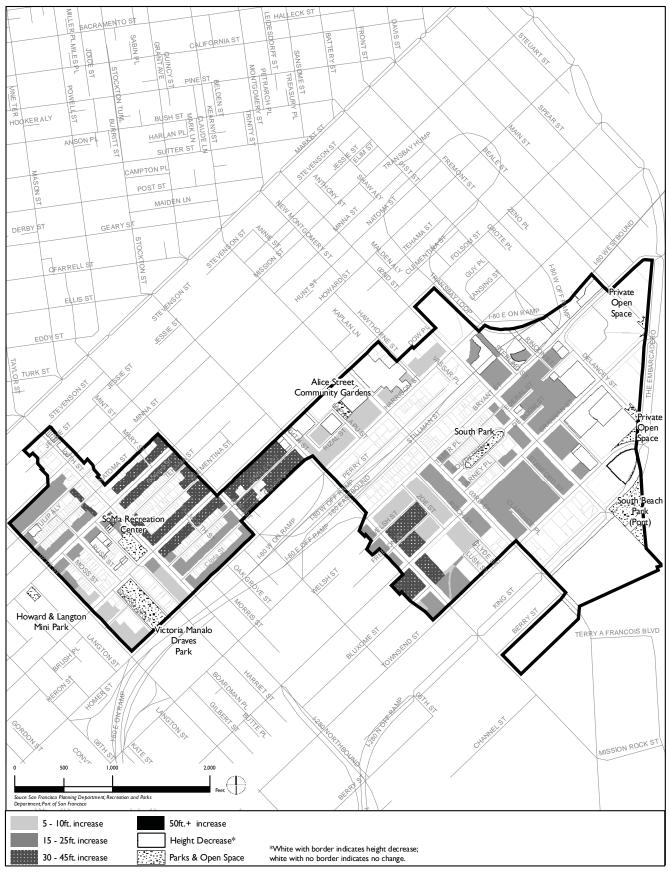
## Shadow Effects on Existing Parks and Open Spaces

This analysis focuses on changes to building height limits that are part of the proposed rezoning project, and how such changes could affect shading on parks and other publicly accessible spaces.

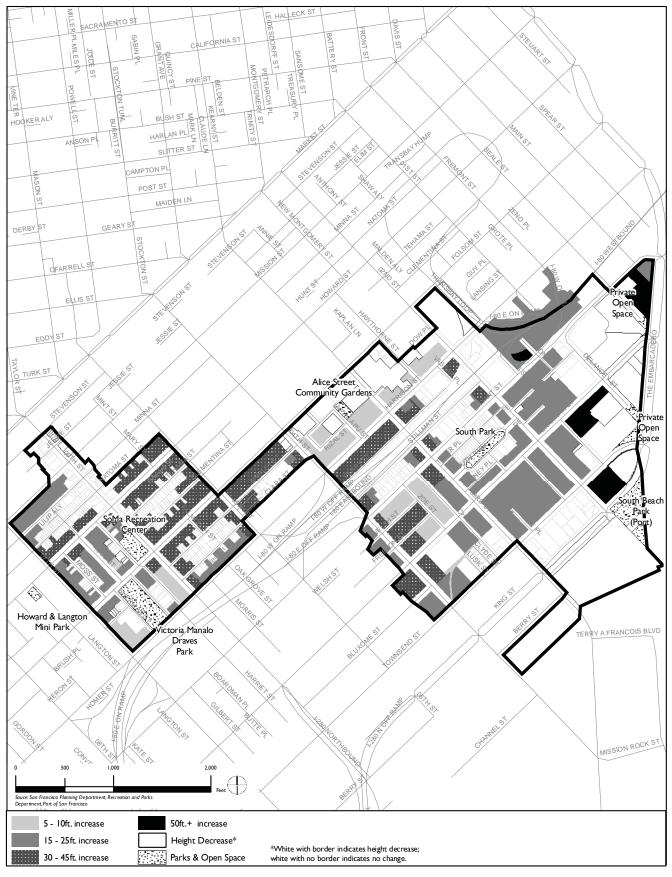
**Figures 22 through 28** indicate proposed changes to height districts in each neighborhood, by rezoning option. Immediately surrounding nine of the parks within the project area, and both of the Recreation and Park Department parks located near but outside of the project area, there would be either no change in height limits or decreases in the building height limit under all three rezoning options. Height limits on some or all sides of another 15 parks (12 under Recreation and Park Department jurisdiction) within the project area would increase. Most of the increases would be slight: five feet. Near a few parks, height limit increases of 15 feet are proposed, and near one recreation center in East SoMa, increases of 25 and 45 feet are proposed.

In some instances, existing development near publicly accessible parks and open space is not as tall as the current height limit would allow. The rezoning project itself would not directly lead to an increase in the height of, or the shadows cast by, existing buildings. However, in areas where the proposed rezoning would allow for changes to permitted land uses, additions to existing buildings and redevelopment of parcels may be more likely to occur, as the incentive for development would potentially be greater due to the additional permitted heights. New buildings could be constructed up to the applicable height limit, unless restrictions were imposed by Section 295 or other applicable controls under the Planning Code.

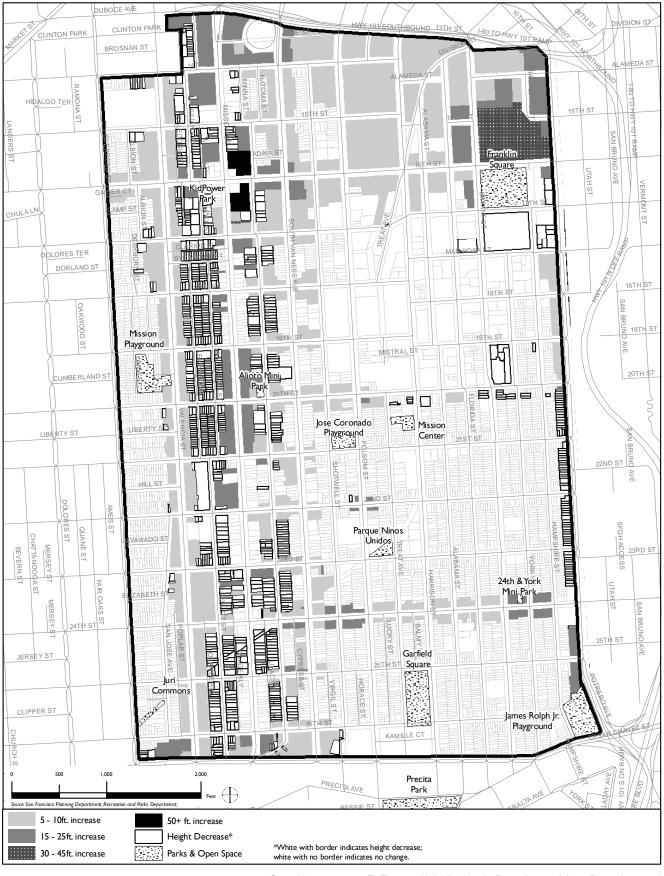
To assess the potential new shading attributable to increased height limits, the following shadow study assumes a "worst-case" shadow scenario that would be caused by full build-out under existing height limits—the No-Project Alternative—and compares those "worst-case" shadows to the corresponding "worst-case" shadows that would be cast under each of the proposed rezoning



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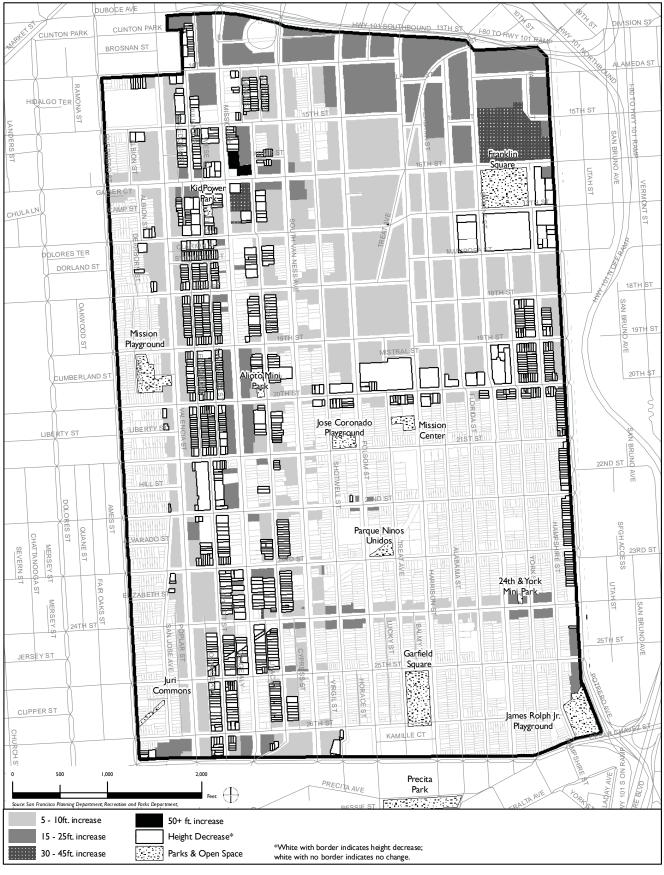


Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091)



Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091)

#### Figure 24 Height Change Mission, Options A & C



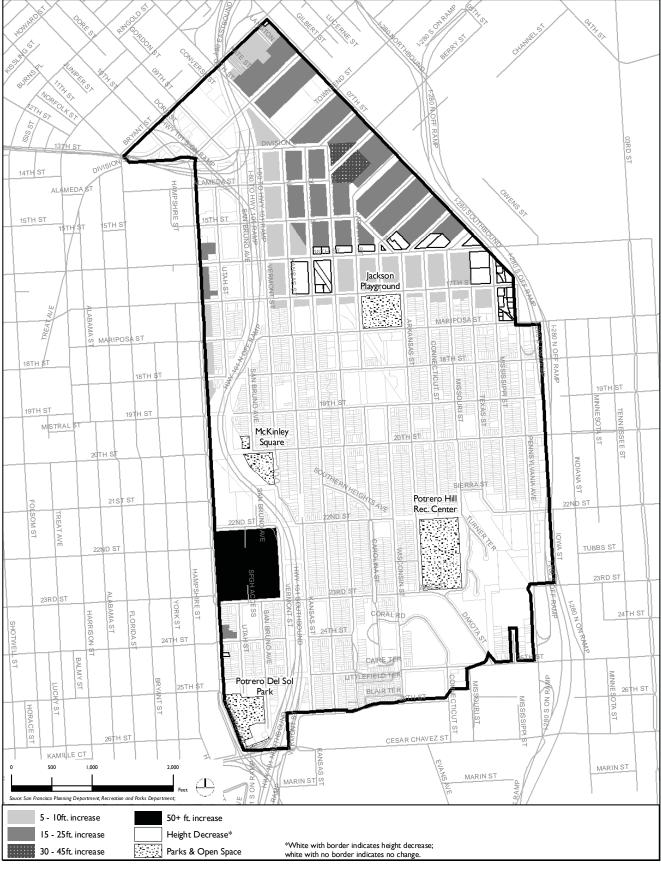
Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091)

### Figure 25 Height Change Mission, Option B

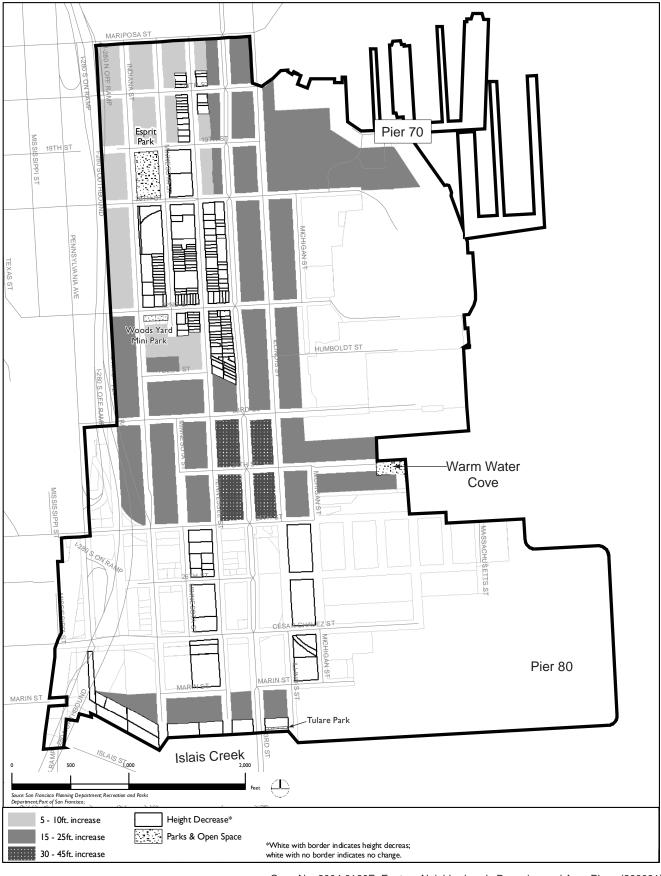


Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091)

### Figure 26 Height Change Showplace Square / Potrero Hill, Options A & C



Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091)



- Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091)

options. Although the study does not directly consider whether or not the existing building heights differ from the existing height limits and therefore does not measure the actual existing shadowing of public open spaces, the subsequent analysis and conclusions draw on the study findings to capture the incremental effect that could result from the newly permitted heights that would be allowed with implementation of each of the three proposed rezoning options.

## Parks Where No Increase to Surrounding Height Limits is Proposed

The following parks are surrounded by parcels and blocks in which the existing height limits would remain the same or decrease under all three of the Eastern Neighborhoods rezoning options. The majority of these parks are also located in residential neighborhoods where the use regulations are not expected to substantively change, so the project would not likely to result in any development pressure on properties not currently built to the maximum height.

- South Beach Park (East SoMa)
- Mission Center (Mission)
- Jose Coronado Playground (Mission)
- Parque Ninos Unidos (Mission)
- Juri Commons (Mission)
- Garfield Square (Mission)
- McKinley Square (Showplace Square/Potrero Hill)
- Potrero Hill Recreation Center (Showplace Square/Potrero Hill)
- Tulare Park (Central Waterfront)

Because no changes to the height limits surrounding these parks and open spaces are proposed, none of the rezoning options are expected to result in increases in the extent or duration of daily shadow cast on them. Additionally, no changes to existing height limits are proposed surrounding the non-Recreation and Park Department open spaces along the Embarcadero in East SoMa, and thus these spaces would not be adversely affected by the project.

Some of the above parks could be shaded by development pursuant to existing height limits (i.e., under the No-Project scenario). Those in the Mission District would have the greatest potential for new shadow under existing height limits, as many of these parks are relatively small and some are nestled within city blocks. In particular, Juri Commons, located on a former railroad right-of-way that cuts through the block bounded by 25th, 26th, Guerrero, and Valencia Streets, is a narrow open space. Although taller buildings than those that exist could be constructed within the current 40-foot height limit, the effect on Juri Commons would be limited because the narrowness of the space means existing buildings already cast substantial shadows except at midday. Moreover, this park is heavily landscaped, with several mature trees that also cast shade.

Both Jose Coronado Playground and Parke Niños Unidos are located at the south end of city blocks, meaning that each has a buffer from buildings to the south in the form of a 64-foot-wide street right-of-way. Each has two- and three-story buildings to the south, east, and west, and there is limited potential for new shadow if one or more of these properties were to be redeveloped at

greater height. The existing 40-foot height limit and the surrounding streets would minimize the potential new shadow that could fall on either of these parks.

Mission Center is primarily an indoor facility. While it has an outdoor soccer field, this field is within the interior of the block, surrounding by rear yards of existing dwellings, and thus there is very limited potential for new shadow on this open space.

No substantial new shading of Garfield Square is likely because the property immediately to the south (Bernal Dwellings) has recently been rebuilt by the San Francisco Housing Authority. Existing parcels to the east, southeast, and west—primarily developed with multi-family housing—could cause new shadow, although the exiting height limit of 40 feet and the width of surrounding streets would limit new shadow. Potential effects would be greatest along the western edge of the park, where Treat Avenue is 60 feet wide, compared to Harrison Street's 82.5-foot width along the east side of the park.

The *People's Plan*, a project variant for the Mission District described in Chapter III, Project Description (see p. 17), would have similar effects to those described above because its height proposals are similar to those under each of the three rezoning options, A, B, and C. Another variant, the MCEJJ plan (see p. 18), does not propose specific height limits, and thus cannot be evaluated as to shadow effects.

Little new shadow is likely on Potrero Hill Recreation Center, because it sits atop a hill and parcels to the south and east (Housing Authority property) slope down from the park. Parcels containing existing single-family dwellings west of the park could be redeveloped to greater heights in some instances, but the existing 40-foot height limits and the width of Arkansas Street would restrict the amount of new shadow that could fall on the park.

Likewise, little new shadow is possible on McKinley Square, atop the western edge of Potrero Hill, with the U.S. 101 freeway downslope to the south and west. As with Potrero Hill Recreation Center, parcels to the east of McKinley Square could, if redeveloped to the 40-foot height limit, incrementally increase shadow on the park, but the existing 40-foot height limits and the width of Vermont Street would restrict the amount of new shadow

No new shadow would be expected on the Redevelopment Agency's South Beach Park because this park is immediately northeast of AT&T Park and east of the 14-story One Embarcadero South residential building.

No new shadow would be expected on Tulare Park, as it sits on the north bank of Islais Creek, at the southern boundary of the project area, and no new buildings of sufficient height are likely to be constructed across the creek, within the Bayview-Hunters Point neighborhood.

In summary, it is unlikely that the No-Project Alternative would result in significant shadow impacts on the above parks as a result of construction to existing height limits.

## Parks Where an Increase to Surrounding Height Limits is Proposed

For the 15 parks around which height limit increases are proposed, potential shading attributable to the proposed project was studied by comparing the shadows that would be cast at build-out under existing height limits (i.e., the No-Project Alternative) to those that would be cast at build-out under each of the three rezoning options. The tallest buildings that could be constructed under existing and proposed height limits on all properties directly adjacent to or across a street from each park was modeled using an architectural drawing and three-dimensional modeling software. Height was measured as specified in the San Francisco Planning Code and no building setbacks were modeled. Topographic data was incorporated in the model to account for differences in elevation. Shadow impacts were analyzed for the period from one hour after sunrise to one hour before sunset—the period regulated by the Sunlight Ordinance—for winter and summer: in December on the winter solstice, when the sun is at its lowest and the shadows are at their longest, and in June on the summer solstice, when the sun is at its highest and shadows are at their shortest. Shadows on any other day of the year would be within the range of shadows present during the solstices.

Two parks, Victoria Manalo Draves Park (East SoMa) and Esprit Park (Central Waterfront), are near elevated roadways. The existing elevated structures may cast shadows on the parks, but they are not part of, or affected by, the proposed project and are not included in the shadow analysis. The location and height of these elevated freeway structures would not change as a result of the proposed rezoning project.

**Tables 56 and 57**, pp. 393 and 395, detail the potential shadow impacts at these times and seasonal points for each of the proposed rezoning options and for the No-Project scenario. For each park, they show the percentage of the park's area that would be in shadow at the opening and closing "Prop K minutes," one hour after sunrise and before sunset. They also indicate when shadows would recede and the park would be in full sun. All times stated for June are in daylight savings time while those in December are standard time.

The following subsections describe the potential shadow impacts on each park and open space in the study area where surrounding height limits are proposed to increase.

Twelve of the 15 parks are under the jurisdiction of the Recreation and Park Department and therefore subject to Planning Code Section 295. All future development greater than 40 feet in height would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. In addition, future proposals for development would undergo site-specific environmental review including individual evaluation of shadowing impacts to public parks and open spaces. As the Planning Commission could not

● TABLE 56 POTENTIAL SHADOW ON PARKS AT BUILDOUT ON ADJACENT PROPERTIES--SUMMER SOLSTICE (JUNE 21), 5:48 AM TO 7:35 PM PDT

			Existi	ng Height Lir	nits (No-Pro	ject Alternative)			Option	A Height Li	mits			Option I	B Height Limits			Option C	Height Limi	ts
Park Name	Neighborhood	Percent of park in shadow, 6:48 AM	Shadow recedes; park in full sun	Shadow resumes	Percent of park in shadow, 7:35 PM	Notes	Percent of park in shadow, 6:48 AM	Shadow recedes; park in full sun		Percent of park in shadow, 7:35 PM	Notes	Percent of park in shadow, 6:48 AM	Shadow recedes; park in full sun	Shadow resumes	Percent of park in shadow, 7:35 PM Notes	Percent of park in shadow, 6:48 AM	Shadow recedes; park in full sun	Shadow resumes	Percent of park in shadow, 7:35 PM	Notes
Victoria Manalo Draves Park	East SoMa	75	9:10 AM	5:30 PM	30		75	9:10 AM	5:30 PM	30				Same heigh	t limits as Option A.	75	9:10 AM/ 10:30 AM	2:40 PM/ 5:30 PM	85	A small shadow covering less than 5% of the park area persists on the far NE corner until 10:30 AM. A small shadow (less than 5% of park area) cast by adjacent buildings on Folsom Street is present starting at 2:40 PM. A shadow cast by buildings across Folsom street begin to fall along the western edge of the park at 5:30 PM
SoMa Recreation Center	East SoMa	60	7:55 AM	2:15 / 5:45 PM	80	Shadows begin to be cast at the north edge of the park at 2:15 PM and along the west edge of the park at 5:45 PM.	75	9:10 AM	2:15/ 5:45 PM	80				Same heigh	t limits as Option A.	75	9:10 AM	2:15 PM/ 3:15 PM/ 5:45 PM	80	
Alice Street Community Gardens	East SoMa	100	2:00 PM	2:30 PM / 3:30 PM	100		100	2:00 PM	2:30/ 3:15 PM	100				Same heigh	t limits as Option A.		S	ame height	limits as Opt	on A.
South Park	East SoMa	75	9:30 AM	4:30 PM	100	Shadows recede from the long southeastern edge at 9:30 AM, but don't recede from the far eastern end of the park until 10:30 AM.	85	10:30 AM	4:30 PM	100	Shadows recede from the long southeastern edge at 8:30 AM, but don't recede from the far eastern end of the park until 10:30 AM.			Same heigh	t limits as Option A.	85	10:30 AM	4:30 PM	100	Shadows recede from th long southeastern edge a 8:30 AM, but don't reced from the far eastern end the park until 10:30 AM.
KidPower Park	Mission	100			100	The park is in full shade from the first Prop K minute until 9:45 AM, when the western edge begins to receive sun. At solar noon (1:12 PM), 80% of the park is in sun, but the southern edge remains shaded by building on the adjacent parcel to the south. Much of the park remains in sun through the afternoon, through shadows cast by buildings across Hoff Street begin to hit the western edge at 4:15 PM. Shadow increases until it covers the whole park at 6:45 PM.	100	4:25 PM	4:45 PM	100	The park is in full shadow until 9:45 AM, same as under the existing (No-Project) height limit. At solar noon, 10% of the park is shaded. The park remains mostly sunny throughout the afternoon. Shadow recedes from the southern edge at 4:25 PM, but begins to hit the western edge at 4:45 PM. the park is in full shadow from 7:00 PM until the last Prop K minute.	100	4:25 PM	4:45 PM	100 Same morning pattern as "existing" (No-Project) and "Options A and C" scenario, with the park in full shade until 9:45 AM. Approximately 10% of park in shade at solar noon. Afternoon pattern same as Options A and C.		S	ame height	limits as Opt	on A.
Franklin Square	Mission	45	9:15 AM	5:45 PM	40		60	9:15 AM	5:30 PM	50		50	8:55 AM	6:00 PM	40		S	ame height	limits as Opt	on A.
Mission Playground	Mission	80	1:00 PM	4:15 PM	75		80	1:00 PM	4:15 PM	80				Same heigh	t limits as Option A.		S	ame height	limits as Opt	on A.
Alioto Mini Park	Mission	100	9:35 AM	1:15 PM	100	The park is in full shade starting at 6:00 PM until last Prop K minute.	100	9:35 AM	1:15 PM	100	Park in full shade from 5:15 PM until last Prop K minute.	100	9:35 AM	1:15 PM	100 Park in full shade from 5:15 PM until the last Prop K minute.		S	ame height	limits as Opt	on A.
24th & York Mini Park	Mission	100	1:05 PM	1:15 PM	100	The park is in full shade from the first Prop K minute until approximately 9:15 AM, when sunny areas begin to appear. It is in full sun only at solar noon (1:12 p.m.), then the western edge begins to be shaded until it is in full shadow again from 4:30 PM until the last Prop K minute.	100	1:05 PM	1:15 PM	100	The park is in full shade until 9:30 AM, when sunny areas begin to appear. It is in full sun only at solar noon (1:12 PM), then the western edge becomes progressively shaded until it is in full shadow again from 4:30 PM until the last Prop K minute.			Same heigh	t limits as Option A.		S	ame height	limits as Opt	on A.
James Rolph Jr. Playground	Mission	5	7:05 AM	1:15 PM	65		5	7:05 AM	1:15 PM	65				Same heigh	t limits as Option A.		S	ame height	limits as Opt	on A.

TABLE 56 (Continued) POTENTIAL SHADOW ON PARKS AT BUILDOUT ON ADJACENT PROPERTIES--SUMMER SOLSTICE (JUNE 21), 5:48 AM TO 7:35 PM PDT

		Existing Height Limits (No-Project Alternative)						Option A Height Limits						Option	B Height Lir	nits			Option C Height L	mits
Park Name	Neighborhood	Percent of park in shadow, 6:48 AM	Shadow recedes; park in full sun	Shadow resumes	Percent of park in shadow, 7:35 PM	Notes	Percent of park in shadow, 6:48 AM	Shadow recedes; park in full sun	Shadow resumes	Percent of park in shadow, 7:35 PM		Percent of park in shadow, 6:48 AM	Shadow recedes; park in full sun	Shadow resumes		Notes	Percent of park in shadow, 6:48 AM	Shadow recedes; park in full sun	Percer of park Shadow resumes 7:35 Pl	in
Potrero Del Sol Park	Showplace Sq./ Potrero	50	8:30 AM/ 	/ 6:30 PM	25	Small shadows persist throughout the entire day on either the southern or northern edges of the park, because there are parcels directly adjacent to the park. However, the majority of the park is in full sun from 8:30 AM until 6:30 PM.	50	8:30 AM/ 	/ 6:00 PM	30				Same heig	nt limits as O	ption A.		S	Same height limits as C	iption A.
Jackson Playground	Showplace Sq./ Potrero	25	8:15 AM	6:15 PM	25			Sam	e height limit	as Existing	. (No Project)	30	8:15 AM	6:15 PM	30	A small shadow covering less than 2% of the park would persist until 8:30 AM at the northeast corner. Another small shadow covering less than 2% would be present at the northwestern corner at approximately 5:50 PM, 20 minutes before the whole western edge begins to be shaded.		Same	height limit as Existing	(No Project).
Esprit Park	Central Waterfront	80	8:45 AM	5:30 PM	90		80	8:30 AM	5:00 PM	90				Same heigh	nt limits as O	ption A.		S	Same height limits as C	ption A.
Warm Water Cove	Central Waterfront	2		9:45 AM/ 2:15 PM	75	A narrow shadow begins to fall on the park's southern edge at 9:45 AM and on the western edge at 2:15 PM.	2		9:45 AM/ 1:55 PM	90	A narrow shadow begins to fall on the park's southern edge at 9:45 AM and on the western edge at 1:55 PM.			Same heig	nt limits as O	ption A.		S	Same height limits as C	ption A.
Wood Yard Mini-Park	Central Waterfront	0			0		0			0				Same heigh	nt limits as O	ption A.		S	Same height limits as C	ption A.

TABLE 57 POTENTIAL SHADOW ON PARKS AT BUILDOUT ON ADJACENT PROPERTIES--WINTER SOLSTICE (DECEMBER 21), 8:22 AM TO 3:54 PM PST

			Existi	ng Height Lir	nits (No-Pro	ject Alternative)			Option	A Height L	imits			Option E	B Height Li	imits				Option C	Height Limi	s
Park Name	Neighborhood	Percent of park in shadow, 8:22 AM	Shadow recedes; park in full sun.	Shadow resumes	Percent of park in shadow, 3:54 PM		Percent of park in shadow, 8:22 AM	Shadow recedes; park in full sun.	Shadow resumes	Percent of park in shadow, 3:54 PM	n ,	Percent of park in shadow, 8:22 AM	Shadow recedes; park in full sun.	Shadow	Percent of park in shadow, 3:54 PM		p sh	cent of ark in adow, 2 AM	Shadow recedes; park in full sun.	Shadow resumes	Percent of park in shadow, 3:54 PM	Notes
Victoria Manalo Draves Park	East SoMa	0	NA	11:15 AM	95	The model indicates that shadow recedes from the park at 8:15 AM, prior to the first Prop K minute. This is due to the orientation of the park and the direction of shadow at this time (from the southeast). There may be shadow cast by the I-80 freeway, but this was not modeled because it would not be a project-related impact. The freeway height is assumed to be stable.	0	8:15 AM	11:15 AM	95				Same heigh	t limit as O	Option A.		0	8:15 AM	11:15 AM	95	
SoMa Recreation Center	East SoMa	40	10:30 AM	11:45 AM	100		80	11:45 AM	11:45 AM	100				Same heigh	t limit as O	option A.		80			100	
Alice Street Community Gardens	East SoMa	100	NA	NA	85	Some portion of the park experiences shadow throughout the day at the winter solstice.	100	NA	NA	85				Same heigh	t limit as O	Option A.			S	Same heigh	limit as Optio	n A.
South Park	East SoMa	95	12:40 PM / 3:30 PM	3:30 PM	10	Shadows would recede from long southeastern edge at 12:40 PM, though small shadow representing less than 5% of park area would persist at far western end until 3:30 PM.	95	12:40/ 3:30	3:30	15	Shadows would recede from long southeastern edge at 12:40 PM, though small shadow representing less than 5% of park area would persist at far western end until 3:30 PM.			Same heigh	t limit as C	option A.		95	12:40/ 3:30	3:30	15	Shadows would recede from long southeastern edge at 12:40 PM, though small shadow representin less than 5% of park area would persist at far wester end until 3:30 PM.
KidPower Park	Mission	100			100	The park remains in full shade until a few minutes before 12:00 PM, when sun begins to hit part of the western side. No more than 1/3 of the park is ever in sun during the afternoon. The park is in full shade again from 3:15 PM until the last Prop K minute.	100			100	Sunny areas begin to appear on the park's western edge around 9:30 AM. At solar noon, the southern 2/3rds of the park is in shadow. Extent of afternoon shadow is greater than under existing (No-Project) height limits. The park is in full shade again from 3:30 PM until last Prop K minute.	100			100	Sunny areas begin to a on the park's western e around 9:30 AM. At sola noon, the southern 2/3r the park is in shadow. E of afternoon shadow is than under existing (No Project) height limits. Th park is in full shade aga from 3:30 PM until the le Prop K minute.	edge lar rds of Extent great D- 'he ain		5	ame heigh	limit as Optio	n B.
Franklin Square	Mission	75			70	A shadow persists along the southern edge of the park often occupying up to 25% of the park area, throughout the entire day. Times shown are for eastern and western park edges.	75			60	A shadow persists along the southern edge of the park often occupying up to 255 of the park area, throughout the entire day. Times shown are for eastern and western park edges.	65	9:45 AM/ 	/ 2:15 PM	60	A shadow persists alon southern edge of the pa often occupying up to 2 the park area, througho entire day. Times show for eastern and western edges.	ark, 25% of out the /n are		S	ame heigh	limit as Optio	n A.
Mission Playground	Mission	95			100	A shadow occupying approximately 20% of the park area persists along its southern edge even at solar noon.	95			100				Same heigh	t limit as O	Dption A.			S	ame heigh	limit as Optio	on A.
Alioto Mini Park	Mission	100			100	The southern 40% of the park is shaded at solar noon by buildings across 20th Street.	100			100		100			100				S	ame heigh	limit as Optio	on A.
24th & York Mini Park	Mission	100			100	The park is in full shade at the first Prop K minute. Sunny patches begin to appear between 9 and 10 AM. Approximately 2/3rds of the park is in sun at the solar noon (12:08 PM), while the southern edge remains shaded by buildings across 24th Street. The park is in full shade from 2:45 PM until the last Prop K minute.	100			100	The park is in full shade at the first Prop K minute. Sunny patches begin to appear between 9 and 10 AM. Approximately 2/3rds of the park is in sun at the solar noon (12:08 PM), while the southern edge remains shaded by buildings across 24th Street. The park is in full shade from 2:45 PM until the last Prop K minute.			Same heigh	t limit as C	ption A.			5	ame heigh	limit as Optio	on A.

TABLE 57 (Continued) POTENTIAL SHADOW ON PARKS AT BUILDOUT ON ADJACENT PROPERTIES--WINTER SOLSTICE (DECEMBER 21), 8:22 AM TO 3:54 PM PST

			Exist	ing Height Li	nits (No-Pro	ject alternative)			Option A Height Limits						B Height L	imits	Option C Height Limits					
Park Name	Neighborhood	Percent of park in shadow, 8:22 AM	Shadow recedes; park in full sun.		Percent of park in shadow, 3:54 PM	Notes	Percent of park in shadow, 8:22 AM	Shadow recedes; park in full sun.	Shadow resumes	Percent of park in shadow, 3:54 PM		Percent of park in shadow, 8:22 AM	Shadow recedes; park in full sun.	Shadow resumes	Percent of park ir shadow, 3:54 PM		Percent of park in shadow, 8:22 AM	Shadow recedes; park in full sun.				
James Rolph Jr. Playground	Mission	15	8:45 AM	12:15 PM	70		15	8:45 AM	12:15 PM	70				Same heig	ht limit as (	Dption A.			Same heig	ht limit as Option A.		
Jackson Playground	Showplace Sq./Potrero	35	9:15 AM/ -	/2:45 PM	40	A small shadow persists along the southern edge of the park throughout the entire day. The times shown for disappearance and assumption of shadow are for the eastern and western edges.		Sam	ie height limi	it as Existing	g (No Project).	35	9:15 AM/ 	/ 2:45 PM	40	A small shadow persists along the southern edge of the park throughout the entire day. The times shown for disappearance and assumption of shadow are for the eastern and western edges.		Same	height limi	t as Existing (No Project).		
Potrero Del Sol Park	Showplace Sq./Potrero	50			10	Some shadow is present during all times of the day, but never exceeds more than 25% of the park area after 9:00 AM.	50			15	A small shadow persists along the southern edge of the park throughout the entire day. The times shown for disappearance and assumption of shadow are for the eastern and western edges.			Same heig	ht limit as (	Option A.			Same heig	ht limit as Option A.		
Esprit Park	Central Waterfront	55	9:30 AM / 	/ 2:20 PM	80	The southern edge of Esprit Park remains in shadow during the entire day. The time shown for disappearance and resumption of shadow are for the eastern and western edges.	50	9:20 AM/ 	/ 2:00 PM	80				Same heig	ht limit as (	Option A.			Same heig	ht limit as Option A.		
Warm Water Cove	Central Waterfront	35	9:15 AM/ -		90		35			100				Same heig	ht limit as (	Dption A.			Same heig	ht limit as Option A.		
Wood Yard Mini-Park	Central Waterfront	25	9:30 AM / 	2:40 PM	25	Existing shadow includes that cast by existing Woods Yard administration building, on the same parcel as the mini-park.	20	9:20 AM	2:20 PM	35	Decreased height limit to east reduces morning shadow; reverse is true in the afternoon.			Same heig	ht limit as (	Option A.			Same heig	ht limit as Option A.		

approve a project determined to have significant shadow impacts per Section 295, implementation of the project is not expected to result in significant shadow impacts.

## East SoMa

### Victoria Manalo Draves Park

Victoria Manalo Draves Park is the Recreation and Park Department's newest park, located on the block between Folsom, Harrison, Sixth, and Seventh Streets. Existing height limits surrounding the park (under No-Project Alternative) are predominantly 40 feet, though one parcel at the southern corner has a 50-foot height limit. This park is to the east of the newly constructed Bessie Carmichael Elementary School/Filipino Education Center. The southeast side of the park fronts Harrison Street along the study area boundary. Just south of Harrison Street is the elevated I-80 skyway. While building height limits south of Harrison Street are established at 30 feet, no buildings are expected to be constructed in these blocks because of the existing elevated freeway. Furthermore, any height change in this area south of the park would not be an impact of the project, since Harrison Street forms the southern boundary of East SoMa at this location. Therefore, structures south of Harrison were not included in the shadow model.

Under Options A and B, height limits would not change, except that the height limit on one parcel near the southern corner of the park would increase from 50 to 55 feet. Under Option C, in addition to this five-foot height increase at the southern corner, the height limits on both sides of Folsom Street would rise from 40 to 85 feet.

The shading that would occur under a build-out scenario up to the proposed height limit under Options A and B is nearly identical to that under the existing height limit. The five-foot height limit increase at the southern corner would not create a discernable increase in shadow on the park.

In a build-out scenario under Option C, in which height limits would increase to as much as 85 feet along Folsom Street, additional shadow would be evident at the summer solstice. While under the existing height limit (the No-Project Alternative), the period of full sun would begin at 9:10 a.m., under Option C a shadow would persist on the northeast corner of the park until 10:30 a.m. and would occupy less than five percent of the park's area. In addition, a small shadow (again covering less than five percent of the park) cast by buildings along Folsom Street would fall on the park's northwest corner from approximately 2:45 p.m. until 5:30 p.m., when the whole western edge of the park would begin to be shaded. At the winter solstice, modeled shadows under Option C would be unchanged from the future No-Project scenario.

All future development in East SoMa would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding Victoria Manalo Draves Park would also be subject to Section 147 review and site-specific environmental analysis. The presence of the elevated

freeway to the southeast and the new elementary school to the southwest and the fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA.<sup>184</sup> Moreover, sites to the northeast and southeast of the park are occupied by single-story buildings and could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on Victoria Manalo Draves Park. As noted in the following tables, under existing height limits, up to 95 percent of the park could be shaded at the last Section 295 minute in winter and up to 75 percent of the park could be shaded at the first Section 295 minute in summer with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

#### South of Market Recreation Center/Eugene Friend Recreation Center

The South of Market Recreation Center fronts on Sixth, Folsom and Harriet Streets. A large proportion of the property is occupied by a building housing the recreation center along Sixth Street, while the southern and western edges of the property are landscaped open space. All of the surrounding properties currently have 40-foot height limits, except for one parcel across Harriet Street that has a height limit of 50 feet.

Under Options A and B, height limits on the northeast side of Sixth Street, across the street from the recreation center, would increase from 40 feet to 85 feet. On the southwest side of Sixth Street, the height limit would increase from 40 feet to 65 feet. For a set of parcels across Harriett Street from the park property, the height limit would decrease by five feet from 40 to 35 feet. Across Folsom Street from the recreation center, the height limit would increase from 40 feet to 65 feet.

<sup>&</sup>lt;sup>184</sup>In practice, when a project is consistent with Section 295 and when the Planning Commission determines that project shadow would not adversely affect use of the park, or determines that the effect would be "insignificant" in the context of Section 295. the Planning Department normally finds potential physical effects of shading to be less than significant under CEQA. However, it is theoretically possible for different conclusions to be reached under the two sets of criteria for Section 295 and CEQA review. Also, as discussed herein, projects not subject to Section 295—either because they are 40 feet tall or less or because they affect non-Recreation and Park Department open space—could potentially have significant shadow effects under CEQA, apart from Section 295.

Under Option C, the height limit increases along Sixth Street would be the same as those under Options A and B. However, the height limit increases along both sides of Folsom Street east of Sixth Street, as well as the south side of Folsom Street across from this park, would be more extensive, rising from 40 feet to 85 feet.

At the summer solstice under build-out at existing height limits (the No-Project Alternative), the property would be approximately 60 percent shaded at the first Prop K minute (6:48 a.m.) by buildings located across Sixth Street. The shadow would fall largely on the eastern part of the property occupied by the indoor recreation center. The property would then be in full sun starting at around 7:55 a.m. Some shadow would begin to be cast along the northern edge by buildings on the adjacent property to the north around 2:15 p.m., and along the western edge by buildings across Harriet Street at around 5:45 p.m. By the last Prop K minute (7:35 p.m.), approximately 80 percent of the property would be in shadow. At the winter solstice, shadow would be cast on the southern end of the park from buildings across Folsom Street in the morning, from the first Prop K minute (8:22 a.m.) until 10:30 a.m. The property would remain in full sun until about 11:45 a.m., when shadows begin to be cast along the western edge, gradually increasing until the property is in full shade around 3:40 p.m.

At build-out under Options A and B, shadows would be more extensive and persist longer during the morning than existing (No-Project) conditions. Shadows cast by buildings across Folsom Street would cover approximately 80 percent of the park property at the first Prop K minute at the summer solstice (6:48 a.m.) and persist until 9:10 a.m., compared to 7:55 a.m. under the future No-Project (existing build-out) scenario. At the winter solstice, the park would also experience more extensive and persistent morning shadows, with approximately 80 percent of the park in shadow cast by buildings to the south across Folsom Street at the first Prop K minute (8:22 a.m.), compared to 40 percent at existing heights. Shadows would persist along the southern edge of the park until approximately 11:45 a.m., compared to 10:30 a.m. under the No-Project Alternative, with existing height limits. Shadows cast in the afternoon would not vary from the future No-Project scenario, since height limits on the western side of the park would not increase.

Under Option C, summer morning shadows on the park would be very similar to those under Options A and B, covering approximately 80 percent of the park at the first Prop K minute and persisting until 9:10 a.m. The difference would occur in the afternoon, when taller buildings along Folsom Street would cast a small shadow covering less than five percent of the property between 3:15 and 5:45 p.m. In the late morning and early afternoon, 85-foot buildings on Folsom Street would continually cast some form of shadow on the southern and western parts of the property.

All future development in East SoMa would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding the South of Market Recreation Center would also be

subject to Section 147 review and site-specific environmental analysis. The fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, sites surrounding the southern end of the recreation center are occupied by one- two- and three-story structures and could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on the South of Market Recreation Center. As noted in the preceding tables, under existing height limits, up to 100 percent of the park could be shaded at the last Section 295 minute in winter and up to 80 percent of the park could be shaded at the last Section 295 minute in summer with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

# Alice Street Community Gardens (San Francisco Redevelopment Agency jurisdiction)

Alice Street Community Gardens is currently surrounded by parcels with height limits of 130 feet on three sides, and a height limit of 80 feet on its southern edge. The park is directly adjacent to existing buildings on three sides, and to a narrow local street (Lapu Lapu Street) on one side.

Under Options A, B, and C, height limits that were previously 80 feet would increase by five feet to 85 feet, while the 130-foot height limit on the northern side would remain the same. Sites immediately east and west of the park would decrease to 85 feet.

This is a small open space that directly abuts other properties on three sides, and the height limits on these surrounding properties are 80 to 130 feet. Consequently, the garden would experience some shadow throughout most of the day under both existing regulations (the No-Project Alternative) and proposed rezoning options A, B, and C. At the first Prop K minute at the summer solstice (6:48 a.m.), the entire park would be in shadow, and shadows would persist along the garden's northeast and southeast sides until 2:00 p.m. Shadows would begin to fall on the garden's northwest and southwest sides at 2:30 p.m. and 3:30 p.m., respectively. From 6:15 p.m. until the last Prop K minute (7:35 p.m.), the garden would be entirely in shadow. All parts of

the garden would receive sun for at least a few hours per day in the summer. Despite the limited duration of sunlight, the garden appears to be active and the plots occupied. At the winter solstice, shadows would cover more than half of the garden at all times during the Prop K period (8:22 a.m. to 3:54 p.m.), and would move generally from the east to west sides.

The only difference that the proposed five-foot height limit increase on surrounding parcels would make is that shadows would begin on the southwest edge of the gardens at 3:15 p.m. instead of 3:30 p.m. as they would under the future No-Project scenario, with existing height limits. Buildout under Options A, B, and C would leave the park entirely in shadow starting at 6:15 p.m. At the winter solstice, the shadow on the garden would be nearly identical to that under the future No-Project scenario, with existing height limits.

As noted in the preceding tables, up to 100 percent of the park could be shaded at the last Section 295 minute in winter and up to 100 percent of the park could be shaded at the first and last Section 295 minutes in summer with full buildout in accordance with existing height limits. As such, the garden would be in a great deal of shadow from existing buildings subject to the existing height limit (No-Project Alternative). The 15-minute difference in the onset of shadow along the garden's southwest edge under rezoning options A, B, and C would not notably detract from the usability of the garden when compared with the No-Project Alternative. However, the garden is currently surrounded by surface parking as well as buildings between five and 10 stories in height. These sites could be redeveloped with taller code-compliant buildings (80-130 foot) under existing height limits. Therefore, under both the No-Project Alternative and with implementation of the project, there could potentially be significant shadow impacts on the Alice Street Community Gardens. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

#### South Park

South Park is surrounded by parcels with 40-foot height limits on all sides, except for two parcels with 55-foot limits that border the far southeast edge of the park.

Under all three options, height limits on the parcels directly adjacent to South Park would remain the same. However, height limits on parcels within the same blocks fronting on Second and Third Streets would increase from 40 to 55 and 65 feet, because these parcels would be designated Neighborhood Commercial Transit, a higher-density mixed-use designation. The increase in height limits on Second Street could affect shadow patterns during the morning hours. In the future No-Project scenario under existing height limits, 75 percent of the park would be shaded at the first Prop K minute (6:48 a.m.), while under build-out with the proposed height increase on Second Street, 85 percent of the park would be shaded at this time. Shadows would recede from the park's long southeastern edge at the same time under both existing (No-Project) and proposed heights. However, with the proposed building height increase along Second Street, shadows would recede from the far northeastern end of the park one hour later, at 10:30 a.m. instead of 9:30 a.m.

In the evening hours, the only discernable difference in shadow patterns would occur between 3:30 p.m. and the last Prop K minute (3:54 p.m.), when shadows on the park's southwestern end would occupy approximately 15 percent of the total park area compared to 10 percent under the future No-Project scenario with existing height limits.

All future development in East SoMa would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding South Park would also be subject site-specific environmental analysis. The fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, several sites surrounding the park are occupied by buildings lower than the existing permitted height and could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on South Park. As noted in the preceding tables, under existing height limits, up to 100 percent of the park could be shaded at the last Section 295 minute in summer and up to 95 percent of the park could be shaded at the first Section 295 minute in winter with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

## Mission

## **KidPower Park**

The recently completed KidPower Park (referred to during its planning phase as Hoff Street Park), located on Hoff Street mid-block between 16th and 17th Streets, is surrounded by parcels with varied height limits. Parcels adjacent to the park's north side are currently designated with a 105-foot limit. Parcels adjacent to the south side of the park currently have an 80-foot height limit. The block across Hoff Street to the west of the park is designated with a 50-foot height limit.

Under the proposed rezoning project, most height limits around the park would decrease or remain the same, while one area on the southeastern side of the park would increase by five feet. Under all three options, height limits on the parcels immediately adjacent to the park's north and south sides would decrease from 105 and 80 feet, respectively, to 40 feet. Under Options A and C, the parcels adjacent to the park's east side (and fronting on Mission Street) would retain the 105-foot height existing height limit in the northern portion of the block, and increase from 80 feet to 85 feet in the southern portion. Under Option B, only the corner parcel at 16th Street and Mission would remain at 105 feet, and the remainder of the parcels on Mission would decrease to 85 feet. Under all three options, the height limit on the block across Hoff Street to the west of the park would decrease from 50 to 40 feet.

The proposed project would result in a net decrease in the extent and duration of shadows on the park compared to a future No-Project scenario at existing height limits.

Because this is a relatively small park surrounded by development directly abutting other parcels, under the future No-Project scenario at existing height limits, it would receive some shadow at all points of any day of the year. It would be in full shadow in the early morning and late evening hours, but would experience variations of sunlight during the middle of the day. The variations are therefore best described in terms of the onset of sun on the park and the sun patterns during mid-day hours.

At the summer solstice under future No-Project conditions with existing height limits, the park would be in full shade from the first Prop K minute until 9:45 a.m., when the western edge begins to receive sun. At solar noon (1:12 p.m.), 80 percent of the park would be in sun, but the southern edge would remain shaded by buildings on the adjacent parcels to the south. Much of the park would remain in sun through the afternoon, though shadows cast by buildings across Hoff Street would begin to hit the park's western edge at 4:15 p.m. Shadow would increase until the whole park would be in shade at 6:45 p.m.

Under Options A and C, the park would remain in full shadow until 9:45 a.m., as under the existing height limit (No-Project scenario). However, at solar noon, 10 percent of the park area would be shaded, and more than half of the park area would remain in sun through most of the

afternoon. Shadow would recede completely from the southern edge at 4:45 p.m., then begin to hit the park's western edge at 4:45 p.m., one-half hour later than under the future No-Project scenario, with existing height limits. The park would be in full shadow starting at 7:00 p.m.

The sun and shadow patterns under Option B would be almost identical to those under Options A and C, and also would represent a net decrease in shadow compared to future No-Project conditions at existing height limits.

The *People's Plan* would have height limits similar around Kid Power Park to those of Option B, and therefore would have similar shadow impacts. The MCEJJ plan does not propose specific height limits, and thus cannot be evaluated as to shadow effects.

All future development in the Mission District would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding KidPower Park would also be subject sitespecific environmental analysis. The fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, several sites surrounding the park are occupied by buildings lower than the existing permitted height and could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on KidPower Park. As noted in the preceding tables, under existing height limits, up to 100 percent of the park could be shaded at the first and last Section 295 minutes in both summer and winter with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

### Franklin Square

Franklin Square fronts on four streets. To the north across 16th Street, the Potrero Shopping Center has a 40-foot height limit. The front part of the shopping center is not currently built up but rather is occupied by a parking lot serving the center. The Muni Metro facility across 17th Street to the south has an 80-foot height limit. The blocks to the west and east of the park currently have height limits of 50 and 65 feet.

Under Options A and C, height limits on three sides of the park would change to 65 feet, while the height limit at the Potrero Shopping Center, north of the park, would increase to 85 feet and one parcel on the corner of 16th and Bryant streets would increase to 55 feet. Under Option B, the height limit for the Potrero Shopping Center would increase to 85 feet as in Option A, but the height limit on surrounding blocks to the west, east and south would increase to 55 rather than 65 feet.

Because the proposed changes would result in some height increases and some decreases around the park, the potential shadow impacts are mixed.

With the future No-Project Alternative under existing height limits, approximately 45 percent of the park would be shaded at the first Prop K minute at the summer solstice. At build-out under Options A and C, additional building height across 16th Street would cast a shadow on the northern edge of the park, increasing the extent of the shadow at the first Prop K minute to approximately 60 percent of the park area. Under Options A and C, the shadow would also begin to be cast on the western edge of the park approximately 15 minutes earlier than it would under future No-Project conditions at existing height limits, and occupy a greater proportion of the park in the evening.

- Under Option B, at the summer solstice, the period of full sunlight would begin approximately
- 15 minutes earlier and end approximately 15 minutes later. The shadow cast on the park at the last Prop K minute would be of a greater extent than under the future No-Project scenario, covering approximately 70 percent of the park area, compared to 40 percent.

The *People's Plan* would have similar height limits around Franklin Square to the height limits proposed in Options A and C, and therefore would have similar shadow impacts. The MCEJJ plan does not propose specific height limits, and thus cannot be evaluated as to shadow effects.

All future development in the Mission would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding Franklin Square would also be subject site-specific environmental analysis. The fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, sites surrounding the park are occupied by surface parking or small buildings between one and three stories and could be redeveloped with taller (40-foot) buildings without

triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on Franklin Square. As noted in the preceding tables, under existing height limits, up to 45 percent of the park could be shaded at the first Section 295 minute in summer and up to 75 percent of the park could be shaded at the first Section 295 minute in winter with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

#### **Mission Playground**

Mission Playground is located in the middle of a predominantly residential block between Valencia, Guerrero, 19th and 20th Streets, but fronts primarily on a small street called Linda Street. Adjacent parcels and blocks on the north, south, and west sides of the park are all designated with a 40-foot height limit, while the parcels fronting on Valencia Street on the east side of the park are currently designated with a 50-foot height limit. Under all three rezoning options, the height limit on Valencia Street would increase to 55 feet, while on all other sides of the park, the existing height limit would remain unchanged.

If new buildings were constructed to meet the proposed five-foot height limit increase on the park's eastern side, the resulting shadows would cover approximately five percent more of the park's area at the first Prop K minute at both the summer and winter solstice. Afternoon shadow patterns in both seasons that were modeled would be the same.

The *People's Plan* would have similar height limits around Mission Playground to the height limits proposed in the three rezoning options, and therefore would have similar shadow impacts. The MCEJJ plan does not propose specific height limits, and thus cannot be evaluated as to shadow effects.

All future development in the Mission District would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding Mission Playground would also be subject site-specific environmental analysis. The fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, with the exception of the five-story building on the northwest corner of 20th and Valencia Streets, sites surrounding the park are occupied by two- and three-story buildings and could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on Mission Playground. As noted in the preceding tables, under existing height limits, up to 100 percent of the park could be shaded at the last Section 295 minute in winter and up to 80 percent of the park could be shaded at the first Section 295 minute in summer with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a projectspecific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

#### Alioto Mini Park

The Alioto Mini Park is located at the corner of 20th and Capp Streets. Adjacent parcels and surrounding blocks are all currently designated with 50-foot height limits.

Options A and C call for a five-foot height limit increase to 55 feet along both sides of 20th Street as well as a 15-foot increase to 65 feet on the parcel abutting the mini park on the north and along the Mission Street corridor half a block to the west of the mini park. Option B calls for the same height limit increases in this immediate area, except that the height on the parcel abutting the mini park on its north side would remain at 40 feet.

Because it is a relatively small park surrounded by development, the Alioto Mini Park is typically in full shadow in the early morning and late evening hours. The potential differences in shadow patterns under the proposed increased height limits appear as earlier onset of full shading in the afternoon. For example, at build-out under the future No-Project scenario, with existing height limits, at the summer solstice, the park would be in full shadow beginning at 6:00 p.m. until the last Prop K minute, while under Options A, B, and C, where building heights would increase 15 feet on the west of the park, it would be in full shadow starting at 5:15 p.m.

The proposed five-foot height limit increase on 20th Street is expected to have less of a potential impact on shadow because the height limit increase would be small, and buildings are separated from the park by the intervening street right-of-way. In fact, the noontime shading at the winter solstice, which is influenced by buildings to the south, would not be discernibly different from the

future No-Project scenario in the model, with existing height limits. Under both an existing and proposed height limits, approximately 40 percent of the park would be shaded at solar noon.

The *People's Plan* would have similar height limits around Alioto Mini Park to the height limits proposed in Options A and C, and therefore would have similar shadow impacts. The MCEJJ plan does not propose specific height limits, and thus cannot be evaluated as to shadow effects.

All future development in the Mission District would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding Alioto Mini Park would also be subject sitespecific environmental analysis. The fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, sites to the west, south and southeast of the park are occupied by one to three story structures and surface parking currently abuts the park to the north. These sites could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on Alioto Mini Park. As noted in the preceding tables, under existing height limits, up to 100 percent of the park could be shaded at the first and last Section 295 minutes in both the winter and summer solstices with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

### 24th and York Mini Park

24th and York Mini Park is a small park that fronts on 24th Street on its south side and is surrounded by buildings on all other sides. Under all three rezoning options, the existing 40-foot height limits would be retained on all of the residential parcels to the north of the park. The height limit for parcels fronting along 24th Street itself would increase by 15 feet to 55 feet.

Because the park is small and directly abutted by other parcels on three sides, it would experience significant shading throughout the day, both under the future No-Project Alternative, at existing height limits, and with the proposed height limit increase along 24th Street. At build-out to the

existing (No-Project) 40-foot height limit, the park would experience some shadow at all parts of the day. For example, at the summer solstice, the park would be completely in shadow from the first Prop K minute until 9:15 a.m., when sunny areas begin to appear. It would be in full sun for only a few minutes around solar noon (1:12 p.m.). Then, the western edge of the park would begin to be shaded until it again would be in full shadow from 4:30 p.m. until the last Prop K minute. The only change in shadow under build-out with an increased height limit along 24th Street would be the patches of sun that begin to appear about 15 minutes later during the morning period.

The *People's Plan* would have the same height limits around the 24th and York Mini Park as the height limits proposed under the proposed rezoning options, and therefore would have similar shadow impacts. The MCEJJ plan does not propose specific height limits, and thus cannot be evaluated as to shadow effects.

All future development in the Mission would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding 24th and York Mini Park would also be subject site-specific environmental analysis. The fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, sites surrounding the park are occupied by buildings lower than the existing permitted height and could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on 24th and York Mini Park. As noted in the preceding tables, under existing height limits, up to 100 percent of the park could be shaded at the first and last Section 295 minutes in both the winter and summer solstices with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

#### James Rolph Jr. Playground

James Rolph Jr. Playground is in the southeastern corner of the Mission Neighborhood directly across Potrero Avenue from Potrero del Sol Park. The surrounding blocks, including those outside the project area across César Chávez to the south, currently have 40-foot height limits. Under all three re-zoning options, the 40-foot height limits would be maintained, except for a 15-foot increase to 55 feet on the west side of Potrero Avenue adjacent to the north side of the park.

This height increase on the northern edge of the park would not discernibly increase the extent or duration of shadow on the park either at the summer or winter solstice during the period from one hour after sunrise to one hour before sunset. This is because of the direction in relation to the park of the parcels that would see an increased height limit.

The *People's Plan* would have the same height limits around Rolph Playground as the height limits proposed under the proposed rezoning options, and therefore would have similar shadow impacts. The MCEJJ plan does not propose specific height limits, and thus cannot be evaluated as to shadow effects.

All future development in the Mission would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding James Rolph Jr. Playground would also be subject sitespecific environmental analysis. The presence of the elevated roadway ramps to the southeast, the generous street widths on the southern and eastern borders of the park and the fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, sites to the east of the park are occupied by one to two story buildings and could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on James Rolph Jr. Playground. As noted in the preceding tables, under existing height limits, at the last Section 295 minute, up to 65 percent of the park could be shaded summer and up to 70 percent in winter with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is

judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

## Showplace Square/Potrero Hill

#### Potrero del Sol Park

Potrero del Sol Park is located directly across Potrero Avenue from the James Rolph Jr. Playground. All the blocks surrounding the park currently have a maximum building height of 40 feet.

All three rezoning options would maintain the existing 40-foot building height limits on the blocks surrounding Potrero del Sol Park, except on the opposite side of Potrero Avenue from the park's northwestern corner, where the height limit would increase to 55 feet.

At the summer solstice, the only difference in potential shadow cast with the increased height limit would appear in the evening hours. Compared to the future No-Project scenario with existing height limits, shadow would be cast on the western edge of the park beginning at 6:00 p.m. rather than at 6:30 p.m. and would cover approximately five percent more of the park area by the last Prop K minute. At the winter solstice, some portion of the park would be shaded at all points during the day by buildings on adjacent parcels on the park's southern edge. Under the rezoning options, at the last Prop K minute, approximately 15 percent of the park would be shaded, compared with 10 percent of the park under the future No-Project scenario.

All future development in Showplace Square/Potrero Hill would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding Potrero del Sol Park would also be subject site-specific environmental analysis. The fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, several sites surrounding the park are occupied by buildings lower than the existing permitted height and could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on Potrero del Sol Park. As noted in the preceding tables, under existing height limits, up to 50 percent of the park could be shaded at the first Section 295 minute on the summer and winter solstices with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in

substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

#### Jackson Playground

Jackson Playground fronts on four streets. Parcels across the street from all sides of the park currently have height limits of 40 feet. In Options A and C, the height limits on surrounding blocks would not change. Under Option B, the height limits for parcels fronting on 17th Street would increase from 40 to 45 feet.

Under the No-Project Alternative, with the existing 40-foot height limit, the park would be in full sun from 8:15 a.m. until 6:15 p.m. at the summer solstice. A shadow occupying approximately 25 percent of the park area would be present on the eastern side of the park at the first Prop K minute and on the western side at the last Prop K minute.

Under Option B, the five-foot height increase along 17th Street could result in small changes in the extent and duration of shadows cast. At the summer solstice, the park would still be in full sun from 8:15 a.m. until 6:15 p.m., except that a small shadow constituting less than two percent of the total park area would be present for 15 to 20 minutes after the start of and before the end of this full sun period. At the last Prop K minute, 30 percent of the park would be in shadow, compared to 25 percent under build-out under future No-Project conditions, at existing height limits, from buildings across 17th Street that would cast shadows on the northern edge of the park. No difference in shadow pattern or duration would be present at the winter solstice.

All future development in Showplace Square/Potrero Hill would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding Jackson Playground would also be subject site-specific environmental analysis. The fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. With the exception of two four-story structures south of the park across Mariposa Street, the park is currently surrounded by one- to three-story structures as well as surface parking lots south, west and northwest of the park. These sites could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on Jackson Playground. As noted in the preceding tables, under existing height limits, up to 25 percent of the park could be shaded at the first and last Section 295 minutes in

summer and up to 40 percent of the park could be shaded at the last Section 295 minute in winter with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

## **Central Waterfront**

#### Esprit Park

Esprit Park occupies the block between 19th, 20th, Minnesota and Indiana streets. 20th street has an elevated ramp that connects the Central Waterfront to Potrero Hill over the freeway. The elevated roadway has the potential to shade the park but would not be affected by the proposed rezoning project.

Currently, Esprit Park is surrounded by parcels with 50-foot height limits. Options A, B, and C all call for the height limits on parcels across 19th and Indiana streets from the park to increase by five feet, to 55 feet. One parcel across 20th Street from the park would decrease by ten feet.

The proposed five-foot height limit increase would have a minor impact on the duration of shadows on the park. Under the future No-Project scenario, with existing height limits, at the summer solstice, shadows would cover approximately 80 percent of the park area at the first Prop K minute (6:48 a.m.). The park would be in full sun from 8:30 a.m. until 5:30 p.m., when shadows would begin to be cast along its western edge, increasing to cover 90 percent of the park at the last Prop K minute (7:35 p.m.). With the five-foot height increase under Options A, B, and C, the model indicates the same shadow coverage at the first and final Prop K minutes, but a resumption of shadow on the western edge of the park at 5:00 p.m. rather than 5:30 p.m. Similarly, at the winter solstice, buildings constructed to the increased height limit would not discernibly increase shadow coverage at the beginning and end of the day, but would shorten the period of full sun on the park by approximately 15 minutes.

All future development in Showplace Square/Potrero Hill would be subject to the Section 295 review process and the potential shadow impacts would be evaluated based on the guidelines of that code section. Future development in the area surrounding Esprit Park would also be subject site-specific environmental analysis. The presence of the elevated roadway to the south and the fact that the Planning Commission could not approve a project determined to have significant shadow impacts on properties under the jurisdiction of the Recreation and Park Commission per

Section 295 would limit potential new shadow impacts, compared to what could otherwise occur. However, it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, sites surrounding the park are either empty or occupied by buildings lower than the existing permitted height and could be redeveloped with taller (40-foot) buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts on Esprit Park. As noted in the preceding tables, under existing height limits, up to 80 percent of the park could be shaded at the last Section 295 minute in winter and up to 90 percent of the park could be shaded at the last Section 295 minute in summer with full buildout in accordance with existing height limits. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

#### Warm Water Cove (Port of San Francisco jurisdiction)

The eastern and northern sides of the Warm Water Cove abut the San Francisco Bay, and would thus remain open. On the west and south sides of the park, adjacent parcels currently have a 40-foot height limit that would increase to 55 feet under all three rezoning options.

Under the future No-Project scenario with existing height limits, the park would not experience any shadow during summer mornings until 9:45 a.m., when a narrow shadow would begin to fall on the southern edge. The first shadows would begin to fall on the park's western edge at 2:15 p.m., increasing gradually to cover approximately 75 percent of the park by the last Prop K minute (7:35 p.m.). At the winter solstice, shadows would be cast on some portion of the park throughout the day, and would occupy approximately 90 percent of its area at the last Prop K minute (3:54 p.m.). However, the shoreline would remain in sun for much of the day, from sunrise until approximately 3:00 p.m.

With the proposed 15-foot height limit increase, the duration and extent of afternoon shadow would increase slightly, beginning along the park's western edge on the summer solstice at 2:00 p.m. instead of 2:15 p.m. and increasing to cover 90 percent of the park at the last Prop K minute. At the winter solstice, the extent of shadow would also increase somewhat in the evening, from 90 percent to 100 percent of the park at the last Prop K minute. However, most of the shoreline, where fishing activities occur, would remain in sun from sunrise until approximately 2:45 p.m.

The proposed 15-foot increase in height limits on the park's western and southern sides could increase the extent and duration of daily shadow cast on the Warm Water Cove park, if the adjacent parcels were redeveloped up to the proposed increased height limit. However, the increase in shadow duration—fifteen additional minutes in the afternoon/evening period—and extent—10 to 15 percent more of the park in the evening—would not have a significant adverse impact on the use of the park.

As noted in the preceding tables, up to 75 percent of the park could be shaded at the last Section 295 minute in summer and up to 90 percent of the park could be shaded at the last Section 295 minutes in winter with full buildout in accordance with existing height limits (No-Project Alternative). Under rezoning options A, B, and C, a substantial portion of the park, and all of the shoreline, would remain in the sun for most of the day. However, aside from a few low structures, sites immediately south and west of the park are currently undeveloped and could be developed with taller code-compliant buildings (40 foot) under existing height limits. Therefore, under both the No-Project Alternative and with implementation of the project, there could potentially be significant shadow impacts on the Warm Water Cove. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

#### Wood Yard Mini-Park (Municipal Transportation Authority jurisdiction)

Wood Yard Mini Park is a small park that fronts on 22nd Street on its north side, Minnesota Street to its east and Indiana Street to its west. The park abuts a narrow surface parking lot on its south side. Under all three rezoning options, the existing 50-foot height limits would be increase by between 5 and 15 feet to the south and west and decrease by between 5 and 10 feet to the north and east. Height limits for the parcels to the north across 22nd Street would decrease by 5 feet to 45 feet and by 10 feet to 40 feet on the northeast corner of 22<sup>nd</sup> and Indiana Streets. To the east across Minnesota Street, height limits would decrease by 5 feet to 45 feet. West of the park, across Indiana Street, height limits would increase by 15 feet to 55 feet.

Because the park is small and directly abutted by other parcels on the south side, it would experience shading at the winter solstice both under the future No-Project Alternative, at existing height limits, and with the proposed height limit changes. Under the No-Project Alternative, with the existing 50-foot height limit, a shadow occupying approximately 25 percent of the park area

would be present at the first and last Prop K minutes. The park would be in full sun from 9:30 a.m. to 2:40 p.m.

Height limit changes under Options A, B, and C could result in minor changes in the extent and duration of shadows cast. At the first Prop K minute on the winter solstice, the 5 foot height limit decrease east of the park would reduce the percent of the park area shaded by 5 percent to 20 percent. Though the shadow would recede 10 minutes earlier and resume 20 minutes earlier than under future No-Project conditions, the park would still be in full sun for the majority of the day (9:20 a.m. to 2:20 p.m.). Under build-out with height increases along Indiana Street, 35 percent of the park would be in shadow at the last Prop K minute, compared to 25 percent under future No-Project conditions. No difference in shadow pattern or duration would be present at the summer solstice.

The proposed 15-foot increase in height limits on the park's western side could increase the duration and extent of daily shadow cast on the Wood Yard Mini Park, if the adjacent parcels were redeveloped up to the proposed increased height limit. However, the increase in shadow duration—10 additional minutes in the afternoon period—and extent—10 percent more of the park in the evening at the winter solstice—would not have a significant adverse impact on the use of the park. The park would remain in full sun for most of the day.

However, the site immediately to the south of the park is currently occupied by a surface parking lot and could be redeveloped with taller code-compliant buildings (50 foot) under existing height limits. Therefore, under both the No-Project Alternative and with implementation of the project, there could potentially be significant shadow impacts on the Wood Yard Mini-Park. Potential impacts from future proposed development would be evaluated on a project-specific basis, and shadow effects could be limited through design of individual projects that takes into consideration shading effects on nearby parks. However, because the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time, it cannot be concluded that this impact would be less than significant, and therefore the impact on this park is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

## Shadow Impacts on Proposed Parks and Open Spaces

Two potential park sites within the project area have been identified in the Recreation and Park Department's Capital Plan. As these parks have not yet been constructed, potential shadow impacts on them are not identified as significant. If and when these properties become public parks, they would be subject to either Section 295 of the Planning Code if under the jurisdiction of the Recreation and Park Department, or to other applicable controls under the Planning Code.

## **Shadow Impacts on Sidewalks**

Where the project would include increases to the maximum building height, the extent and duration of shadows cast on public sidewalks could increase if and when individual properties are redeveloped up to the new height limits. The effect likely would be most noticeable along longer street corridors and where the proposed height limit increase would be greatest, such as along Folsom, Howard, Fourth and Sixth streets in East SoMa. However, even in these locations, the shadows that could be cast on sidewalks by buildings constructed up to the new height limits would not be in excess of that which would be normal and expected in a highly urban area. Furthermore, the policies set forth in the draft area plans for East SoMa, the Mission, and Showplace Square/Potrero Hill encourage all future development to adhere to alleyway sunlight access guidelines and to apply Streetscape Master Plan guidelines as proposed by the Planning Department (see Appendix B).

## Conclusion

The shadow effects of the project on public parks, publicly accessible open spaces, and public sidewalks can be summarized as follows:

While project would increase height limits around 12 Recreation and Park Department parks located within the project area, all potential increases in the extent or duration of shadow would be somewhat ameliorated by the fact that all proposed development would be subject to site-specific environmental review and any additions or new development over 40 feet in height to the provisions of Planning Code Section 295. Under Section 295, the Planning Commission could not approve a project determined to have significant shadow impacts on the use of a park property.

Three parks within the project area—the Alice Street Community Gardens in East SoMa and the Warm Water Cove and Wood Yard Mini-Park in the Central Waterfront—are under the jurisdiction of other agencies and hence not subject to Section 295 of the Planning Code. However, the height limit around Alice Street Community Gardens is already up to 130 feet, and the proposed five-foot height limit increase would not noticeably increase the duration of shadow or detract from the use of the space. The extent and duration of shadows on Warm Water Cove could increase with the proposed 15-foot height limit increase on the park's western and southern sides, but the park would still experience substantial sunlight throughout the day, particularly along the shoreline, and its usability would not be significantly affected. Neither would the increase in shadow duration and extent on Woods Yard Mini-Park have a significant adverse impact on the use of the park as it would remain in full sun for most of the day.

The extent and duration of shadow on public sidewalks could increase along street corridors where the project includes an increase in the maximum building height. However, this new shadow would not be in excess of that which would be expected in a highly urban area.

None of the potential increases in shadow would alter temperatures in such a way to substantially affect public areas or change the climate in the community or region.

Nevertheless it cannot be stated with certainty that compliance with Section 295 would always mitigate any potential significant effects under CEQA. Moreover, sites surrounding many of these parks could be redeveloped with taller buildings without triggering Section 295. Therefore, under both existing height limits (the No-Project Alternative) and with implementation of the project, there could potentially be significant shadow impacts in the project area parks. It cannot be concluded that this impact would be less than significant because of the potential existing for new shadow, possibly in substantial amounts depending on subsequent individual proposal(s) that may be put forth, and because the feasibility of complete mitigation for potential new shadow impacts of currently unknown development proposals cannot be determined at this time. Therefore the project impact with respect to shadow is judged to be significant and unavoidable for all three rezoning options and for the No-Project Alternative.

## **Cumulative Impacts**

Shadow impacts from development resulting from project implementation is not likely to create cumulative impacts in conjunction with other potential development outside the project area, because the proposed Eastern Neighborhoods Rezoning and Area Plans would have jurisdiction over all future development in the project area. Therefore, no development not subject to the proposed rezoning and area plans is reasonably foreseeable.

## J. Archeological Resources

## Setting

## **Historical Context**

A technical memorandum<sup>185</sup> was prepared by the Planning Department archeologist for the environmental evaluation of the Eastern Neighborhoods Rezoning and Area Plans to provide background information regarding potential effects to archeological resources eligible or potentially eligible for listing on the California Register of Historical Resources, which must considered under CEQA. The purpose of the historical context is to provide an overview of the project area that is requisite to the identification of potential archeological resources and to evaluate the potential significance of any identified archeological resources.

The archeological record documents that prehistoric peoples occupied the project area, and San Francisco as a whole at least 6,000 years ago. The earliest peoples present were small groups of nomadic hunter-gathers who hunted large game supplemented with a diet of seeds and nuts as evidenced by the presence of large projectile points and milling stones (manos and metates). These peoples may have spoken a Hokan language. By at least 500 B.C., these populations were displaced or amalgamated with a bayshore- and marsh-adapted people who were Costanoan language speaking people who had migrated from the Columbia River basin via the Central Valley. The Costanoan (also known as Ohlone) people lived in larger, more sedentary settlements, with a diet primarily based on acorns, shellfish, and small game, and maintained cultural practices different from their predecessors with respect to treatment of the dead, personal adornment, and various technologies.

The Costanoan tribe that occupied the northern end of the San Francisco peninsula in the late 18th century is known under the general term Yelamu. At the time of European contact, they occupied three semi sedentary village groups. One of the villages, Chutchui, may have been located within the project area, since it was near the Laguna de los Dolores that was to the east and southeast of the project area. Prehistoric Costanoan and/ or pre-Costanoan peoples may also have had specialized activity sites (shell fish processing, hunting blind, ritual, or burial sites) within the project area.

Native Americans were also present within the project area in the historic period. In fact, the Native American population in San Francisco was at its greatest known density and number in the early 1800s. The adobe village (rancheria) for neophytes (Christianized Indians) maintained at

<sup>&</sup>lt;sup>185</sup> Dean, Randall, Archeologist, MEA, San Francisco Planning Department, *Technical Memorandum: Eastern Neighborhoods Rezoning and Area Plans Archeological Context*, to File No. 2004.0160E, April 21, 2006. For a full bibliographic listing of references cited in the archeological context subsection, please refer to this technical memorandum, which is available for review by appointment at the Planning Department, 1650 Mission Street, Suite 400, in Project File No. 2004.0160E.

Mission Dolores was within the project area. Over the course of its occupancy, the Mission Dolores rancheria would have had not only Costanoans, but Native Americans from other tribelets around the Bay Area, such as Coastal Miwok, Southern Patwin, and Pomo who were linguistically and culturally distinct from the Costanoans. Native American populations were present within the project area at least into the 1850s as largely menial laborers.

The first European settlement within the project area was the original mission of San Francisco de Asís constructed in 1776, a temporary structure or brush chapel (enramada). The first mission was constructed near the headwater lake of Mission Creek, "Laguna de Nuestra Senora de los Dolores". The second Mission Dolores also dates from 1776 and was constructed of wood and mud (palizada). The location of first and second missions have not been verified but they may have been situated in the vicinity of 14th and Mission Streets. The second mission complex included a priest's house of palizada construction and cemetery, and was in use for at least eight years but possibly longer. San Francisco's third mission (the existing adobe Mission Dolores) was constructed over a period of several years beginning in 1782. At the period of its peak expansion and activity, approximately 1814 to 1817, the Mission Dolores complex included at least forty-three buildings and is known to have covered an area that extended at least from Guerrero Street to Church Street and 15th Street to Dolores Creek south of 18th Street. However, the location of many of the known buildings and structures associated with Mission Dolores (e.g., the mission prison, school, one of the two tanneries, one of the two mills, forge, and bathhouse) is not known, thus, the geographical extent of the whole mission complex may have been more extensive than indicated. Following the secularization of Mission Dolores in 1835, the mission's properties and buildings were subdivided among small land grants.

Spanish-Mexican period occupation and activities in the project area also occurred outside of the Mission Dolores area. Various adobe houses are known to have been present along San Jose Road, near Precita Creek, west of Potrero Avenue, and Potrero Hill. The adobe Old Wall and rock Doss Wall were located at the base of the west slope of Potrero Hill.

Between 1835 and the discovery of gold in California in 1848, a small settlement formed around the former Mission complex. A number of new adobe and wood-frame houses, as well as some commercial enterprises were constructed in the area, generally by Californios families. Many of the former Mission structures became adapted to new uses including: an inn and tavern, residences for the remaining neophyte Indians (who now were servants of local Californios households) and poorer Hispanic and mestizo families. A number of non-Hispanics also moved into the Mission Dolores community, comprised generally of young English or American men who had married into local Mexican families. In addition, in 1846, several Mormon families settled in some of the former Mission buildings following a schism within the party of several hundred Mormon emigrants who had recently arrived the same year by ship at Yerba Buena. The Mission Dolores area became an ethnic enclave for Californios families who were increasingly economically, politically, and culturally marginalized by the rapid changes resulting from the

Gold Rush. To preserve a distinct and oppositional identity and to realize a degree of selfdetermination, the settlement at Mission Dolores unsuccessfully petitioned the American military governor for recognition as a distinct pueblo. By the early 1850s, there were more than 50 adobe buildings in the Mission Dolores district, encompassing an area from 14th to 19th Streets and Mission to Church Streets.

In the early 1850s, Steamboat Point was one of the principal areas in San Francisco for ship construction/repair operations. The other early shipyard locations were on Rincon Point and the Northeast Waterfront. Tichenor's Way (Second and Townsend Streets) remained in the area until the mid-1870s, well after other relocated to Point Potrero (Central Waterfront).

By the mid-1850s, market gardens and dairies began to proliferate on the outskirts of the city, principally southwest of Fourth Street in the former slough and wetlands around Mission Bay and extending to the area west of the Laguna de los Dolores to provide the foodstuffs for the growing settlement of San Francisco. Between 1852 and 1857 much of the area around Mission Dolores north to 14th Street and east to Folsom Street had been put under cultivation, with parts of the area east of Mission Dolores occupied by squatters who maintained small farming plots.

Two elite residential districts were also developed in the mid-1850s south of Market Street: Rincon Hill and South Park. On Rincon Hill, large lots allowed construction of grand, ostentatious villas. South Park, on the other hand, was designed in emulation of the townhouse crescents in London.

At this same time various industries related to processing of livestock into consumable products: meat, leather, soap, candles, fertilizer, leather products, etc. located near the Brannan Street Wharf at the base of Ninth Street, an area known as Butchertown. Economies of agglomeration drew these industries, and derivative industries (glove manufacturers, whip makers, book binders, etc.) together because of the availability of fresh water, tidal flow to remove noxious wastes, and accessibility by plank road or by shallow craft. Because of the relative cheapness of land, deepwater access, and isolation from the city certain industries, these uses ultimately relocated on the tip of Potrero Point.

At the time of its opening in 1866, Woodward's Gardens represented the most extensive park/recreation area that had been created in San Francisco covering an area a little larger than the block bounded by 13th, 14th, Valencia, and Mission Streets. The diversions offered far exceeded those of other early proprietary parks like Russ Gardens, the Willows, and Hayes Park. Woodward's Gardens contained a museum with South Pacific and East Asian artifacts, an art gallery with copies of European old-master paintings, a menagerie with stuffed and live animals, one of the world's first salt-water aquariums, and a restaurant. It also featured theatrical and circus performances. Whereas the earlier urban amusements such as the Willows and Hayes Park may have lasted barely a decade, Woodward's Gardens remained popular for almost 30 years closing in 1894, following the development of Golden Gate Park and the Mid-Winter's Fair of 1893.

The linkage of San Francisco to the East Coast by railway after 1865 resulted in important landuse pattern changes within the project area. Southern Pacific and Central Pacific Railroad Co.'s large passenger and freight depot and maintenance shops and Pacific Mail Steamship Company's complex of warehouses and wharf displaced many of the shipyards on Steamboat Point. Through the latter part of the 19th century, the area south of Brannan and Berry Streets became more intensely developed for shipping especially for heavy, bulk commodities. West of Fifth Street, SoMa developed as a dense skilled and unskilled working class residential neighborhood with retail businesses on the ground floors along Fifth and Sixth Streets.

Potrero Hill remained little developed during this time. However, on its isolated western slope two important medical institutions were constructed in the mid-1860s, the Magdalen Asylum (later, St. Catherine's) and the San Francisco County Hospital. In the 1860s and 1870s many boat builders relocated from Steamboat Point to the northern shoreline of Potrero Point, along what today is Illinois Street and Third Street, where river steamboats, and bay and ocean schooners were constructed. Long Bridge (Third Street) was constructed over Mission Bay in 1865 and within two years extended to Hunter's Point where the Bay View Race Course and new Hunter's Point dry docks were located. The first significant iron and steel mill in the West was constructed in 1866 on the northern tip of Potrero Point, the Pacific Rolling Mills. Many of the mill's semi-skilled workers lived in boarding houses on Irish Hill. Claus Spreckels' California Sugar Refining plant relocated to Potrero Point in 1883 and remained in operation well into the 20th century. In the early 1880s, the Union Iron Works constructed the first great West Coast shipyard at Potrero Point. The Union Iron Works shipyard was the principal producer of large steel ships on the West Coast.

## East SoMa

The East SoMa plan area historically included Steamboat Point, the eastern and southern slopes of Rincon Hill, the large slough and marsh wetlands southwest of Third Street and an area of sand dunes ridges between Third and Seventh Streets. East SoMa was inhabited prehistorically (CA-SFR-2, CA-SFR-154) and, in fact, the general South of Market area had one of the highest concentrations of prehistoric settlement sites in San Francisco.

East SoMa developed early in response to the Gold Rush. In the early 1850s, a number of shipyards were established at Steamboat Point because of the relatively deep water was a preferred location for ship builders and ship repairers. In the 1860s many of the Steamboat Point ship yards relocated to Potrero Point, as the area became attractive due to the terminus for the new railroad and as a port for heavy, bulk commodities like coal, lumber, and brick. In conjunction with newly developed waterfront-oriented industrial uses, a Chinese fishing village was established at the base of the eastern bluff of Rincon Hill near the eastern edge of SoMa. The

Chinese villagers also hired themselves out for other employments, such as laborers at Charles Hare's shipwrecking yard at the tip of Rincon Point. At this time development was sparse beyond Third Street. There were large commercial gardens along the Folsom Street plank road.

George Gordon, emulating London's elegant brick row house "crescents," constructed South Park through the latter 1850s and the 1860s. A number of historically significant persons lived in South Park at various times during the course of the latter 19th century, including Robert B. Woodward, David Colton, Hall McAllister, Senator William Gwin, Alexander Forbes, and James C. King.

The arrival of the transcontinental railroad in 1869 was a watershed event for San Francisco that greatly defined the subsequent character of SoMa. The expectations were that the transcontinental railroad would increase markets on the East Coast and reduce prices for raw and finished goods since prices were generally lower in the East. Instead the most impressive local economic effect of the transcontinental railroad, was a depression in wage rates and substantial rise in unemployment. The economy of San Francisco had grown quickly from the Gold Rush to the Comstock boom with a low unemployment rate and high wage rate. The railroad introduced large numbers of new workers (East Coast immigrants and unemployed former railroad construction workers, especially young Irish and Chinese men). Most residents of the eastern South of Market Area, outside of South Park, Rincon Hill, and certain streets, were probably wage laborers. In the ten years prior to 1880 the city's population increased from 150,000 to 235,000 with much of the new population absorbed into SoMa. The result was that much of SoMa became typified by rental and tenant housing occupied by a population characterized by chronic or episodic unemployment and residential transience. The characteristics of the working class sections of SoMa changed during the 1870s and 1880s: frequent change of residency, smaller household size, and increased tenant-occupancy.

On a bluff just above Bryant Street, Saint Mary's Hospital was constructed by the Sisters of Mercy in 1861. The principal mission of the hospital was to serve the needs of working class immigrants. During the 19th century the hospital grew into a large complex occupying more than two-thirds of the southern portion of the block between Rincon Place and First Street and Harrison and Bryant Street. The medical complex included a convent, two buildings for elderly/infirm women, a residence for unemployed women, a women's benevolent society hall, and a school.

By the mid-1860s Steamboat Point, no longer a small isolated point of land, was linked to the factories and ports of Potrero Point, Islais Creek and Hunter's Point by Long Bridge and to the East Coast markets by the Southern Pacific Railroad. The Southern Pacific and Central Pacific Railroad Company constructed a passenger and freight depot and maintenance shops on the former southern knob of Steamboat Point within the block bounded by Townsend, Third, Fourth, and King Streets. In the 1870s, the Pacific Mail Steamship Co. constructed a long wharf and

warehouses, around First and Brannan Streets. Adjoining the dock were the Oriental and Occidental Warehouses. By the late 1880s, the East SoMa plan area south of Brannan Street was industrial, for example, canneries, furniture makers, the San Francisco Gas and Light Company. South of Berry Street were wharves for heavy commodities, like lumber and bricks. The area north of Brannan Street was residential and on major streets residential with shops on the ground floor. Fifth Street contained some ethnic enclaves such as Jewish families who operated junk businesses, pickle factories, and kosher butcher shops. Sixth Street between Market and Howard Streets had a large number of Japanese residents in the early 1900s.

The earthquake and fire of 1906 permanently transformed the land use and demographic pattern of the project area. SoMa's building stock was destroyed by the fire, and within a day of the earthquake nearly all of SoMa's 62,000 residents were refugees. Initially some working class residents were allowed to return and to construct sheet metal shanties. Eventually temporary housing was constructed for this largely un-employed single male population, and much of this "temporary" housing became permanent, supplied by cheap boarding houses and hotels; the middle and upper class residents did not return. Otherwise, the devastation resulting from the fire, sharply propelled certain tendencies such as that of young SoMa households relocating to larger residential quarters in the Mission District. Many of the industries of the South of Market Area did not rebuild on the same sites so that in many cases, building sites remained vacant and undeveloped into the 20th century.

## Mission

Some documentary evidence indicates that at least one Native American settlement, Chutchi, was located within the Mission District at the time of the founding of the first Franciscan mission in 1776. The first European settlement in the Mission District was in the northern portion of the valley, probably near Mission Creek (14th and 15th Streets): the first and second Missions, priests' house, cemetery, and possibly a Native American neophyte village. It is not known what other structures or improvements associated with the first two missions or the current Mission Dolores which were constructed in the 1780s, may have been present within the Mission District except for the "Old Wall," an adobe wall which separated the old Mission valley pasture land (Potrero Viejo) from the new Mission pasture (Potrero Nuevo) along the western and southern slope of Potrero Hill.

During the 1840s and early 1850s there were dozens of adobe and wood frame buildings constructed within the Mission area, the location of most of them is unknown, with the exception of: Juan Prado's adobe house; Jesus de Noe's wood frame (c. 1840) house; De Haro's laborers' house (c. 1843 and the house of Maria Carmen Bernal (wife of José Cornelio Bernal).

From the 1840s the area surrounding the Mission Dolores complex developed into a small community of old California Hispanic families and affinelly-related American- or British-born family members and members of a dissident Mormon community. New adobe and wood-frame

houses were constructed and older deteriorating adobe structures were readapted to house this growing community, which unsuccessfully petitioned the American military governor for legal recognition of the community as a pueblo independent of San Francisco. Following the construction of the Mission Street and Folsom Street proprietary plank roads (1851 and 1852) the western half of the Mission area became the primary bread basket for San Francisco supplying fresh produce from truck gardens located between Mission Creek and 22nd Street.

In the 1850s, nested within the southern fringe of farms and gardens plots of the Mission District, were the Union and the Pioneer Race Courses, which were weekend destination points. By the end of the 1850s, the Willows (bounded by 18th, 19th, Valencia, and Mission Streets) was created as a proprietary park, offering the serenity of landscaped picnic gardens. By 1866, Woodward's Gardens opened. Woodward's Gardens was another proprietary recreational park but at a scale of size and range of diversions previously unknown in San Francisco.

By 1889, the area along the south side of Precita Creek along the southern edge of the Mission District area formed a long cluster of tanneries and of small manufacturers of associated products like gloves.

During the latter 19th century, the northwestern portion of the Mission was gradually built up as a residential area of single family and multi-flat housing with numerous residential-oriented institutional uses such as schools, churches, and St. Luke's Hospital at 20th and Valencia Streets. An indoor skating rink was located on Mission Street between 20th and 21st Streets in the 1880s. Certain industries requiring heavy water consumption (woolen mills, tanneries, soap and candle works, breweries, pottery works) located along the margins of water courses (Precita Creek, Mission Creek). The three square blocks between 16th, 19th, Folsom, and Harrison Streets) contained two large wool factories (Mission Woolen Works, Pacific Woolen and Knitting Mills) by the 1870s, a large brewery plant, soap factories, and the Mission Pottery Works. The area separating the industries along Mission and Precita Creeks and the solid residential neighborhood of the Mission District tended to remain undeveloped or sparsely developed during the 19th century.

Following the Earthquake and Fire of 1906, the land use pattern, demographics, and residential density of the Mission District changed. Following the destruction of SoMa in 1906 much of its population relocated to the Mission District, overall increasing the residential density and level of development. The net effect over time was to displace the remaining farming and diary operations and other non-residential land uses.

## Showplace Square/Potrero Hill

No reference to prehistoric occupation of Potrero Hill exists in the historical or archeological literature. During the Spanish-American period (1775-1835) Potrero Hill was used as pasturage (Potrero Nuevo). An adobe wall running along the base of the western slope of Potrero Hill

separated the newer pasture from the older grazing land (Potrero Viejo). In the 1840s there were at least two adobe houses on and at the base of Potrero Hill, which may have been used by sheep or cattle herders.

The Showplace Square area historically extended over the broad slough and marsh lowland that made up the estuary of Mission Creek. From the early 1850s the area was preferred by certain industries such as slaughterhouses, tanneries, glue factories, soap and candle makers who benefited from the ability to transport livestock by water transport and twice daily tidal action to dispose of noxious waste materials. Thus, the area around Ninth and Brannan Streets was known for half a century as Butchertown because of the large concentration of these types of industries and of derivatives manufactories, such as glove makers, bookbinders, and parchment makers. Stockyards were placed south of the Brannan Street Bridge within the area bounded by Potrero Avenue, 14th, 16th and Vermont Streets. In 1871, the city outlawed slaughterhouses within the city requiring them to be located at the mouth of Islais Creek. Despite the ordinance, meatpackers, stock yards, and soap factories operated in this area throughout the end of the 19th century. To the north of Butchertown, by the 1880s, boardinghouses/hotels mostly for single men and tenements for working-class families had clustered along Ninth and 10th Streets, providing a skilled and semi-skilled workforce. (Today, most people remember the last Butchertown, south of Islais Creek, near Third Street and Evans Avenue.)

Although some industries had located at Potrero Point (Point San Quentin) as early as the mid-1850s, the only industry within Potrero Hill in the mid-1870s was a tannery and glue factory located near Mariposa Street. Because of its isolation and tranquility in the 1860s-1870s, Potrero Hill was the chosen venue for two prominent medical institutions: the Magdalen Asylum and the San Francisco County Hospital.

## **Central Waterfront**

The Central Waterfront occupies what historically was the eastern tip of Potrero Hill, known as Point San Quentin or Potrero Point. The archeological record to date has not disclosed any prehistoric sites within this area. In 1849 a new town at the tip of Point San Quentin was planned by John Townsend and Cornelius de Boom but never realized. The first known improvements in the Central Waterfront were two blasting powder magazines. In 1854 Gibbons and Lammot (agents of the du Pont de Nemours Co.) constructed a powder works on the south shore of the point (23rd Street between Maryland and Louisiana Streets). Less than two years later the Hazard Powder Co. was established nearby. At this same time, Tubbs cordage works was established on the south side of Potrero Point. The cordage manufacturing operation required initially a 1,000 ft. long shed-covered rope walk that projected out on a wharf into the Bay.

In the 1860s and 1870s many boat builders (e.g., Tierman, Ternan, Manson, Ewing, Turner and Rundle) relocated from Steamboat Point to the northern shoreline of Potrero Point, along what

today is Illinois Street and Third Street. John C. North's boat yard was probably the most renown of the Potrero Point ship builders, producing river steamboats and lumber schooners.

After the cut through Potrero Hill was blasted through and Long Bridge constructed, the first large industry in the Central Waterfront, the Pacific Rolling Mills, was constructed at the end of 20th Street. The Pacific Rolling Mills produced iron bars, rod, and railroad iron. Irish Hill to the south became after 1866 a working class neighborhood composed of some modest single family houses but mostly boarding houses and a nearby Chinese shanty. By 1875 another large plant was located on the south side of Potrero Point, the City Gas Company (San Francisco Gas Light Co.). By the early 1880s Claus Spreckels had relocated the California Sugar Refining plant to a site east of Louisiana Street and south of Humboldt Street. The sugar refinery remained in continuous operation into the 1900s. The Union Iron Works had constructed its shipbuilding plant on Potrero Point by the late 1890s.

## Archeological Context

A sizable archeological literature exists for San Francisco supported by a considerable amount of archeological field investigation. Most of this documentation has been more descriptive than analytic in its approach and most field projects have been archeological salvage responses to development proposals rather than research-initiated projects. Until recent years, archeologists in San Francisco have primarily concentrated on a small range of archeological resources, specifically prehistoric sites, Gold Rush period structural remains and deposits, buried Gold Rush period storeships, structural remains associated with the Spanish/Mexican Presidio, the foundations of the former City Hall complex, and deposits associated with Chinese households or merchants. A number of archeological data recovery projects have also been conducted in former cemetery sites involving the removal of a large number of burials. A substantial research void in past archeological work in San Francisco has been domestic and commercial deposits after 1860 but recently such deposits have been the focus of increased investigation.

## Project Area

The project area has been comparatively less studied archeologically than many other parts of San Francisco, such as for example, the northeast, northern South of Market Area, Bayview District, Hunters Point, and Rincon Hill areas of San Francisco. Within the approximately 425 city blocks that comprise the Eastern Neighborhoods, 55 blocks (10%) have been archeologically studied or, at least, assessed in terms of archeological sensitivity. There is among the four planning areas in the Eastern Neighborhoods a wide variation in the intensity of prior archeological research: the East SoMa and Central Waterfront Neighborhoods have been comparatively well studied archeologically while the Mission District and Showplace Square/Potrero Hill Neighborhoods have been less archeologically researched. For all the Eastern Neighborhoods there has been relatively little archeological field investigation. This past neglect may be due to two factors: comparatively weaker development pressure that might prompt archeological studies and a

former bias that the local archeology community had towards certain types of archeological resources (prehistoric and Gold Rush period archeological sites). In any event, it is a commonplace in archeology that the lack of archeological research or studies of an area is not, in itself, an indication that the area has no intrinsic archeological significance since often other unrelated factors may be responsible for the dearth of information. Within the project area almost all of the archeological studies that have been prepared to date have been pre-project assessments of the presence/significance of archeological resources that may potentially be impacted by specific building or transportation projects. Nearly all of these studies were prepared in regulatory compliance with CEQA or Section 106 of the National Historic Preservation Act.

## East SoMa

The East SoMa neighborhood has been the most archeologically studied of all of the Eastern Neighborhoods both in terms of documentary and field studies. Most of these studies have been of individual project sites of one to three parcels. Some of the studies have been intensive, multidisciplinary research projects of sites embracing several city blocks.<sup>186</sup>

There are two recorded prehistoric sites (CA-SFR-2, CA-SFR-154) in the East SoMa project area There have been several finds of secondary (re-deposited) prehistoric midden in East SoMa which may be indicative of primary prehistoric deposits near to the finds or of no longer extant prehistoric settlement sites that have been destroyed by 19th century site formation and construction processes. Up to the present time, one of the greatest concentrations of prehistoric sites in San Francisco has been just outside of the project area to the north of Howard Street.

The archeological research design and treatment plan prepared for the SF-480 rebuild and for the Caltrans seismic retrofit of the west approach of the Bay Bridge meticulously examined the historical record for the five East SoMa blocks along the elevated freeway and auxiliary ramps (Beale Street to Fourth Street, Harrison to Bryant Streets, and between Essex and Second Streets and Folsom and Harrison Streets).<sup>187</sup> The archeological resources identified within the five-block area included remains associated with elite families (1850s-1900), domestic servant cottages (!850s-1900); workers at St. Mary Hospital, dockworker households (1850-1906?), and Sister of Mercy Convent. The archeological field investigation (Anthropological Studies Center, 2004) for

<sup>&</sup>lt;sup>186</sup> Praetzellis, Mary et al., SF-80 Bayshore Viaduct Seismic Retrofit Projects Report on Construction Monitoring, Geoarchaeology, and Technical and Interpretive Studies from Historical Archaeology. Rohnert Park, CA: Anthropological Studies Center, Sonoma State University Academic Foundation, Inc. June 2004; David Chavez & Associates, Archaeological Resources Inventory for the South of Market Redevelopment Project. April 1995; Praetzellis, Mary, Adrian Praetzellis, et al. (Anthropological Studies Center), Tar Flat, Rincon Hill and the Shore of Mission Bay: Archaeological Research Design and Treatment Plan For SF-480 Terminal Separation Rebuild. Rohnert Park, CA: Anthropological Studies Center, Sonoma State University Academic Foundation, Inc. 2 volumes. December 1993; Ziesing, Grace H. et al.(Anthropological Studies Center), San Francisco-Oakland Bay Bridge, West Approach Replacement: Archaeological Research Design and Treatment Plan. Rohnert Park, CA: Anthropological Studies Center, Sonoma State University Academic Foundation, Inc. 2 volumes. July 2000.

<sup>&</sup>lt;sup>187</sup> Praetzellis, et. al., Tar Flat, Rincon Hill and the Shore of Mission Bay, 1993 (op. cit.); Ziesing, et. al., San Francisco-Oakland Bay Bridge, West Approach Replacement, 2000 (op. cit.).

the Bay Bridge West Approach seismic retrofit program found eleven NRHP-eligible privies associated with Irish foundry worker households (1860s-1900) residing on Baldwin Court.

Of the nearly thirty archeological reports related to sites within the SoMa project area, seven reports are results of archeological data recovery programs, such as the Baldwin Court study. Archeological sites analyzed have included a Chinese shrimp fishing village (1850s-1860s) on the shoreline of Rincon Hill, St. Mary's Hospital (1861-1906), and Tichenor's Ways (CA-SFR-130H) a marine railway and dry dock (1851-1870s) on Steamboat Point.<sup>188</sup> In 2005, at a site on the periphery of the East SoMa project area, the unexpected discovery of a large Spanish-Mexican period matanza (cattle/elk slaughter/hide & tallow processing site) has reopened the question of whether other pre-Gold Rush and Spanish-Mexican period archeological deposits/features may be present within the SoMa area.<sup>189</sup>

## Mission

The Mission project area has been the least archeologically studied of all of the Eastern Neighborhoods. The paucity of the known archeological record is incongruous with the relative long duration and richness of the historical record of this part of the Mission District. There are no recorded prehistoric sites in the Mission project area but it is fairly certain the area was occupied prehistorically. Also, historical documentation suggests the presence of at least one Native American settlement at the time of initial European settlement in 1776. The first and second Spanish missions and auxiliary buildings were most likely located in this part of the Mission District. A large number of Mexican-period adobe houses and other structures were dispersed throughout the district as far east as Potrero Avenue and as far south as César Chávez Street. Post-Gold Rush period potential archeological resources are also abundant and would at least in part include: the Willows (1850s), Woodward's Gardens (1866–1894), Union Race Course (1850s), Precita Creek tanneries (1850s–1890s), St. Luke's Hospital (1870s–?), dairy farms (1850s), Chinese garden farms (1850s–1880s), the Mission Woolen Works (1870s) and the Pacific Woolen Knitting Mills (1870s).

Little archeological testing or data recovery has been undertaken in the Mission project area.<sup>190</sup> The most intensive archeological fieldwork project undertaken to date was in a five acre site at 15th and Valencia Streets, the Valencia Gardens Hope VI project. The project archeological research design predicted a potentially complex archeological site composed of deeply buried

<sup>&</sup>lt;sup>188</sup> William Self Associates, *Historic Archaeology of Tichenor's Ways, A Mid-19th Century Marine Railway and* Drydock. May 1999.

<sup>&</sup>lt;sup>189</sup> Pastron, Allen G. & Allison Vanderslice (Archeo-Tec), 888 Howard Street, City and County of San Francisco, California: Pre-Construction Archeological Testing Program. June 2005. [Site is adjoining but outside the project area]

<sup>&</sup>lt;sup>190</sup> Basin Research Associates, Inc., *Final Report – Archaeological Testing/Monitoring 1290-1294 Potrero Avenue*. November 21, 1994; Pastron, Allen G. & Richard D. Ambro (Archeo-Tec), Report of Results of Pre-Construction Auger Borings for Possible Deep Prehistoric Resources at the Valencia Gardens Hope VI Project. November 30, 2004; Pastron, Allen G. & Richard D. Ambro (Archeo-Tec), Report of Initial Findings of the "Mechanical Exploratory Trenching" Component of the Program of Pre-Construction Archaeological Testing and Evaluation Conducted within the Borders of the Valencia Gardens Hope VI Project. November 30, 2004.

prehistoric deposits, Spanish-period features related to the first and second Missions, domestic deposits associated with the household of the prosperous industrialist Egbert Judson (1850s–1906), remains of a Chinese farm, and features related to Recreation Park (1907–1930) an early baseball park.<sup>191</sup> The archeological testing program explored two testing strategies: core sampling for deeply, buried prehistoric deposits that could be affected by project compaction grouting and archeological trench testing for more recent prehistoric and historical archeological resources. The Valencia Gardens archeological testing and data recovery program revealed Spanish/Mexican period deposits of clay roof (tejas) and floor (ladrillos) tile fragments and Majolica ware fragments. It could not be determined if the tile fragments were a primary or secondary deposit. The prehistoric midden found in several test units was interpreted as having been re-deposited from another, possibly close range, location. Native American human remains were recovered in a similarly disturbed context. The most spectacular archeological feature discovered at Valencia Gardens were the architectural remains of a Chinese male communal house, multiple privy feature, and trash pit associated with a large garden on site (1880s–1890s).

In 2001, the emergency archeological investigation of the inadvertent discovery of several classically sculpted figural granite fragments at the BestBuy store construction site resulted in the determination that the project site had been that of either an 1890s stone cutter yard or of a post-1906 City stone cutting yard. The carved granite fragments appeared to be architectural elements. The post-discovery site survey indicated that construction activities had destroyed the remains or stratigraphic context of any other archeological deposits/features that had been present. Attempts to undertake further archeological investigation or to curate the recovered stone-sculpted architectural fragments were not successful.

## Showplace Square/Potrero Hill

The Showplace Square/Potrero Hill project area has been poorly studied archeologically. Of the approximately 150 square blocks within the area only 12 have been the subject of some form of archeological research. The sparseness of research within the Showplace Square/Potrero Hill area should not be attributed to a corresponding meagerness in the actual archeological record. The comparative historical absence in the area of intense development pressure especially for large-scale, deep-soils disturbing projects as in the northeast and SoMa districts of San Francisco, may be primarily responsible for sparse archeological documentation of this part of city. The majority of prior archeological research has been in the Showplace Square area including eight of the twelve previously archeologically studied blocks. Correspondingly, little archeological field exploration has occurred within Showplace Square/Potrero Hill. Although few in number, the archeological data recovery projects undertaken up to the present have yielded informative results.

<sup>&</sup>lt;sup>191</sup> Pastron, Allen G. & L. Dale Beevers (Archeo-Tec), From Bullfights to Baseball Archaeological Research Design and Treatment Plan for the Valencia Gardens Hope VI Project. December 2002.

There are no prehistoric sites within the Showplace Square/Potrero Hill area. The former presence of abundant freshwater wetlands and streams (Laguna de los Dolores, Mission Creek, Precita Creek) along the periphery of the project area and rich concomitant biotic resources important to prehistoric communities supports the expectation that even in the absence of archeological evidence, prehistoric population were present within the project area. Some geoarcheological evidence indicates that the western base of Potrero Hill and the Mission District may be geologically distinct from other parts of San Francisco.<sup>192</sup> The hills along the western rim of this valley may have prevented the formation of the extensive sand dune deposits that occurred during the Holocene period (over the last 10,000 years) over much of San Francisco. As a result very old sand deposits (14,000-60,000 years old), above which very old prehistoric deposits may be expected do not occur only at great depths as in other parts of San Francisco, but are comparatively near the existing surface within a depth of generally of two meters B.S. in the Showplace Square/Potrero Hill area. Thus, efforts to locate paleosols and evidence of early prehistoric presence in the Showplace Square/Potrero Hill area may require archeological investigation strategies different from those typically employed in other parts of San Francisco.

Two historical archeological investigations within the project area have produced significant findings.<sup>193</sup> The archeological studies for the Caltrans seismic retrofit of the Bayshore Viaduct project investigated seven domestic privies determined to be NRHP-eligible. The privies were associated with late 19th century German (merchant, expressman) and Irish (laborer, widow) households. Fewer than seventy privies have been archeologically studied in San Francisco. As an historical archeological feature, a privy is generally the most informationally rich. A comparison of the data from the seven Showplace Square privies with that obtained from privy studies done for the Cypress Freeway Project in Oakland and the Bay Bridge West Approach seismic retrofit project in San Francisco, found that certain correlations could be made with the socio-economic status of households and their use of certain types of serving vessels, Asian porcelain bric-a-brac, certain ceramic ware types, and French-made tableware. There was an unexplained preference for the consumption of wine and liquor by San Francisco households and beer and ale by Oakland households. Almost all of the domestic artificial material recovered in the Caltrans Showplace Square six-block project area indicated some appreciation of Victorian aesthetics such as matching china sets, decorated ware, tea service, serving pieces, stylishness of clothing and level of wornness of clothing and shoes.

Archeological investigation for the Showplace Square Center project at Eighth and Townsend Streets encountered a very large headless marble statue and associated fragments. The sculpture,

<sup>&</sup>lt;sup>192</sup> Parsons, Jeff D., "Geo-Archaelogical Setting of San Francisco General Hospital Parking Garage at the Former 24th and Utah Carhouse" in A Report on the Archaeological Monitoring of the San Francisco General Hospital Parking GarageProjects, 24th and Utah Avenue. Appendix 1. Abacus Archaeological Associates. December 4, 1995.

<sup>&</sup>lt;sup>193</sup> Praetzellis, et al., SF-80 Bayshore Viaduct Seismic Retrofit Projects Report on Construction Monitoring, Geoarchaeology, and Technical and Interpretive Studies from Historical Archaeology. Rohnert Park, CA: Anthropological Studies Center, Sonoma State University Academic Foundation, Inc. June 2004; Bard, James C. & Stuart A. Guedon (Basin Research Associates), Archaeological/Cultural Resources Conditions of Approval for project located at 8th and Townsend Streets. (Case 84.613ECZ). August 21, 1989.

in the style of the French 19th century Neo-Classical School, was 4.5 meters (14.4 feet) in height. The statue was identified through historical documentary research and an oral history with the grandson of the founder, to be the product of the McGilvray Raymond Granite Co. (1906-1928). The McGilvray firm, largely comprised of Scottish stone carvers and masons, was responsible for the stone work of some of the most architecturally celebrated early 20th century buildings in the Bay Area: San Francisco City Hall, Stanford University campus buildings (1890-1919), the Campanile (University of California, Berkeley), War Memorial Opera House, Civic Auditorium, and the Flood Building.

## **Central Waterfront**

Of the four Eastern Neighborhoods, the Central Waterfront has been one of the most studied in the archeological literature, notwithstanding that as of yet no field archeological investigations have been conducted in the area. Three large archeological background studies.<sup>194</sup> The archeological report for the Potrero Power Plan contained an historical context for the shoreline portion of the Central Waterfront between 14th and 23rd Streets, east of Illinois Street. The historical context statement prepared for the bayside sewer facilities for the San Francisco Clear Water Program in the early 1980s covered an area extending from the Bayview District to China Basin and, within the Central Waterfront area, a two-block wide corridor along the Third Street alignment. The study also contained an archeological research design addressing prehistoric shellmounds in the southeastern part of San Francisco. The objectives of the Wood Annex study was to serve as a site history for the identification of past land uses that may have produced hazardous wastes.

The Potrero 7 report is important in San Francisco archeological literature in developing a format, analysis, and methodological approach that still is a model today. Potrero 7 viewed archeological information about a resource as being potentially significant independent of an extant documentary record of the resource. Potrero 7 is also one of the first local studies to regard buried shipyards and ships as valuable sources of knowledge of 19th century maritime practices. Potrero 7 in viewing street improvements as potential archeological resources in their own right, above and beyond the conventional archeologists' view of street construction as a source of resource disturbance, examined the history of street improvements in San Francisco (refuse, planking, cobble stone, macadam, wood block, asphalt, basalt block, brick) and its broader social implications. Potrero 7 was also innovative in its prehistoric approach in San Francisco in expanding the field of potential property types beyond that of shellmounds to include other types of prehistoric sites.

<sup>&</sup>lt;sup>194</sup> Archeo-Tec, *The Wood Annex Facility: A Site History*. March 8, 1988; Olmsted, Roger et al. San Francisco Bayside, Historical Cultural Resource Survey, April 1982; and Wirth Associates, *Potrero 7: Phase I, Cultural Resources Overview and Inventory*, March 1979.

## Significance of Expected Archeological Resources in Project Area

The archeological literature related to the project area has found that expected archeological resources could have important research value and would, therefore, be significant under CEQA. Examples of research themes that have been proposed to which expected archeological resources could contribute significant data include: the material expressions of middle class culture and identity, resistance to, modification or acceptance of middle class values by working-class households of various ethnicities and occupations, the availability of various classes of consumer goods, the material expressions of working class culture, use of material culture/dietary practices to define or maintain group boundaries, the acculturation of different ethnic households, and the difference in adaptations and economic strategies between women-headed households and other household types.

# Significance of Expected Archeological Resources in Project Area: Special Cases

Within the project area, the archeological literature has tended to give special significance to archeological resources associated with prehistoric populations and with the Mission Dolores complex. Archeological deposits with these associations may be important whether or not they possess, in their own right, any research-value because these deposits have special characteristics that make them significant, such as their scarcity (San Francisco prehistoric and Native American archeological sites) or their eligibility for listing in the State or National Register on the basis of their association with a significant historical event (archeological resources associated with the history of the three Franciscan Mission complexes in San Francisco).

## Mission Dolores Archeological District Context

The Mission Dolores area has a unique and special historical importance in the period extending from 1776 until the 1850s reflecting a number of important historical events/periods, persons, and diverse ethnic and religious groups, including Native Americans, Californios, Franciscan missionaries, and Mormons. Based on historical documentary research and recent archeological investigations, archeologists have concluded that the archeological remains associated with the entire Mission Dolores complex must be viewed as one interconnected resource, that is, an archaeological district. The Mission Dolores area represents a distinct archeological zone relative to its historical significance, its interpretive value, and its archeological sensitivity.

Archeological resources associated with the Mission Dolores area have a high level of historical/scientific significance because of the unique, historically early, and pivotal place Mission Dolores holds in the history of the San Francisco peninsula. In general, archeological remains associated with the Mission Dolores complex (1776-1850s) are potentially eligible for listing in the CRHR on the basis of their association with Spanish/Mexican Period, the Franciscan missionization of California Native Americans (Criterion A), with important historical

personages such as Juan Bernal, Francisco Guerrero, and Francisco De Haro (Criterion B), with architectural and technological history (Criterion C) and with a broad range of significant current historical and scientific research topics (Criterion D).

Archeological artifacts associated with the Mission Dolores complex would have a high degree of interpretive value relative to the Spanish/Mexican period of San Francisco history, Native Americans, California architectural history, the history of California missions, and the history of the Roman Catholic Church and missionization in California and the American Southwest. Archeological resources within the Mission Dolores complex are atypically sensitive to disturbance from human activities because of their unusual proximity to the existing land surface and because of the relative lack of soils disturbing activities that have occurred in the area during the course of the 19th and 20th centuries that otherwise, could have impaired the integrity of archeological deposits.<sup>195</sup>

# Impacts

## Significance Criteria

CEQA requires that the effects of a project on an archeological resource shall be taken into consideration and that if a project may affect an archeological resource that it shall first be determined if the archeological resource is an "historical resource", that is, if the archeological resource meets the criteria for listing in the California Register of Historical Resources (CRHR). To be eligible for listing to the CRHR under Criteria A, B, or C, an archeological site must contain artifact assemblages, features, or stratigraphic relationships associated with important events, or important persons, or exemplary of a type, period, or method of construction (CEQA Guidelines § 15064.5(a)(1) and (3) and (c)(1) and (2)). To be eligible under Criterion D, an archeological site need only show the potential to yield important information concerning human history or prehistory.<sup>196</sup> An archeological resource that qualifies as a "historical resource" under CEQA, generally, qualifies for listing under Criterion "D" of the CRHR (CEQA Guidelines §15064.5 (a)(3)(D). An archeological resource may qualify for listing under Criterion "D" when it can be demonstrated that the resource has the potential to significantly contribute to questions of scientific/historical importance. The research value of an archeological resource can only be evaluated within the context of the historical background of the site of the resource and within the

<sup>&</sup>lt;sup>195</sup> Ambro, Richard. They Danced in the Plaza: The Historical Archaeology of Notre Dame Plaza, Mission San Francisco de Asis (Dolores), 347 Dolores Street. Holman & Associates. 2003; Ambro, Richard, Results of Archaeological Monitoring of Demolition of Two School Structures at the Children's Day School, 333 Dolores Street. April 23, 2003; Pilling, Arnold R., Mission Dolores, San Francisco, on August 19, 1952. S-3105. Northwest Information Center, Sonoma State University, Rohnert Park, California. 1952.

<sup>&</sup>lt;sup>196</sup> United States Department of the Interior, *National Register Bulletin 15: How to Apply the National Register Criteria for* Evaluation. Revised 2002 Available on the internet at: http://www.cr.nps.gov/nr/publications/bulletins/nrb15/.

context of prior archeological research related to the property type represented by the archeological resource.<sup>197</sup>

## Expected Archeological Property Types

Based on previous archeological research and historical documentation, various archeological resources are expected to be present within the project area. On the basis of common historical, typological, and functional commonalties these archeological resources can be grouped into specific archeological property types. Some of the archeological property types expected within the project area include:

## East SoMa

- Prehistoric resources
- Boat construction/repair yards (1850s-1860s)
- Domestic deposits (1850s 1906)
- Domestic deposits (working class households, 1850s 1906)
- Domestic deposits (elite Rincon Hill, South Park households, 1850s 1906)
- Commercial deposits (1850s-1906)
- Commercial deposits (Jewish, Fifth St., 1880s)
- Pacific Mail Steamship Co. warehouses, office, wharf (1870s-1906)

## Mission

- Prehistoric resources
- Prehistoric resources (early, within 2 m. B.S.)
- Spanish-Mexican period adobe houses (1830s-1840s)
- Old Wall (adobe, 1840s ?)
- Voss Wall (rock, 1840s?)
- Tanneries (1850s-1880s)
- Domestic deposits (1850s 1900s)
- Union Race Course (1850s)
- The Willows (1850s)
- Woodward's Gardens (1866-1894)
- St. Luke's Hospital (1870s)
- Mission Woolen Works (1870s)
- Pacific Woolen Knitting Mills (1870s)
- Pottery yards (1870s)

## **Mission Dolores Archeological District**

The Mission Dolores Archeological District is the area in which archeological remains associated with the Mission Dolores complex (1776-1850s) are known or expected to be present.

Archeological resources potentially eligible for listing in the CRHR and present within the project area include:

<sup>&</sup>lt;sup>197</sup> California Office of Historic Preservation, Guidelines of Archaeological Research Designs. Preservation Planning Bulletin. No. 5. 1991.

- Prehistoric deposits and site of Costanoan village, Chutchi
- First Mission site (enramada construction) (1776)
- First Mission cemetery (1776 1782/91)
- Second Mission site (palizada construction) (1776-1782/91)
- Second priest's house (palizada construction) (1776-1782/91)
- Rancheria of Second Mission (1776-1782/1791)
- Third Mission site (adobe construction) (1782/91-)
- Third priest's house and guest rooms (1782/91-1850s)
- West adobe mission (building (1797/8-1850s)
- Second Mission cemetery (1782/91-1840s/1850s?)
- Adobe neophyte rancheria (mid-1799s/1811 1850s?)
- Mayordomo house (early 1790s-1850s)
- Adobe servant's quarters –Guerrero building (early 1790s-1850s)
- Adobe soldiers' barracks (late 1780s-1850s)
- Adobe school (esquela) (1793-1830s)
- Eastern adobe wall (?)
- Adobe sacristy (1782-1830s)
- Adobe baptistery (1833/35)
- Adobe granary (1794)
- Adobe soap factory (1817-1830s)
- Adobe mills (molino) (pre-1816-1840s)
- Acequia (1780s-1830s)
- Mission corral (1830)
- Two adobe buildings (c. 1826)
- Juan C. Bernal's unfinished adobe house (1835-36)
- Guerrero adobe (c1837)
- Francisco Ruffino's Adobe kitchen (c. 1850)
- Francisco De Haro's adobe house (1841)

In addition there are many documented buildings and structures associated with the three Mission Dolores complexes or associated with post-secularization Mission Dolores complex whose locations have not been identified. These include the Mission bathhouse, prison, second tannery, second mill, forge, shoe shop, and nineteen adobe houses. There is a reasonable potential that the sites of some of these buildings/structures are within the plan area.

## Showplace Square/Potrero Hill

- Prehistoric resources
- Prehistoric resources (early, within 2 m. B.S.)
- Spanish-Mexican period adobe houses (1840s)
- Old Wall (adobe, 1840s ?)
- Voss Wall (rock, 1840s?)
- Tanneries (1850s-1880s)
- Soap and candle works (1850s)
- Butchertown (1850s-1880s)
- Domestic deposits (1850s 1900s)

- Magdalen Asylum and Female Industrial School, late St. Catherine's (1860s-1900s)
- Magdalen Asylum cemetery
- San Francisco General Hospital (1870s-)

## **Central Waterfront**

- Prehistoric resources
- Powder factories (1850s)
- Tubbs Cordage Company (1850s-1890s)
- Boat construction/repair yards (1860s-1870s)
- Domestic deposits (1860s-1900s)
- Street treatment techniques (1850s-1900s)

## **Potential Project Effects**

Under any of the proposed rezoning options, the proposed changes in Planning Code (zoning) controls and amendments to the General Plan for the project area would create a regulatory context for new private land improvements that could result in a greater potential for the disturbance of soils below the existing surface than exists under the current zoning. Since California Register-eligible archeological resources are expected to be present within existing sub-grade soils of the project area, the proposed land use policies and controls within the project area could adversely affect significant archeological resources.

## Land Use

The Eastern Neighborhoods Rezoning and Area Plans propose land use and maximum building height policy and regulatory changes that would increase the number of potential residential units over baseline conditions. The rezoning options would permit housing and mixed-use development in many areas currently zoned for and occupied by industrial use. In general residential development is subject to higher seismic safety standards than industrial development and may require greater geotechnical or foundation support. Substantial portions of the project area including the East SoMa, the Mission District, Showplace Square, and Central Waterfront area are within Liquefaction Hazard Zones in which new residential development or adaptation of industrial/commercial/institutional buildings for residential use would frequently require geotechnical support in the form of pilings or soils improvement techniques. Increased residential capacity would likely result in increased disturbance of soils over baseline conditions from residential project activities such as foundation support, excavation for sub-grade levels, and, in some cases, utilities installation. Since a wide range of potentially CRHR-eligible archeological properties may be present within the project area, the proposed revision in land use regulations and policies would result in an increased level of soils disturbance and, thus, could adversely affect archeological resources eligible for the California Register.

## **Building Height**

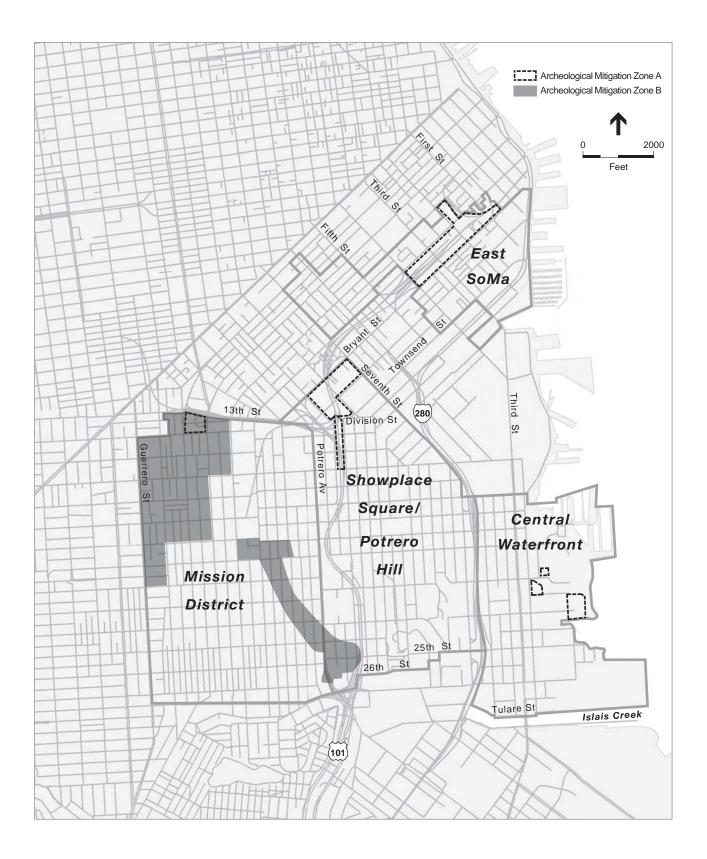
The project would also result in increased maximum building height allowances in certain portions of the project area, for example, in Showplace Square, along Mission, Valencia, and 24th Streets in the Mission, and along Second, Third, Fourth, Fifth, Seventh, Mission, Howard, Folsom, Harrison, Bryant, and Brannan Streets in the Eastern SoMa areas depending on which planning option is adopted. Increasing development height often increases the minimum level of geotechnical support required for the development, with an associated increase in the depth and magnitude of soils disturbance/modification. Much of the project area proposed for increased building height allowances is within Liquefaction Hazards Zones in which increased residential building envelope and heights would frequently require geotechnical support in the form of pilings or soils improvement techniques. The potential to increase the amount and depth of soils disturbance resulting from the new building height regulations within the project area would increase the potential to affect California Register-eligible archeological resources.

A final archeological research design and treatment plan (ARDTP) has been prepared and is on file at the Northwest Information Center and the Planning Department for certain properties within the project area, shown as Archeological Mitigation Zone A as shown in **Figure 29**. For subsequent development projects within Archeological Mitigation Zone A, implementation of Archeological Mitigation Measure J-1, p. 512, would reduce potential program-level effects of the proposed Plan on archeological resources to a less-than-significant level.

For all other areas of the project area, with the exception of sites within the Mission Dolores Archeological District described below, implementation of Archeological Mitigation Measure J-2, p. 514, would reduce potential program-level effects of the proposed Plan on archeological resources to a less-than-significant level.

## Potential Project Effects Mission Dolores Archeological District

The project proposes zoning, land use and height limit re-designations within the Mission Dolores Archeological District. The Mission Dolores Archeological District area is currently within various extant Neighborhood Commercial, Residential, and Industrial zoning districts. The Mission District Area Plan/Rezoning options under all three Options (A, B, and C) would increase housing density along Mission Street, Valencia Street, and in the two square blocks bound by Guerrero, Valencia, 15th and Division Streets. Under all three Options there is a progressive replacement of existing core PDR zoning by Residential/PDR zoning, principally in the area east of Capp Street and north of 20th Street. The proposed zoning re-designation of properties within the Mission Dolores Archeological District would generally increase the potential number of residential units that could be constructed. Under the proposed height limit changes proposed by the project options no material difference, in general, would occur in the maximally permitted height.



SOURCE: San Francisco Planning Department
Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091)
Figure 29
Archeological Mitigation Zones

As discussed in the Setting, the Mission Dolores Archeological District is highly archeologically sensitive. All archeological deposits associated with the Mission Dolores complex are potentially eligible for listing in the CRHR and can be located near to the existing land surface. In some recent residential projects within the Mission District, foundation support techniques using deep soils grouting and high pressure soils consolidation techniques have been proposed/used with the potential to adversely affect archeological resources within a depth of thirty feet or more below the existing grade. Archeological deposits are known and expected within the existing street right-of-ways, since they are associated with activities and structures existing prior to the emplacement of the current street configuration. Thus, soils-disturbing activities resulting from subgrade basement/garage excavation, foundation support, and utilities installation associated with the increase in residential and commercial development allowed under proposed land use policies of the Project could adversely affect California Register-eligible archeological resources within the Mission Dolores Archeological District.

Implementation of Archeological Mitigation Measure J-3, p. 515, would reduce potential effects on archeological resources of projects undertaken within the Mission Dolores Archeological District (Archeological Mitigation Zone B as shown in Figure 29) in conformance with the policies and implementing regulations of the Plan to a less-than-significant level.

# K. Historical Resources

## Introduction and Methodology

This analysis of the potential impacts to historical resources is based on a review of existing known resources and potential resources and an evaluation of the potential effects on those resources. Because the proposed rezoning and area plans would not directly affect historical resources, the impact discussion evaluates whether the proposed zoning changes—both as to permitted use and as to height—could indirectly result in effects on historical resources.

This section is based on a background report prepared by historical preservation consultants Carey & Co.<sup>198</sup> With the help of geographic information system (GIS) software, the report identified potential impacts that could put known and potential historical resources at risk, based on anticipated development patterns resulting from land use changes and areas of potentially increased development density. The report also described the potential types of future projects that could adversely affect historical resources, and identified provisions for taking into consideration potential impacts to properties that are not currently identified as having historic significance.

This section is also based on an independent GIS analysis conducted by the San Francisco Planning Department with a focus on determining potential effects to age-eligible properties. The Department's GIS analysis identified those known and potential resources as well as age-eligible properties (45-years or older) within the areas where the proposed zoning options or changes to existing height districts could affect these properties. The Planning Department's GIS analysis relies on the most current information available to the Department as of 2007.<sup>199</sup>

Further information is included in this section that has been derived from Planning Department surveys of the Mission District over the past several years, and from initial survey work performed in the South of Market neighborhood in connection with the proposed Eastern Neighborhoods Rezoning and Area Plans planning effort.<sup>200</sup>

<sup>&</sup>lt;sup>198</sup> Carey & Co. Inc., *Eastern Neighborhoods Rezoning and Community Plans EIR, San Francisco, California, Historic Resources Report, December 29, 2006. This report is available for review, by appointment, at the Planning Department, 1650 Mission Street, Suite 400, in File No. 2004.0160E.* 

<sup>&</sup>lt;sup>199</sup> The reporting of the quantity of known or potential resources undertaken by the Planning Department in 2007 may not completely match the work that was done in the background technical report in 2006. In such cases, the impact analysis relies on the most conservative assessment, which relates to the larger number of potential resources in the project area.
<sup>200</sup> A historical resources survey of SoMa was initiated in January 2007, with the issuance of a Request for Proposals

<sup>&</sup>lt;sup>200</sup> A historical resources survey of SoMa was initiated in January 2007, with the issuance of a Request for Proposals to potential survey consultants. Historical resources surveys of the entirety of the Eastern Neighborhoods study area are anticipated to be complete by Spring 2008.

# **Environmental Setting**

A "historical resource" is defined, under CEQA Section 21084.1, as one that is listed in, or determined eligible for listing in, the California Register of Historical Resources. In addition, a resource that (i) is identified as significant in a local register of historical resources, such as Article 10 and Article 11 of the San Francisco Planning Code, or (ii) is deemed significant due to its identification in an historical resources survey meeting the requirements of Public Resources Code Section 5024.1(g), is presumed to be historically significant "unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant." Finally, CEQA Section 21084.1 permits a lead agency to determine that a resource constitutes a historical resource even if the resource does not meet the foregoing criteria.

## Historical Resource Surveys in the Eastern Neighborhoods

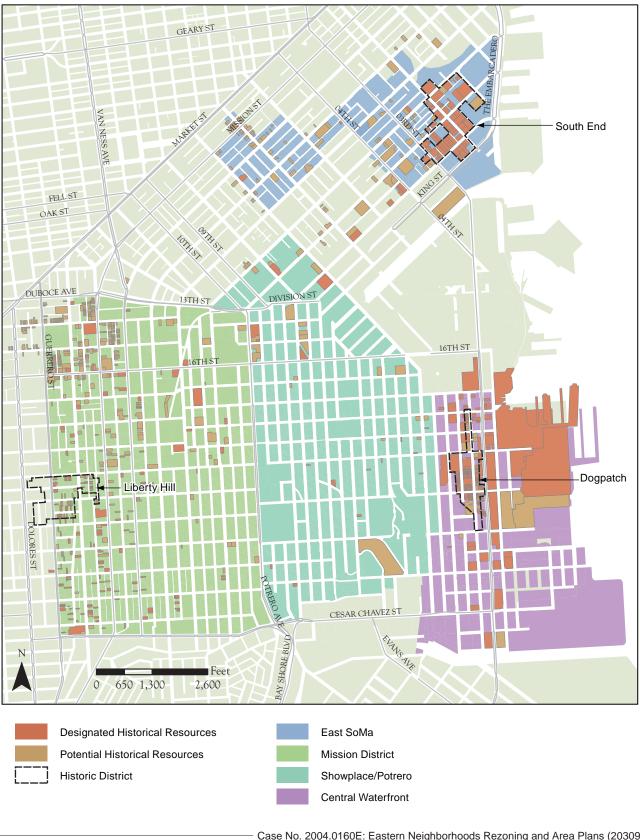
A number of historical resources surveys have been conducted within the Eastern Neighborhoods study area. Some of these surveys constitute local registers of historical resources, having been formally adopted by the Board of Supervisors and/or the Planning Commission. Buildings identified in these surveys as having historical significance are considerer historical resources under CEOA.<sup>201</sup> Other surveys have not been formally adopted by the City, and therefore are not considered local registers of historical resources. Buildings identified as historically significant in those surveys are considered potential historical resources, for which further consultation and review is required prior to a determination being made as to whether the building is historical resource.<sup>202</sup> Historical resources surveys applicable to the Eastern Neighborhoods are described below.<sup>203</sup> For each survey, the criteria that surveyed buildings were required to meet to be included is also presented, and the number of known and potential resources is given. Included in the tabulation are known and potential historical resources within one block of the identified Eastern Neighborhoods project boundary, which includes a number of properties between Fourth and Seventh streets south of Harrison Street, as well as a concentration of smaller residential structures just northwest of the Mission District planning area.<sup>204</sup> Table 58 summarizes the resources identified in this compilation, and Figure 30 illustrates the identified individual historical resources and three extant Article 10 districts in the project area. Included in this tabulation is a separate category of buildings at least 45 years old but not already identified as historical resources in one surveys or adopted registers. Because of the possibility that such buildings may qualify as historical resources, the Planning Department considers such buildings

<sup>203</sup> Much of the language describing the surveys is taken from Preservation Bulletin 11, "Historic Resource Surveys."

<sup>&</sup>lt;sup>201</sup> Included in the list of designated historical resources are those properties identified in Planning Code Article 10 (City Landmarks) and Article 11 (historical resources in the C-3 (Downtown) zoning districts, including portions of the South of Market area formerly zoned C-3, generally bounded by Mission, Howard, Sixth, and Tenth Streets), and subsequently designated as the South of Market Extended Preservation District.

<sup>&</sup>lt;sup>202</sup> San Francisco Preservation Bulletin 16, "CEQA Review Procedures for Historic Resources," http://www.sfgov.org/site/uploadedfiles/planning/projects\_reports/PresBulletin16CEQA10\_8\_04.PDF.

<sup>&</sup>lt;sup>204</sup> Also included as potential historical resources are buildings evaluated in two Carey & Co. surveys (Mid-Market and Southern Waterfront) that have not been formally filed with the Planning Department.



SOURCE: Carey & Co., Inc.

Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091) Figure 30 Historic Resources in the Eastern Neighborhoods

TABLE 58
KNOWN & POTENTIAL HISTORICAL RESOURCES & AGE-ELIGIBLE PROPERTIES* IN
THE EASTERN NEIGHBORHOODS

	Known Resources	Potential Resources	Total	Unrated Properties ≥ 45 years old
East SoMa	94	86	180	498
Mission District	699	371	1,070	3,891
Showplace/Potrero	14	105	119	2,285
Central Waterfront	140	34	174	163
Total	947	596	1,543	6,837

\*This category includes any property that meets the minimum age-eligibility criteria for historic resource screening, which is 45 years or older under CEQA. It should, however, be noted that age is not the sole criterion in determining whether a building is significant in the context of CEQA; other considerations, based on the California Register of Historic Places criteria include association with significant historic events, association with the lives of important persons, the embodiment of distinctive architectural characteristics, or a property's ability to yield important historical information (Guidelines 15064.5).

SOURCES: Carey & Co. Inc.; San Francisco Planning Department, 2007; CEQA Guidelines.

potential historical resources and generally requires site-specific research concerning such properties when an application for demolition or alteration is filed.

Figure 30 shows that, while known and potential historical resources are spread throughout the Eastern Neighborhoods, they do exhibit a few areas of special concentration. In East SoMa, the blocks east and southeast of South Park generally comprise the warehouses (many of them maritime related) of the South End Historic District.

Market and Howard includes the residential buildings of the proposed 6th Street Lodginghouse District, which was identified as a potential historic district in the Mid-Market Redevelopment Plan EIR.<sup>205</sup> Known historical resources in the Mission are primarily within the Liberty Hill Historic District along Guerrero, Valencia and Mission Streets and the alleys between them. The northwest portion of the district, between 16th Street and Duboce, has a particularly dense assemblage of historic properties. Showplace Square and Potrero Hill have comparatively few known or potential historical resources, with the only areas of noticeable concentration along Potrero Avenue and Kansas/ Henry Adams Street in Showplace Square. Finally, historical resources in the Central Waterfront have two primary concentrations: the small-lot residential buildings of the Dogpatch Historic District (along Minnesota, Tennessee, Third and Illinois Streets between Mariposa and 23rd Streets) and the large-lot industrial buildings on or near Pier 70 (east of Illinois Street). Age-eligible properties are distributed throughout the project area.

<sup>&</sup>lt;sup>205</sup> Mid-Market Redevelopment Plan EIR, DEIR published September 28, 2002, certified September 18, 2003. This report is on file and available for review, by appointment, at the San Francisco Planning Department, 1650 Mission Street, Suite 400 as part of Case File No. 2002.0805E.

# California Register of Historical Resources/National Register of Historic Places

# Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS)

This is the official repository of information for all historical resources in the project area nominated to the California Register of Historical Resources or National Register of Historic Places. Buildings with a rating of "7 – not evaluated" or which have a temporary designation of 7 while waiting for evaluation from the State Office of Historic Preservation will need additional investigation to determine their historic status. Buildings rated 1 through 5 on the CHRIS inventory are considered historical resources under CEQA, as they have are either listed (1) determined eligible for listing, (2) or considered eligible for listing, (3) on the National Register (and, therefore, also on the California Register); state-owned properties that appear eligible for the California Register (4);<sup>206</sup> or properties recognized as historically significant by local government.<sup>207</sup> A "6" status code means that the property has been evaluated and does not qualify as an historical resource.

## Adopted Local Registers of Historical Resources

## Planning Code Article 10

Article 10 of the San Francisco Planning Code identifies city landmarks and historic districts. Article 10 is considered an adopted local register of historical resources under CEQA, as it is part of the Planning Code and is therefore subject to formal action by the Board of Supervisors. The Eastern Neighborhoods Planning Area has 16 city landmarks, each of which is a historical resource under CEQA.

In Article 10 historic districts, properties with ratings of Contributory and Contributory-Altered are assumed to be historical resources for the purposes of CEQA. The Eastern Neighborhoods Planning Area has three historic districts: the South End Historic District, the Liberty Hill Historic District and the Dogpatch Historic District.

**South End Historic District.** The Board of Supervisors adopted the South End Historic District in 1990. The District is generally bound by Stillman Street to the north, First Street to the east, Ritch Street to the west and King Street to the south. It contains 41 contributors that are considered historical resources under CEQA.

**Liberty Hill Historic District.** The Board of Supervisors adopted the Liberty Hill Historic District in 1985. The District is generally bounded by 20th, Valencia, 22nd, and Dolores Streets,

<sup>&</sup>lt;sup>206</sup> Prior to the State Office of Historic Preservation's adoption of California Register Status Codes in 2003, a National Register status code of 4 indicated that a property *might*, in the future, become eligible for the National Register.

<sup>&</sup>lt;sup>207</sup> Prior to 2003, the National Register status code of 3 indicated properties that warranted special consideration in local planning, but were not eligible for the National Register or California Register.

with an extension east to San Carlos Street roughly between 20th and 21st Streets. Partially within the Mission plan area, this district includes 163 contributory buildings that that are considered historical resources under CEQA. These buildings generally date from the late 19th century, when this neighborhood was an early "suburb" of San Francisco. The buildings survive today because they reside just outside of the area devastated by the fire following the 1906 earthquake, which was halted at 20th Street.

**Dogpatch Historic District.** The Board of Supervisors adopted the Dogpatch Historic District in 2003. Mariposa Street to the north, Tubbs Street to the south, Third Street generally bind the District to the east, and Indiana Street to the west. The district contains 104 buildings that are designated contributory to the district, and which therefore considered historical resources under CEQA. This includes both (1) buildings that date from the historic district's period of significance (1867 – 1945) and retain their historic integrity, and (2) buildings from the period of significance that have had their historic integrity compromised by inappropriate alterations.

## Historical Resource Surveys in the Eastern Neighborhoods Project Area

## Historical Resources Analysis in the Eastern Neighborhoods—SoMa

Historical resources survey work is currently under way in connection with the proposed Eastern Neighborhoods Rezoning and Community Plans project. In December 2006, Page & Turnbull prepared a preliminary "Context Statement" for the entire South of Market district, generally bounded by Market Street, China Basin Channel (Mission Creek), First Street, and Division/13th Streets. This report describes the history and development of the South of Market Area, presents a typology for classifying the district's buildings, and examines the potential for historic districts to be delineated. In the Introduction to the report, Page & Turnbull summarizes the history of the area now commonly referred to as SoMa, noting that the neighborhood "has been likened to San Francisco's back porch or loading dock, the place where the unglamorous service businesses and industrial enterprises could set up shop close to railheads, the waterfront and downtown. Here, lots are large and transportation networks well-developed." <sup>208</sup>

The South of Market was largely destroyed in the 1906 earthquake and fire, and was then rebuilt within a relatively short time—15 to 20 years in two major building booms: 1906-1911 and 1920-1925. The timing of reconstruction, combined with the fact that many of the buildings were designed by a relatively limited number of architects, resulted in a remarkably uniform building stock. With some exceptions, the majority of the buildings took the form of two- to five-story, reinforced-concrete loft structures with multi-pane steel industrial sash windows and minimal ornament. In addition, the neighborhood includes smaller groupings of frame single and multi-

<sup>&</sup>lt;sup>208</sup> Page & Turnbull, *Preliminary Historic Context Statement, South of Market Area.* December 29, 2006; p. 1. This report is available for review, by appointment, at the Planning Department, 1650 Mission Street, Suite 400, in File No. 2004.0160E.

family housing, generally on the smaller mid-block streets, many of which were rezoned as Residential Enclave Districts (RED) in the South of Market rezoning of the 1980.

Until relatively recently the primary light industrial manufacturing and warehousing district of San Francisco, SoMa "was once the domain of hardworking longshoremen, warehousemen, merchant mariners, day laborers, immigrant farm workers and other manual workers (most of whom were men) who contributed immeasurably to the prosperity and economic development of the West. Many were immigrants-beginning with the Irish and Germans – who were then followed by waves of Greeks, Jews, Ukrainians, Japanese, Okies, Central Americans, African-Americans, and Filipinos."<sup>209</sup>

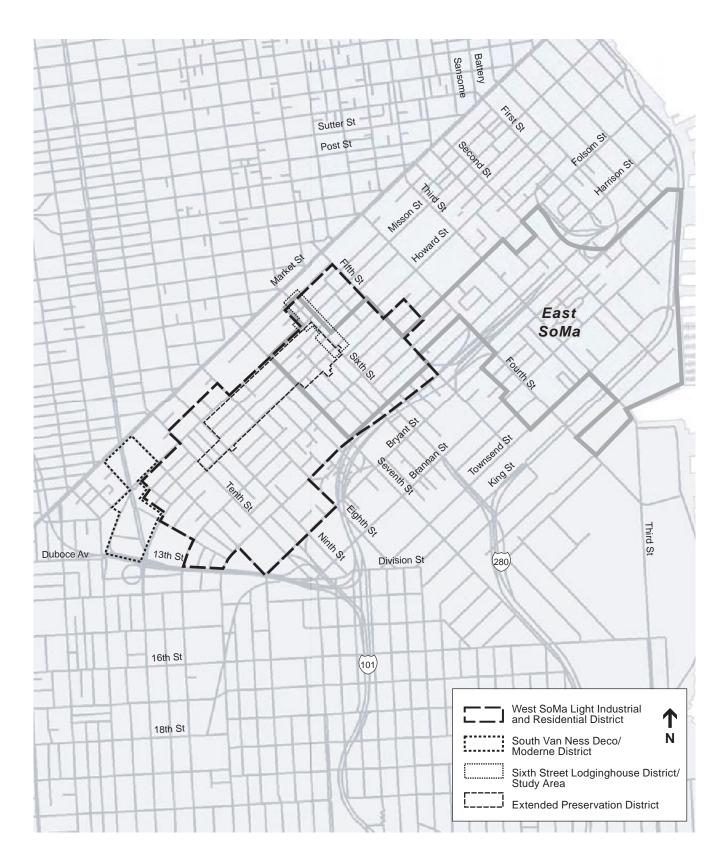
Other historical themes identified in the South of Market include the labor activism of the 1930s, which culminated in the 1934 Waterfront Strike and the citywide General Strike; World War II, when thousands of workers— many, unlike earlier generations of laborers, African-American, Latino, or Asian—flocked to San Francisco; the post-war period of industrial relocation, increasing poverty, and "a perception of social breakdown" that ultimately resulted in drafting of a massive redevelopment scheme that became Yerba Buena Center and the surrounding area. Page & Turnbull notes that, in the 1950s as the Redevelopment Agency began to acquire property and demolish buildings, the fate of the neighborhood seemed uncertain. "This factor, combined with the social and physical isolation of the area from the rest of the city began to attract others excluded from mainstream America, such as artists, radicals and gays, including a sizable leather community."<sup>210</sup> Finally, in the 1980s, the South of Market began to undergo a technology-fueled real estate boom that has continued, albeit somewhat inconsistently, to the present.

As part of the South of Market Context Statement, Page & Turnbull delineated a potential West SoMa Light Industrial & Residential District in the area generally bounded by Mission, Fifth, Harrison and Tenth Streets. This potential district "contains a heavy concentration of light industrial buildings constructed between 1906 and 1927 and several smaller enclaves of workers' housing and residential hotels constructed primarily between 1906 and 1913, with some infill housing constructed during the 1920s and later." Page & Turnbull also identified a smaller potential South Van Ness Deco/Moderne District, centered around Mission Street and South Van Ness Avenue, covering parts of five blocks developed during the early 1930s in response to the completion of South Van Ness Avenue from Market to Howard Streets. According to Page & Turnbull, this area "contains one of the most important concentrations of Art Deco commercial architecture in San Francisco."<sup>211</sup> These potential historic districts are shown in **Figure 31**.

<sup>209</sup> Ibid; p. 1. The Filipino community, in particular, experienced substantial growth in the South of Market beginning in the 1950s, as many single Filipino men were displaced from north-of-Market residential hotels that were demolished. Neighborhood activists have since worked to establish a true community, and today there are many small Filipino-American family-owned stores that serve the SoMa population.

<sup>&</sup>lt;sup>210</sup> Ibid; p. 5

<sup>&</sup>lt;sup>211</sup> Ibid; p. 68.



Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091) Figure 31 Potential SoMa Historic Districts, Extended Preservation District, and Study Areas

SOURCE: Page & Turnbull, 2006

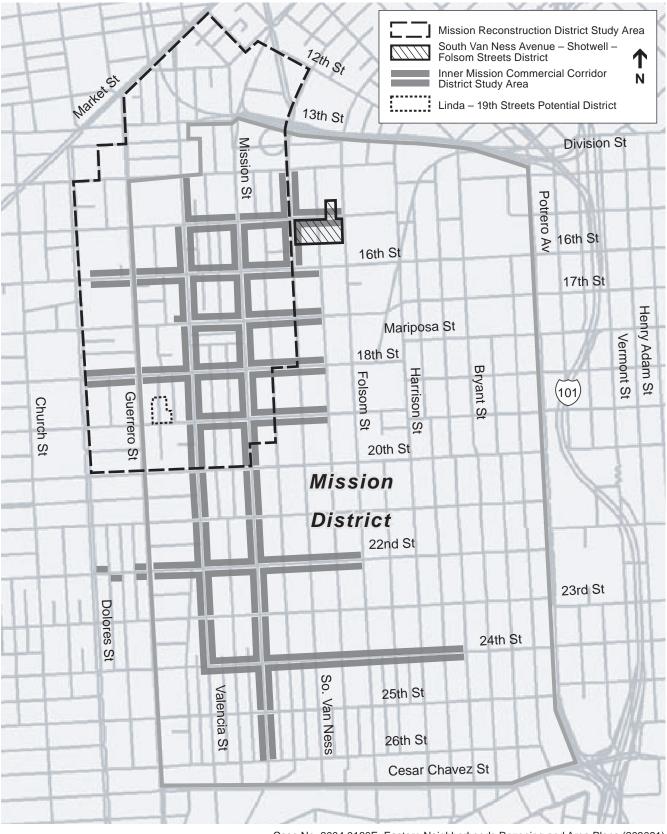
## Mid-Market Survey (6th Street Lodginghouse District)

The Mid-Market Survey ratings are taken from a Cultural Resources Report that Carey & Co prepared for the Mid-Market Redevelopment Plan EIR. Carey & Co's analysis drew on survey work by architectural historian Anne Bloomfield of the Sixth Street corridor (the only area of overlap between the Mid-Market survey area and the Eastern Neighborhoods). The EIR identified a potential 6th Street Lodginghouse National Register District, located along Sixth Street between Market and Folsom Streets. The district is a contiguous group of 34 low-budget residential hotels built between 1906 and 1913. According to the Mid-Market EIR, the district may be eligible for listing at the local level of significance under National Register of Historic Places Criterion A, patterns of events, as the last surviving concentration of low-budget, single-room-occupancy residential hotels built south of Market after the 1906 earthquake and fire to house the relatively large number of single male seasonal-workers. While the EIR was certified in 2003, the proposed district has not been submitted to the SHPO, nor has it been formally adopted by the Planning Commission. Therefore, buildings identified as contributory to 6th Street Lodginghouse District are considered potential historical resources for this analysis, and given the time that has elapsed since its initial identification, further research is required to update the preliminary survey findings.

#### Inner Mission North Historic Resource Survey

In 2001, the Planning Department began a survey in the Inner Mission North area, which is phased into four subareas. The Inner Mission North Historic Resource Survey is examining over 1,000 residential and commercial buildings, structures and objects largely built following San Francisco's devastating earthquake and fire of 1906. The survey area includes a variety of building types such as single-family homes, apartment buildings, hotels, churches and commercial stores. When completed, the Inner Mission North survey will provide a comprehensive history, architectural description and analysis of each resource surveyed. In 2006, survey findings for the first two of the four areas were adopted; these findings identify known resources for the purposes of CEQA. The remaining work on areas three and four is currently under study. Once the survey is adopted, the properties it identifies as historic would become eligible for historic designation in the Planning Code.

In a related effort, Planning staff has preliminarily identified several potential historic districts in and near the Inner Mission North survey area (see **Figure 32**, Mission District Historic Resource Study Areas). These include three districts within the Mission neighborhood as defined for the Eastern Neighborhoods planning process: the Inner Mission Commercial Corridor District, the Mission Reconstruction District, the South Van Ness Avenue-Shotwell-Folsom Streets District and the Linda-19th Street District. The first two of these are listed identified by OHP as being "eligible for local listing or designation," while the South Van Ness Avenue-Shotwell-Folsom Streets.



SOURCE: San Francisco Planning Department, 2007
Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091)
Figure 32
Mission District Historic Districts
and Study Areas

Initially, the Inner Mission Commercial Corridor included the block faces on either side of Mission Street, between 15th and 26th Streets; on Valencia Street, between 15th and 24th Streets; on 24th Street, between Valencia and Florida Streets; on 22nd Street, between approximately Dolores and Folsom Streets; on 16th and 18th Streets, between approximately Dolores and Shotwell Streets; and on shorter stretches of 15th, 17th, and 19th Streets and South Van Ness Avenue; it spans the pre- and post-earthquake periods. These areas provided a broad starting point in the examination of resources and districts in the Mission district's commercial corridors. As further described in the discussion of project impacts, additional information and study has narrowed and refined the focus of this potential district to Mission Street, generally from 16th Street on the north to 26th Street to the south, referred to as the Mission Miracle Mile Potential Historic District.

The Mission Reconstruction District is roughly bounded by 12th Street to the north, 20th Street to the south, Market Street to the northwest, Dolores Street to the west, and South Van Ness to the east, and represents an area virtually destroyed in 1906 and rebuilt in the years immediately thereafter. The South Van Ness Avenue-Shotwell-Folsom Streets District, which generally encompasses properties covering two partial blocks between 15th Street, Shotwell Street, South Van Ness Avenue and Folsom Street includes a small "island" of structures that survived the 1906 earthquake and subsequent fires that raged for days thereafter, reaching as far south as 20th Street, with only isolated pockets of buildings north of 20th Street having been spared—including most of the buildings in this district. Each of these three districts is considered a known or potential historical resource for purposes of this analysis.

The Linda-19th Street District includes potential contributors to a primarily residential district on the block faces fronting the southern portion of Linda Street to the north of 19th Street. In addition, Planning staff has identified a thematic grouping of "Inner Mission Earthquake Survivors, a group of mostly un-surveyed properties that date from prior to the 1906 earthquake and fire and survived that disaster. While subsequent surveys could identify specific additional district(s) from among this group, individual buildings dating from before 1906 "warrant special consideration in local planning." Existing Planning Department practice, in the context of applications for planning permits, is to require research concerning all residential and commercial buildings that are 45 years or older for which sufficient information is not currently available, to determine whether such buildings meet the California Register criteria and qualify as historical resources under CEQA.<sup>212</sup>

## Central Waterfront/Dogpatch Historical Resource Surveys

Research that led to adoption of the Dogpatch Historic District also involved a survey in the city's Central Waterfront/Pier 70 area, one of San Francisco's earliest industrial complexes and

<sup>&</sup>lt;sup>212</sup> San Francisco Preservation Bulletin 16, "CEQA Review Procedures for Historic Resources," page 6. <u>http://www.sfgov.org/site/uploadedfiles/planning/projects\_reports/PresBulletin16CEQA10\_8\_04.PDF.</u>

nationally important for production of military vessels for the Spanish American War, World War I and World War II. The Planning Commission adopted the Dogpatch Survey and the Central Waterfront Survey in 2001 and 2002, respectively. As a result, buildings rated 1-5 in these surveys are considered historical resources for the purposes of CEQA. (As described above, the subsequent designation of the Dogpatch area as a historic district expanded historical resource status to all Contributory buildings in the district.) It should also be acknowledged that about 45 parcels examined in Central Waterfront survey require reevaluation, because these properties received a "4" status code.<sup>213</sup> Properties with a "4" status code require reevaluation based on the revised State Historic Preservation Office (SHPO) survey rating system to determine eligibility for the National and/or California Register(s). The reevaluation of these approximately 45 parcels is scheduled to occur by late 2007.

## Other Surveys of Historical Resources

## Unreinforced Masonry Building (UMB) Survey

In November 1990, the Landmarks Preservation Advisory Board (Landmarks Board) completed "A Context Statement and Architectural/Historical Survey of Unreinforced Masonry Building (UMB) Construction in San Francisco from 1850 to 1940." The survey examined more than 2,000 privately owned, unreinforced masonry buildings in San Francisco. The survey was evaluated by the California Office of Historic Preservation (OHP) and National Register of Historic Places determinations of eligibility were made by the OHP for many of the 2,000 buildings surveyed; those rated 1 - 5 are considered historical resources, as described above under "California Register of Historical Resources/National Register of Historic Places." Those properties rated "6" are considered potential resources, due to the high degree of historical and architectural interest of the property type, and because of the passage of time since the survey was completed.

## 1976 Citywide Architectural Quality Survey

Between 1974 and 1976, the San Francisco Planning Department conducted a citywide inventory of architecturally significant buildings. An advisory review committee of architects and architectural historians assisted in the final determination of ratings for the 10,000 buildings, which became an unpublished 60-volume inventory (on file at the Planning Department). Both

<sup>&</sup>lt;sup>213</sup> The "4" status code indicated "status undetermined, requires further research." Formerly, 4s were assigned through surveys to properties that had the potential, if some circumstance or event was to happen in the future, to become eligible for the National Register. Thus by definition, resources identified as 4s were not eligible for the National Register. Yet under CEQA, they were presumed to be historical resources. The 4 status code has been updated to either a 7N or 7N1, to signify that these resources need to be reevaluated using current standards and applying both National Register and California Register criteria. Henceforth, a status code of 4 is broadly defined by SHPO as "Appears eligible for National Register (NR) or California Register (CR) through other evaluation," and will be used to denote those state owned properties evaluated pursuant to Public Resources Code §5024. Cited from Technical Assistance Bulletin #8, California State Office of Historic Preservation, accessed electronically June 25, 2007, http://ohp.parks.ca.gov/pages/1069/files/tab8.pdf

contemporary and older buildings were surveyed, but historical associations were not considered. The inventory assessed architectural significance, which included design features, the urban design context and overall environmental significance. Each building was assigned a rating, from a low of "-2" to a high of "5," generally correlated with architectural quality (from "detrimental" to "extraordinary"). When completed, the 1976 Architectural Survey was believed to represent the top 10 percent of the city's architecturally significant buildings. Buildings rated 3 or higher represent approximately the top 2 percent of all of San Francisco's buildings in terms of architectural importance, while ratings of 0 or 1 are generally interpreted to mean that the property has some contextual importance. Because the 1976 Survey has not been adopted by City action, it is not a local register of historical resources. In any case, a building's inclusion in the 1976 survey is considered a potential resource unless additional information and research proves otherwise.

## San Francisco Architectural Heritage Surveys

For the past 30 years, San Francisco Architectural Heritage (Heritage) has commissioned a number of historical resource surveys. To date, Heritage has conducted a comprehensive survey, research and evaluation of the city's Downtown and other areas. The findings of the Downtown survey served as the genesis of the book *Splendid Survivors*,<sup>214</sup> which led to the creation of the City's Downtown Plan and Article 11 of the Planning Code. Heritage developed a rating system for its surveys while conducting the Downtown survey, using an alphabetical rating system of A through D, with buildings of highest importance rated A and buildings of minor importance rated D. Buildings rated B were deemed of Major Importance, while C-rated buildings were of Contextual Importance. The Downtown survey resulted in an inventory that assessed the importance of over 800 buildings surveyed according to a set of 13 criteria in four main categories: architectural significance, historical significance, environmental significance (including visual prominence and importance as part of a row or cluster of buildings), and integrity (the degree to which the original design had survived later alterations).<sup>215</sup> The Heritage surveys have not been adopted as a local register of historical resources, although many Heritagerated buildings have been otherwise designated as landmarks or otherwise determined to be historical resources. Heritage ratings are not easily obtainable en masse. The Heritage survey ratings included in this analysis are drawn from the 1990 UMB survey. Properties rated A, B, or C by Heritage are considered potential historical resources.

## Junior League Survey (Here Today)

In 1968, the Junior League of San Francisco concluded a five-year-long survey of historic buildings in San Francisco, San Mateo and Marin counties. The most important buildings

<sup>&</sup>lt;sup>214</sup> Michael R. Corbett, ed., *Splendid Survivors: San Francisco's Downtown Architectural Heritage*. San Francisco: Foundation for San Francisco's Architectural Heritage; California Living Books, 1979.

<sup>&</sup>lt;sup>215</sup> The 13 criteria, by category, are: Architecture (Style, Construction, Age, Architect, Design, Interior); History (Person, Event, Patterns); Environment (Continuity, Setting, Landmark); and Integrity.

identified in the survey were included in the book *Here Today*, which contains information on approximately 2,500 properties within San Francisco.<sup>216</sup> The survey (as reflected in the text and index of *Here Today*) was adopted by the Board of Supervisors in 1970, and therefore buildings included in the book are identified as historical resources for CEQA purposes, by virtue of their listing on an adopted local register. The Junior League Index, which includes the full results of the survey, includes additional buildings of historical significance that were not included in *Here Today*; properties in the survey but not included in *Here Today* are considered potential historical resources for which more analysis is required before a formal determination can be made.<sup>217</sup>

#### Historical Architectural Resources Report, Transbay Area Redevelopment Plan

In 1997, Carey & Co. conducted a historical survey of the area surrounding the Transbay Terminal at First and Mission Streets. Only a handful of buildings in this survey fall within the Eastern Neighborhoods project area, and most of these were deemed ineligible for the California Register of Historic Resources but of local interest. The exceptions are 351, 361, 385 and 398 Bryant, which are listed on the CRHR as appearing eligible for listing in the National Register as a contributor to a district that has been fully documented, and 355 Bryant, which received a "C" Heritage rating. These five buildings were included in this analysis as potential historical resources.

#### Southern Waterfront Historic Resources Report

Carey & Co. completed a historical resources survey in 1994 as part of the Port of San Francisco's Waterfront Plan EIR. Fifty-three buildings and structures were identified, 24 of which were concentrated in the complex of industrial buildings on or near Pier 70, an area bounded by 18th Street, Illinois Street, 22nd Street and the Bay. This boundary represents the World War IIera boundaries of Bethlehem steel and the U.S. Navy Shipyards. Both areas were used for iron production and shipbuilding for over one hundred years, and contain buildings dating from the nineteenth century to the 1940s. Buildings assigned National Register status codes of 2, 3, and 5 in this survey were identified as potential historical resources in this analysis.

## Age-Eligible Properties and Unidentified Potential Historic Resources

According to Preservation Bulletin 16, buildings 45 years or older may be considered "historical resources." Additional research would be required, however, to determine whether they meet the California Register criteria, above and beyond a consideration of the age of the property to qualify as "historical resources" for purposes of CEQA. Given the size of the Eastern Neighborhoods, and the general age of their building stock, the sources cited above cannot be considered comprehensive. There are potentially many more historical resources in the Eastern Neighborhoods that have not yet been identified. As noted, CEQA Section 21084.1 permits a

<sup>&</sup>lt;sup>216</sup> Junior League of San Francisco, *Here Today*. San Francisco: Chronicle Books, 1968.

<sup>&</sup>lt;sup>217</sup> Junior League Index, available on the internet at: <u>http://sfpl.lib.ca.us/librarylocations/sfhistory/pdf/juniorleague.pdf</u>

local agency to identify as a historical resource even properties that do not meet the criteria specified in that section. Section 15064.5 of the state CEQA Guidelines specifies that a lead agency may consider a building or other feature to be a historical resource, as long as this determination is supported by substantial evidence. Planning for the Eastern Neighborhoods will take into account the potential for previously unrecognized resources to be present. As stated in Policy 6.1.2 of the recently released Draft Area Plan for East SoMa: "Until the survey [of historical resources in the East SoMa plan area] is completed, project proposals should be carefully evaluated for their historic character."<sup>218</sup>

## **Regulatory Setting**

A number of policies in the *San Francisco General Plan* directly address preservation of historic buildings and other resources, while other policies concentrate on retention of certain uses. In the case of these latter policies, the uses focused on by the policy language are typically accommodated in buildings of a characteristic age, type, or size, and to the extent that the *General Plan* calls for retaining these uses, it indirectly speaks to preservation of certain components of the City's building stock. *General Plan* policies are discussed in Section IV.B, Plans and Policies.

# **Impact Analysis**

## Significance Criteria

A project is generally found to have a significant effect on the environment if it would substantially adversely affect a property of historic significance in such as way as to take away from that property the quality for which it is judged historical. CEQA Section 21084.1 states "a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment." A "historical resource" is defined as one that is listed in, or determined eligible for listing in, the California Register of Historical Resources, one that is identified as significant in a local register of historical resources, such as Articles 10 and 11 of the San Francisco Planning Code, or one that is deemed significant due to its identification in an historical resource survey meeting the requirements of Public Resource Code Section 5024.1(g). A resource that is deemed significant due to its identification in an historical resource survey meeting the requirements of Public Resource Code Section 5024.1(g), is presumed to be historically significant unless a preponderance of evidence demonstrates otherwise. Section 5024.1(g) sets forth guidelines for historical resource surveys, including, among other things, listing the results in the State Historic Resources Inventory and preparation of the survey according to State Office of Historic Preservation procedures. In general, project-specific historical resource surveys performed as part of CEQA review in San

<sup>&</sup>lt;sup>218</sup> San Francisco Planning Department, "East SoMa, Draft Area Plan," October 3, 2006, http://www.sfgov.org/site/uploadedfiles/planning/Citywide/pdf/soma\_area\_plan\_draft\_web.pdf.

Francisco will meet these guidelines and, therefore, resources identified as having California Historical Resource status codes of 1 through 5 on such surveys will normally be determined to be historical resources for CEQA purposes.

A "substantial adverse change" is defined by CEQA Guidelines Section 15064.5 as "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired." The significance of an historical resource is "materially impaired," according to Guidelines Section 15064(b)(2), when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that:

- A. convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
- B. account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- C. convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

In general, a project that has been designed or mitigated to comply with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* (including the Standards for Rehabilitation) is considered to result in a less-than-significant effect on the environment (CEQA Guidelines Sec. 15064.5(b)(3)).

CEQA Guidelines Section 15126.4(b)(2) states that, "In some circumstances, documentation of a historical resource, by way of historic narrative, photographs, or architectural drawings as mitigation for the effects of demolition of the resources will not mitigate the effects to a point where clearly no significant effect on the environment would occur."<sup>219</sup> In such cases, the demolition or substantial alteration of a historical resource would remain a significant and unavoidable impact on the environment even after the historical documentation has been completed.

## Impact Overview

Future development projects that would be facilitated by the proposed changes to use districts and height limits in the Eastern Neighborhoods may cause substantial adverse changes in either (a)

<sup>&</sup>lt;sup>219</sup> Case law has held that, at least in the instance of a major historical resource, commemoration of the resource cannot mitigate, to a less-than-significant level, the impact of demolition of the resource. ("A large historical structure, once demolished, normally cannot be adequately replaced by reports and commemorative markers." *League for Protection of Oakland's Architectural and Historic Resources v. City of Oakland*, 52 Cal. App. 4th 896. 1997.)

the significance of one or more of the historical resources identified in this analysis, or (b) the significance of one or more of the historic districts in which some of these resources are located. As noted above, substantial adverse changes that may occur include demolition, destruction, relocation or alteration of one or more resources, such that the historical significance or resource and/or the historic district in which it is located is "materially impaired." Such an adverse change to a CEQA-defined historical resource would constitute a significant impact.

## Changes in Use Districts

The potential adverse effect the proposed rezoning options may have on historical resources lie primarily in the extent to which those options lay the groundwork for the large-scale conversion of industrial land to other, and especially residential, uses. Each of the three rezoning proposals entails converting approximately two-thirds of land currently zoned Light Industrial (M-1) or Heavy Industrial (M-2) to mixed-use zones in which housing is encouraged and permitted by right. Other land currently zoned Heavy Commercial (C-M) would also be rezoned to permit housing, as would some mixed-use areas of the South of Market that permit PDR uses. By increasing the amount of land in which residential uses are permitted and encouraged, while reducing the amount of land in which PDR or industrial uses are permitted and encouraged, the proposed rezoning could substantially increase incentives to demolish or alter historic buildings that are not suitable for residential uses, in order to construct new residential buildings. (Such effects in East SoMa would be diminished to some degree by a proposed amendment to Planning Code Sec. 803.5(c). This amendment would include California-Register-eligible structures among those historical resources in the South of Market zoning districts in which a wide variety of uses, including residential use, may be permitted, despite being otherwise prohibited.<sup>220</sup>) The proposed rezoning could also increase the incentive to demolish historic buildings currently in PDR or industrial use that may conflict with adjacent or nearby residential uses developed in the future pursuant to the new zoning and community plans.

Of course, not all known and potential historical resources in the Eastern Neighborhoods would be threatened by new development that would tend to favor an influx of new residential uses. Historic homes, for example, could even benefit from more solidly residential surroundings. This analysis does not distinguish between historical resources that would be threatened by increased residential uses and those that would not. Detailed considerations of a given historical resource's current use and context are better suited to a project-specific environmental assessment.

<sup>&</sup>lt;sup>220</sup> Sec. 803.5(c) addresses "preservation of landmark buildings, significant or contributory buildings" in the South of Market districts. It permits, with Conditional Use authorization, any use that is principally or conditionally permitted in the Service Secondary Office (SSO) Use District to be established in any South of Market district, within City Landmark buildings, contributory buildings to historic districts that are proposed for conversion to office use greater than 25,000 sq. ft., and buildings identified as "significant" or "contributory" under Planning Code Article 11 (this last case is applicable only to the area bounded generally by Mission, Howard, Sixth, and Tenth Streets that was formerly zoned C-3). Such uses include, among others, residential, office, and retail uses. The proposed amendment would add to the categories of eligible buildings those "structures recorded with the State Historic Preservation Office as eligible for the California Register [of Historical Resources]."

Nevertheless, it is clear that future development projects that would be facilitated by the proposed changes to use districts (through introduction of new uses land/or intensification of use) and height limits in the Eastern Neighborhoods could cause substantial adverse changes in either (a) the significance of one or more of known or potential historical resources, or (b) the significance of one or more of the historic districts in which some of these resources are located. Such an adverse change to a historical resource would constitute a significant impact.

## Changes in Height Limits

By increasing height limits in portions of the Eastern Neighborhoods, the proposed rezoning could increase the financial incentive to replace historic structures with newer, taller buildings (or add additional stories to existing buildings), in order to take advantage of the greater allowable density. Increased height limits could also foster the development of taller buildings near historical resources. Such new developments could bring significant changes to the historical resources' setting, thereby potentially compromising the integrity of those resources. While any height increase to surrounding buildings can potentially compromise the integrity of a historical resource's location and context, it is generally true that as permitted heights increase, so do potential adverse effects to historical resources.

## **Neighborhood-Specific Potential Impacts**

## East SoMa

## Draft East SoMa Area Plan

The draft East SoMa Area Plan contains a policy framework for preserving historical resources. One policy calls for the completion of a historic survey of the plan area (with project-specific evaluation pending completion of the survey), and the possibility of revision to policies in the draft plan "to reflect the results of currently underway and future surveys"; encouragement of preservation, rehabilitation, and adaptive reuse of historic buildings and resources, including historic districts; respect for the historic character and cultural heritage of the area and support for the sustainability of resources; encouragement of new building design that respects the character of nearby older development; promotion of preservation incentives that encourage reuse of older buildings; and preservation of the "cultural and socio-economic diversity of the plan area through preservation of Historic Properties, along with an acknowledgement that "to maintain the City's supply of affordable housing, historic rehabilitation projects may need to accommodate other considerations in determining the level of restoration." Additionally, Chapter V, Mitigation Measures, includes interim procedures for permit review within the draft East SoMa Plan Area (see Mitigation Measure K-1) that would be in effect until the final survey findings are adopted.

## **Effects of Proposed Zoning Changes**

In general, the proposed options entail rezoning the East SoMa area to Mixed-Use Residential (MUR) along Second and Third streets, with scattered Employment and Business Development (EBD) parcels along Fourth and Fifth streets, and Urban Mixed-Use (UMU) everywhere else. The most significant zoning changes would be to the area to the southwest of South Park. This area would be changed from Service/Light Industry (SLI), which permits only affordable housing, to UMU, which also allows market-rate housing. Areas currently zoned Service/Secondary Office (SSO) would also be rezoned Urban Mixed Use. The portion of East SoMa west of 4th Street, being currently zoned Residential/Service District (RSD), already accommodates residential uses.

The primary area of proposed height limit increases in East SoMa are the blocks east, south and southwest of South Park. Height limits would also be increased along portions of major streets (5th, 6th, 7th, Harrison, Folsom, Howard and Mission) to the west.

#### Option A

The following information is presented from the background Carey & Company analysis conducted in 2006. Under Option A, zoning that permits and encourages residential uses would be expanded to 85 parcels containing known or potential historical resources, 61 of which contain known resources.

Height limits would be increased 15 feet or more on 64 parcels containing identified or potential historical resources, including 48 structures known as historical resources.

## Options B and C

Options B and C propose the same slight expansion of residential uses over Option A. These rezoning options would, in addition to the 85 parcels listed above, expand residential-permitting zoning to 9 more parcels containing known or potential historical resources (including one known resource).

Height increases under Option B would be the same as those under Option A. However, Option C proposes additional height increases at certain locations, which could affect an additional three properties (all potential historical resources).

#### Proposed East SoMa Area Plan

An analysis of the potential for the draft SoMa Area Plan (October 3, 2006 draft) to result in potential adverse environmental effects on known and potential resources, potential districts and age-eligible properties was conducted by Planning Department staff. The evaluation is based on a GIS analysis that examines areas in East SoMa where zoning and height changes are contemplated in the context of where known and potential resources are located. In East SoMa, the GIS analysis examines the potential for the draft plan to potentially affect properties where

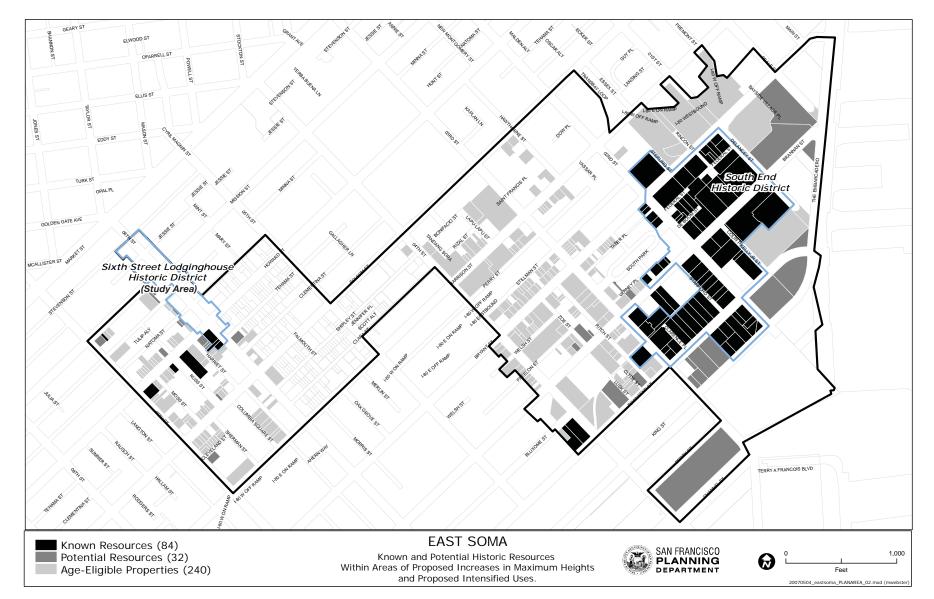
height increases may occur, based on three categories: 15-feet or less, 20-25 feet, and 35 feet or greater. The analysis indicates height changes would affect properties generally in the western portion of the neighborhood, between 5th and 6th Streets from Howard to Harrison Streets. The analysis indicates age-eligible properties that could be affected are east of 4th Street and south of Brannan Street. The analysis indicates that the draft East SoMa area plan could potentially affect 84 known resources, 32 potential resources, and about 240 age-eligible properties. **Figure 33** illustrates the plan's potential impact to known and potential historic resources and age-eligible properties. As the demolition of a historical resource generally cannot be fully mitigated to a less-than-significant level, the impact of demolition of buildings that are identified as historical resources would be considered a significant and unavoidable impact of the proposed Eastern Neighborhoods Rezoning and Community Plans project, because such demolition could be anticipated to occur as a result of development secondary to project implementation. Mitigation identified in Chapter V, Mitigation Measures, could in some cases reduce the nature of the impact, but it is assumed that demolition of historical resources could not be mitigated to a less-than-significant level.

## Effects on Existing and Potential Historic Districts

Although the historic districts identified in the South of Market are not formally delineated, there is sufficient evidence presented in the preliminary SoMa analysis, and summarized above, such that these districts are considered historical resources for purposes of CEQA analysis. For purposes of a conservative assessment, it is presumed that the demolition of one or more contributing resources to either of the three potential historic districts identified in the Setting for East SoMa would occur during the lifetime of the area plan. While demolition of a contributing resource to a historical district may not result in a significant adverse effect on that district, this assessment assumes that such demolition would constitute a significant impact that could not be mitigated to a less-than-significant level. However, the precise nature of the impact cannot be determined in the absence of specific information about the district and the proposal under consideration. Mitigation identified in Chapter V, Mitigation Measures, such as the proposed amendments to Article 10 of the Planning Code, could in some cases reduce the nature or the degree of the impact on the existing and potential districts, but it is assumed that such effects would be significant and unavoidable.

## No-Project Alternative

The No-Project Alternative, because it would not result in zoning changes that would tend to induce redevelopment, would avoid some of the effects described above for each of the rezoning options. Under the No-Project Alternative, identified and potential historical resources would, however, continue to be subject to risk of demolition or substantial alteration as a result of *ad hoc* development in the project area. On the other hand, the No-Project Alternative would not incorporate the additional policy direction of the draft East SoMa Plan and interim controls for



SOURCE: San Francisco Planning Department, 2007

- Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091) Figure 33 Potential Plan Impacts to Historic Resources: East SoMa

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permit review cited in Chapter V that could, to some extent, ameliorate the effects of the proposed rezoning options.

## **Mission District**

## **Draft Mission Area Plan**

Like the draft East SoMa Plan, the draft Mission Area Plan contains a policy framework for preserving historical resources, calling for, among other things, a historic survey of the plan area (with project-specific evaluation pending completion of the survey), and the possibility of revision to policies in the draft plan "to reflect the results of currently underway and future surveys"; encouragement of preservation, rehabilitation, and adaptive reuse of historic buildings and resources, including historic districts; respect for the historic character and cultural heritage of the area and support for the sustainability of resources; encouragement of new building design that respects the character of nearby older development; promotion of preservation incentives that encourage reuse of older buildings; and preservation of the "cultural and socio-economic diversity of the plan area through preservation of historic resources"; and application of the Secretary of the Interior's Standards for the Treatment of Historic Properties, along with an acknowledgement that "to maintain the City's supply of affordable housing, historic rehabilitation projects may need to accommodate other considerations in determining the level of restoration." Prior to the completion of the areawide historic survey, the draft Mission Area Plan also calls for mandatory Landmarks Preservation Advisory Board review of proposed demolitions of buildings 45 years or more in age and Mandatory Discretionary Review for all proposed new construction over 50 feet in height. Additionally, Chapter V, Mitigation Measures, includes further interim procedures for permit review within the draft East SoMa Plan Area that would be in effect until the final survey findings are adopted.

## Effects of Proposed Zoning Changes

In general, the proposed rezoning options bring greater changes to the zoning of the Northeast Mission Industrial Zone (NEMIZ) than to the remainder of the Mission District. This limits the rezoning's potential impact on historical resources, since, as noted above, the bulk of the known and potential historical resources in the Mission lie outside the NEMIZ. Even so, significant numbers of historical resources could be impacted by rezoning options B and C.

In general, the rezoning options propose only modest height limit increases for the Mission District. Height limits would be slightly increased along commercial corridors such as Valencia and 24th streets, and left largely the same elsewhere. The only substantially increased height limits would be along Mission Street and in the area around the site of the shopping center at 16th and Bryant streets. The latter area includes only two potential historical resources, at 100 Potrero Avenue and 1598 Bryant Street.

## Option A

Option A would expand residential-permitting zoning to only a handful of new parcels in the Mission District. Only two known or potential historical resources sit on such parcels, both of which are potential resources.

Option A would result in height increases of 15 feet or more on 63 parcels containing known or potential historical resources in the Mission District, including 8 containing known resources.

## Option B

Option B would expand residential zoning in the vicinity of Mission Street and South Van Ness Avenue north of 19th Street, as well as west of Harrison Street between Mariposa and 20th streets. Altogether, Option B would expand residential-permitting zoning to 53 parcels containing known or potential historical resources, 10 of which are known resources.

Height limit increases under Option B would be incrementally greater than with Option A. Under Option B, height limits would be raised 15 feet or more on 67 parcels containing known or potential historical resources (the 63 parcels noted above, along with 4 additional parcels, all containing potential resources).

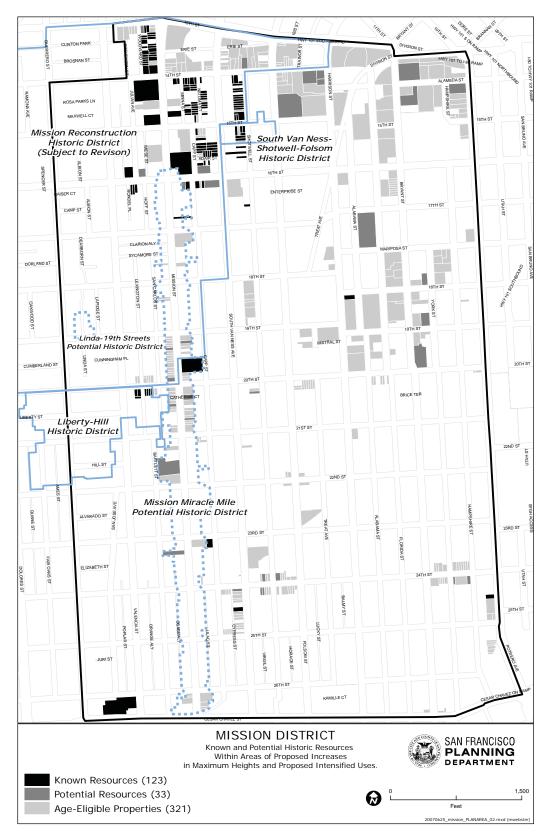
## Option C

Option C would allow for the greatest expansion of residential use in the Mission District. Residential-permitting zoning would be expanded to 71 parcels containing known or potential historical resources. These 71 parcels consist of the 53 parcels listed above under Option B and 18 additional parcels, which include 5 known historical resources.

Proposed height increases under Option C would be the same as those under Option A.

## Proposed Mission Area Plan

An analysis of the potential for the draft Mission Area Plan (March 13, 2007 draft) to result in potential adverse environmental effects on known and potential resources, potential districts and age-eligible properties was conducted by Planning Department staff. In the Mission, the GIS analysis evaluates the potential for the draft plan to potentially affect properties where height increases may occur, based on three categories: 15-feet or less, 20-25 feet, and 35 feet or greater. The analysis indicates height changes would affect properties generally in the NEMIZ and segments along Mission Street between 19th and 21st Streets. Other areas The GIS analysis also indicates age-eligible properties that could be affected by rezoning due to changes in permitted land uses or intensification of use, generally east of Harrison Street, between 16th and 20th Streets, as well as in other more disparate locations. The analysis indicates that the draft Mission area plan could potentially affect 123 known resources, 33 potential resources, and about 321 age-eligible properties. **Figure 34** illustrates the plan's potential impact to known and potential historic resources and age-eligible properties.



SOURCE: San Francisco Planning Department, 2007

Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091) Figure 34 Potential Plan Impacts to Historic Resources:

Mission

As the demolition of a historical resource generally cannot be fully mitigated to a less-thansignificant level, the impact of demolition of buildings that are identified as historical resources would be considered a significant and unavoidable impact of the proposed Eastern Neighborhoods Rezoning and Community Plans project, because such demolition could be anticipated to occur as a result of development secondary to project implementation. Mitigation Measure K-1 identified in Chapter V, Mitigation Measures, could in some cases reduce the nature of the impact, but it is assumed that demolition of historical resources could not be mitigated to a less-than-significant level.

## People's Plan

The community-based People's Plan (March 2005 draft) includes policy language concerning historical resources, calling for preservation and promotion of the historical resources and cultural heritage of the Mission District; preservation and maintenance of structures and "cultural expressions such as murals that serve as significant visible reminders of the area's social and architectural history"; and incorporation of "publicly visible art works that reflect the Mission District's unique character in new private development and in streets and public spaces." Also under Historic and Cultural Resources, the People's Plan includes a policy to "Recognize the people of the Mission as a cultural resource and create safeguards against displacement," and another policy calling for "effective neighborhood participation in the initial planning and ongoing programming, of arts and cultural activities in the Mission." As a matter of economic development, the People's Plan calls for preservation of the Mission's "historic industrial building stock." And under Housing policies, the People's Plan also calls for preservation of existing rental housing and residential hotels.

Because the People's Plan would generally have similar land use effects to those in Option B, it is likely that the effects of the People's Plan on historical resources would also be similar to those of Option B. Although the People's Plan would extend special protection to auto repair businesses along South Van Ness Avenue from Division Street to 18th Street, those establishments, while sometimes found in older, converted warehouse-style buildings, are frequently housed in relatively newer, single-story garage-type structures.

## MCEJJ Plan

The MCEJJ Plan does not include specific policy language concerning historical resources. Because the MCEJJ Plan would have land use effects comparable to aspects of both Option C and the No-Project alternative, this plan would result in effects on historical resources that would likely be greater than those of Options A and B and the *People's Plan*.

## Effects on Historic Districts

For purposes of a conservative assessment, it is presumed that the demolition of one or more contributing resources to any of the historic districts identified in the Setting in the Mission District would occur during the lifetime of the area plan. While demolition of a contributing resource to a historical district does not necessarily result in a significant adverse effect on that district, this assessment assumes that such demolition would constitute a significant impact that could not be mitigated to a less-than-significant level. Mitigation Measure K-1 identified in Chapter V, Mitigation Measures, could in some cases reduce the nature or the degree of the impact on the district, but it is assumed that such effects would be significant and unavoidable.

#### No-Project Alternative

The No-Project Alternative, because it would not result in zoning changes that would tend to induce redevelopment, would avoid some of the effects described above for each of the rezoning options. Under the No-Project Alternative, identified and potential historical resources would, however, continue to be subject to risk of demolition or substantial alteration as a result of *ad hoc* development in the project area. On the other hand, the No-Project Alternative would not incorporate the additional policy direction of the draft Mission Plan that could ameliorate the effects of the proposed rezoning options.

## Showplace Square/Potrero Hill

## Draft Showplace Square/Potrero Hill Area Plan

Like the draft Mission District Area Plan, the draft Showplace Square/Potrero Hill Area Plan (December 5, 2006 draft) contains a policy framework for preserving historical resources, calling for, among other things, a historic survey of the plan area (with project-specific evaluation pending completion of the survey), and the possibility of revision to policies in the draft plan "to reflect the results of currently underway and future surveys"; mandatory Landmarks Preservation Advisory Board review of proposed demolitions of buildings 45 years or more in age and Mandatory Discretionary Review for all proposed new construction over 50 feet in height, prior to completion of the areawide historic survey; encouragement of preservation, rehabilitation, and adaptive reuse of historic buildings and resources, including historic districts; respect for the historic character and cultural heritage of the area and support for the sustainability of resources; encouragement of new building design that respects the character of nearby older development; promotion of preservation incentives that encourage reuse of older buildings; preservation of the "cultural and socio-economic diversity of the plan area through preservation of historic resources"; and application of the Secretary of the Interior's Standards for the Treatment of Historic Properties, along with an acknowledgement that "to maintain the City's supply of affordable housing, historic rehabilitation projects may need to accommodate other considerations in determining the level of restoration."

## **Effects of Proposed Zoning Changes**

Showplace Square is one of the areas of greatest anticipated change following rezoning. Minimal zoning changes are proposed, however, for Potrero Hill.

Proposed height limit increases in the Showplace Square/Potrero Hill neighborhood are generally limited to the portion of Showplace Square east of Kansas/Henry Adams Street and along 7th Street.

As noted in Chapter III, Project Description, the *Rezoning Options Workbook* included a potential Design PDR Use Area overlay zone in the central portion of Showplace Square, where only design-related PDR uses would be permitted, to help preserve the existing cluster of design uses. Subsequent drafts of the Showplace Square/Potrero Area Plan issued in 2006 delineated a separate Design & Showroom District with similar controls to those proposed in the overlay zone. In this Design & Showroom District, demolition of PDR space would be restricted, office and retail uses would be limited in size, and residential use would be prohibited. The December 2006 draft Showplace Square/Potrero Area Plan also includes a separate Arts District with similar controls to those proposed in the UMU zone, but which is intended to encourage arts-related PDR uses and student housing. These two zones are designed to curtail the conversion of PDR to residential uses in the Showplace Square area, which would tend to diminish the degree to which historical resources might otherwise be affected.

## Option A

Option A would expand residential-permitting zoning to all of the blocks of Showplace Square along 7th Street, and along 16th Street east of De Haro Street. Ten known or potential historical resources, including two known resources, are located in these blocks.

Three parcels containing known or potential historical resources, including one with a known resource, would have height limits increased by one story or more under Option A.

## Option B

Eleven known or potential historical resources sit on industrial parcels that would permit residential uses following rezoning in accordance with Option B. These 11 parcels consist of the 10 parcels listed above under Option A and one additional parcel.

In terms of height limits, Option B would result in increases in permitted height by one story or more on nine parcels containing known or potential historical resources. These nine parcels consist of the three parcels listed above, along with 6 additional parcels, including one known historical resource.

## Option C

Option C would allow for the greatest expansion of residential-permitting zones in the Showplace Square area. Residential-permitting zoning would be expanded to 24 parcels containing known or potential historical resources. These 24 parcels consist of the 11 parcels listed above under Options A and B and 13 additional parcels, including 3 known resources. Proposed height increases under Option C would be the same as those under Option A.

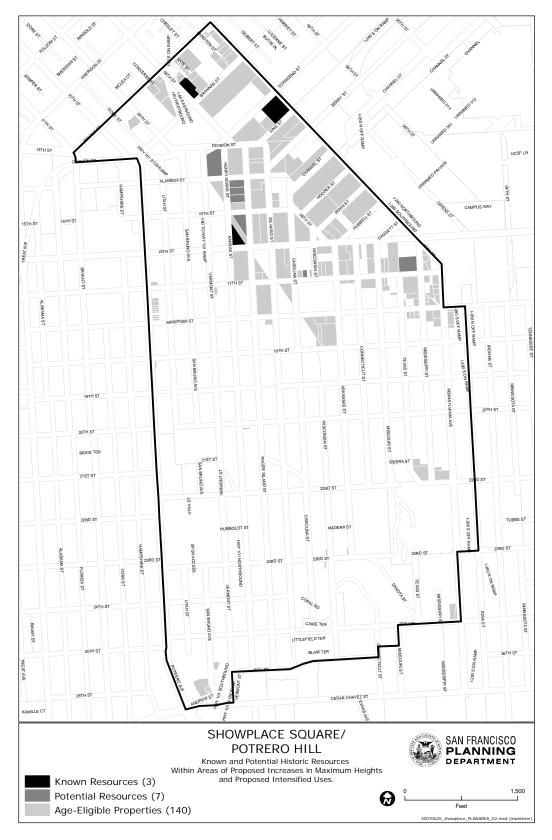
#### Proposed Showplace Square/Poterero Area Plan

An analysis of the potential for the draft Showplace Square/Potrero Area Plan to result in potential adverse environmental effects on known and potential resources, potential districts and age-eligible properties was conducted by Planning Department staff in 2007. The evaluation is based on a GIS analysis that examines areas in Showplace Square/Potrero Hill where zoning and height changes are contemplated in the context of where known and potential resources are located. In this plan area, the GIS analysis analyzes the potential for the draft plan to potentially affect properties where height increases may occur, based on three categories: 10-15 feet, 20-25 feet, and 30 feet or greater. The analysis indicates height changes would affect properties generally in the northern portion of the neighborhood, between Division and 16th Streets east of Vermont Street. Other areas The GIS analysis also indicates age-eligible properties that could be affected by rezoning due to changes in permitted land uses or intensification of use, generally north of Division Street to Brannan Street and east of Kansas Street between 16th and Mariposa Streets. The analysis indicates that the draft Mission area plan could potentially affect 3 known resources, 7 potential resources, and about 140 age-eligible properties. **Figure 35** illustrates the plan's potential impact to known and potential historic resources and age-eligible properties.

As the demolition of a historical resource generally cannot be fully mitigated to a less-thansignificant level, the impact of demolition of buildings that are identified as historical resources would be considered a significant and unavoidable impact of the proposed Eastern Neighborhoods Rezoning and Community Plans project, because such demolition could be anticipated to occur as a result of development secondary to project implementation. Mitigation Measure K-1 identified in Chapter V, Mitigation Measures, could in some cases reduce the nature of the impact, but it is assumed that demolition of historical resources could not be mitigated to a less-than-significant level.

#### Effects on Historic Districts

No historic districts have yet been identified in the Showplace Square/Potrero neighborhood. However, it is likely that the concentration of brick and other industrial buildings that are more than 45 years old could constitute a historic district. Given the extent of the Showplace Squaresub-area and the number of potential historical resources, it is likely that one or more buildings considered historical resources under CEQA would be demolished during the lifetime of the area plan. While demolition of a contributing resource to a historical district does not necessarily result in a significant adverse effect on that district, for purposes of a conservative assessment, it is presumed—in the absence of project-specific research and evaluation—that demolition that would result in such an adverse effect on a yet-to-be delineated historic district in Showplace Square could occur as an indirect result of the proposed project. However, the specific nature of this impact cannot be described pending further research, which is ongoing, and absent specific information about the proposal under consideration. Mitigation identified in Chapter V,



SOURCE: San Francisco Planning Department, 2007

Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091) Figure 35

Potential Plan Impacts to Historic Resources: Showplace Square/ Potrero Hill Mitigation Measures, could in some cases reduce the nature or the degree of the impact on the district, but it is assumed that such effects would be significant and unavoidable.

#### No-Project Alternative

The No-Project Alternative, because it would not result in zoning changes that would tend to induce redevelopment, would avoid some of the effects described above for each of the rezoning options. Under the No-Project Alternative, identified and potential historical resources would, however, continue to be subject to risk of demolition or substantial alteration as a result of *ad hoc* development in the project area. On the other hand, the No-Project Alternative would not incorporate the additional policy direction of the draft Showplace Square/Potrero Plan that could ameliorate the effects of the proposed rezoning options.

#### **Central Waterfront**

#### **Draft Central Waterfront Plan**

Like the other draft area plans, the draft Central Waterfront Plan contains a policy framework for preserving historical resources. However, because a historical resources survey has been completed for the Central Waterfront, the draft area plan focuses in part on already-identified areas of known historic importance. The draft Central Waterfront Plan calls for, among other things, provision of resources for the maintenance and periodic update of the Central Waterfront Cultural Resource Survey; preservation of historic elements of the Maritime and Industrial Area east of Illinois Street; protection of important examples of engineering achievements such as bridges and tunnels and, as appropriate, their designation as city landmarks or as contributors to historic districts; consideration extending the compliance period for local, state, or nationally designated unreinforced masonry buildings, especially in the Pier 70 area; encouragement of preservation and rehabilitation of other historic buildings and resources, including historic districts; promotion of preservation incentives that encourage reuse of older buildings; respect for the historic character and cultural heritage of the area and support for the sustainability of resources; encouragement of new building design that respects the character of nearby older development; and application of the Secretary of the Interior's Standards for the Treatment of Historic Properties.

#### **Effects of Proposed Zoning Changes**

This analysis treats all three rezoning proposals as equivalent for the Central Waterfront area, given that the proposals differ only in that Option A would convert the existing Potrero power plant site to housing, which would not affect any known or potential historical resources. In general, the rezoning proposals expand residential-permitting zoning along Minnesota, Tennessee, Third and Illinois streets between Mariposa and 25th streets, as well as along 280 between Mariposa and 20th. The vast majority of this land is currently zoned Heavy Industrial

(M-2). The rezoning proposals would expand residential-permitting zoning to 43 parcels containing known or potential historical resources, including 34 structures that are known historical resources.

The three rezoning options propose identical height limit increases for the Central Waterfront. Height limit increases are generally proposed along Third and Illinois streets, and in the southern portion of the area, between 22nd and 25th streets. Height limits in the portion of Pier 70 north of 20th Street would be increased from 40 to 55 feet. In addition to known historical resources at 420, 460 and 548 20th Street (Pier 70 Buildings 104, 102 and 101, respectively), this change would affect 18 known or potential historical resources. The rezoning proposals would increase height limits 15 feet or more for 53 known or potential historical resources in the Central Waterfront, all but two of which are known resources.

#### Proposed Central Waterfront Plan

An analysis of the potential for the draft Central Waterfront Better Neighborhoods Plan (December 2002 draft) to result in potential adverse environmental effects on known and potential resources, potential districts and age-eligible properties was conducted by Planning Department staff in 2007. The evaluation is based on a GIS analysis that examines areas in the Central Waterfront where zoning and height changes are contemplated in the context of where known and potential resources are located. In this plan area, the GIS analysis analyzes the potential for the draft plan to potentially affect properties where height increases may occur, based on three categories: 15 feet, 25 feet, and 35 feet or greater. The analysis indicates height changes would affect properties generally along Third Street as well as the blocks east of Iowa Street south of 23rd Street. Other areas The GIS analysis also indicates age-eligible properties that could be affected by rezoning due to changes in permitted land uses or intensification of use are generally to the north of the plan area between Mariposa, Indiana, Illinois and 22nd Streets as well as on Pier 70. The analysis indicates that the draft Mission area plan could potentially affect 28 known resources, 31 potential resources, and about 64 age-eligible properties. **Figure 36** illustrates the plan's potential impact to known and potential historic resources.

As the demolition of a historical resource generally cannot be fully mitigated to a less-thansignificant level, the impact of demolition of buildings that are identified as historical resources would be considered a significant and unavoidable impact of the proposed Eastern Neighborhoods Rezoning and Community Plans project, because such demolition could be anticipated to occur as a result of development secondary to project implementation. Mitigation identified in Chapter V, Mitigation Measures, could in some cases reduce the nature of the impact, but it is assumed that demolition of historical resources could not be mitigated to a lessthan-significant level.



SOURCE: San Francisco Planning Department, 2007

Case No. 2004.0160E: Eastern Neighborhoods Rezoning and Area Plans (203091) Figure 36 Potential Plan Impacts to Historic Resources: Central Waterfront

#### Effects on Historic Districts

Given that both the Dogpatch Historic District and the Pier 70 industrial area are welldocumented historic districts, it is presumed that the demolition of one or more contributing resources to the Dogpatch Historic District or within the concentration of historical resources at Pier 70 would constitute a significant impact that could not be mitigated to a less-than-significant level. Mitigation identified in Chapter V, Mitigation Measures, such as the proposed amendments to Article 10 of the Planning Code, could in some cases reduce the nature or the degree of the impact on the district, but it is assumed, for purposes of a conservative assessment, that one or more such resources could be adversely affected during the lifetime of the Central Waterfront Area Plan, and that such effects would be significant and unavoidable.

#### No-Project Alternative

The No-Project Alternative, because it would not result in zoning changes that would tend to induce redevelopment, would avoid some of the effects described above for each of the rezoning options. Under the No-Project Alternative, identified and potential historical resources would, however, continue to be subject to risk of demolition or substantial alteration as a result of *ad hoc* development in the project area. On the other hand, the No-Project Alternative would not incorporate the additional policy direction of the draft Central Waterfront Plan that could ameliorate the effects of the proposed rezoning options.

### Conclusion

Parcels subject to both development of new residential uses and increased height limits would be particularly vulnerable to change. Altogether, approximately 32 percent known or potential historical resources in the Eastern Neighborhoods could potentially be affected by the proposed rezoning (under Option C).

**Table 59**, below, tabulates the area plans' potential to affect known and potential resources, as well as age eligible properties. The first column reiterates the number of known resources by plan area and the second column tabulates the number of known resources potentially affected through height and use district changes within the plan area. The figures listed in parenthesis indicate the percentage of affected resources or age-eligible properties by neighborhood plan area. Depending on the degree to which individual buildings and/or districts that are known historical resources are

• adversely affected, the range of proposed rezoning options would contribute to the abovedescribed loss of historical resources and potential resources resulting from actions other than the proposed Eastern Neighborhoods Rezoning and Area Plans project, both within the study area, as well as elsewhere in San Francisco. Given the degree of change that can reasonably be anticipated in the study area and citywide over the period when the proposed project would be implemented, and the concomitant anticipated loss of a certain number of historical resources, this cumulative impact would be significant and unavoidable. The No-Project Alternative would not result in the kind of development pressure, described above, that would be brought about by each of the three rezoning options. However, given the loss of many potential historical resources and/or potential historic district contributors in the project area—particularly in East SoMa—and given the continuing development pressure in the Eastern Neighborhoods, it is unlikely that the No-Project scenario would see a halt in demolition of historical resources and potential resources. Given recent trends, it can be reasonably anticipated that other, future projects will be proposed in the Eastern Neighborhoods that could threaten additional historical resources and potential resources even under the No-Project Alternative. Although it could reasonably be expected that the impacts might be somewhat less substantial than with the proposed project, this impact is judged to be significant and unavoidable for the No-Project Alternative, as well.

TABLE 59
POTENTIALLY AFFECTED HISTORICAL RESOURCES & AGE-ELIGIBLE PROPERTIES
BY NEIGHBORHOOD

	Known Resources	Known Resources Potentially Affected	Potential Resources	Potential Resources Potentially Affected	Unrated Properties ≥ 45 years old	Unrated Properties ≥ 45 years old Potentially Affected
East SoMa	94	84 (89%)	86	32 (37%)	498	240 (48%)
Mission District	699	123 (18%)	371	33 (9%)	3,891	321 (8%)
Showplace/Potrero	14	3 (21%)	105	7 (7%)	2,285	140 (6%)
Central Waterfront	140	28 (20%)	34	31 (91%)	163	64 (39%)
Total	947	238 (25%)	596	103 (17%)	6,837	765 (11%)
Total SOURCE: San Francisco	-	( )	596	103 (17%)	6,837	765 (11%)

As described above, implementation of the mitigation measure identified in Chapter V, Mitigation Measures, could reduce the potential effects on historical resources. In recognition of the magnitude of potential impacts identified in East SoMa and the Central Waterfront, Mitigation Measures K2 and K3 are included in this EIR to offset potential substantially adverse changes resulting from the plans on the South End Historic District and the Dogpatch Historic District. Those measures propose amendments to Article 10 of the Planning Code to incorporate additional controls for future projects in those districts. For purposes of a conservative analysis, and pending completion of historical resources surveys for the entire project area, the proposed project's indirect effect on historical resources is judged to be significant and unavoidable, as it is unlikely that no future development proposal in the Eastern Neighborhoods could result in demolition, alteration, or other changes to one or more historical resources such that the historical significance of those resources would be "materially impaired."

# L. Hazardous Materials

# Introduction and Methodology

This section presents the existing setting and potential impacts related to hazards and hazardous materials associated with the implementation of the proposed project. The Setting includes a definition of hazardous materials and waste, an overview of general environmental conditions in the Eastern Neighborhoods project area with respect to the presence of hazardous materials and wastes, a general description of hazardous building materials likely to be present within the project area, and an overview of the most relevant hazardous materials regulations that are applicable to the project area. Based on this information, impacts associated with the potential to be exposed to hazardous materials during construction and as a result of future land use changes due to implementation of the project are identified.

This analysis is based on general parameters concerning the growth assumed in the Eastern Neighborhoods. No site-specific development is contemplated as part of the proposed rezoning and area plans project, and therefore no such proposals are analyzed here. Rather, this section evaluates potential future development in the project area at a program level of detail and sets forth the procedure by which future site-specific development projects would be evaluated.

# **Environmental Setting**

A number of acronyms are used in this section. For ease of reading, these acronyms are defined in **Table 60**.

Hazardous materials, defined in Section 25501(h) of the California Health and Safety Code, are materials that, because of their quantity, concentration, or physical or chemical characteristics, pose a substantial present or potential hazard to human health and safety or to the environment if released to the workplace or environment. Hazardous materials have been and are commonly used in commercial, agricultural and industrial applications as well as in residential areas to a limited extent. A waste is any material that is relinquished, recycled, or inherently waste-like. Title 22 of the California Code of Regulations, Division 4.5, Chapter 11 contains regulations for the classification of hazardous wastes. A waste is considered a hazardous waste if it is toxic (causes human health effects), ignitable (has the ability to burn), corrosive (causes severe burns or damage to materials), or reactive (causes explosions or generates toxic gasses) in accordance with the criteria established in Chapter 11, Article 3. Article 4 of Chapter 11 lists specific hazardous wastes and Article 5 identifies specific waste categories including Resource Conservation and Recovery Act (RCRA) hazardous wastes, non-RCRA hazardous wastes, extremely hazardous wastes, and special wastes. If improperly handled, hazardous materials and wastes can result in public health hazards, if released to the soil, groundwater, or air in vapors, fumes, or dust.

#### TABLE 60 HAZARDOUS MATERIALS ACRONYMS

Acronym	Definition
AST	Above-Ground Storage Tank
BAAQMD	Bay Area Air Quality Management District
DBI	San Francisco Department of Building Inspection
DEHP	Di (2 ethylhexyl) phthalate
DPH	San Francisco Department of Public Health
DTSC	California Department of Toxic Substances Control
LUST	Leaking Underground Storage Tank
PCBs	Polychlorinated biphenyls
RCRA	Resource Conservation and Recovery Act (federal)
RWQCB	Regional Water Quality Control Board (Region 2, San Francisco Bay Region)
UST	Underground Storage Tank
VCP	Voluntary Cleanup Program

The following potential sources of hazardous materials are present in the project area:

- fill materials, including those placed east of the historic high tide line;
- historic and existing uses of hazardous materials, including underground storage tanks (USTs), and permitted handling of hazardous wastes;
- identified sites where soil or groundwater has been affected by a chemical release(s) from past or present land uses (referred to as "environmental cases"); and
- hazardous building materials that were historically used in construction.

#### **Fill Materials**

As described in the Initial Study (Section 9, Geology/Topography, of the Initial Study, in Appendix A of this EIR), portions of the project area are underlain by artificial fill. In San Francisco, the fill materials were primarily obtained from dune sands, quarried rock (including serpentinite bedrock found in many areas of San Francisco), industrial refuse, and building debris following the 1906 earthquake. The composition of the artificial fill can be highly variable, ranging from cobble to boulder sized rubble mixed with sand and gravel. The larger sized material includes such items as concrete, bricks, porcelain, glass, and wood.

Hazardous materials used in the industries that were destroyed during the 1906 fire and earthquake were commonly incorporated into the building debris, which was then incorporated into the earthquake fill, and built upon during reconstruction. Because of this historical practice, the 1906 earthquake fill commonly contains polynuclear aromatic hydrocarbons,<sup>221</sup> heavy metals,

<sup>&</sup>lt;sup>221</sup> PAHs are group of chemicals that are formed during the incomplete burning of coal, oil, gas, wood, garbage, or other organic substances, such as tobacco and charbroiled meat. PAHs usually occur naturally, but they can be

oil and grease, and volatile organic compounds.<sup>222</sup> The existence of hazardous materials in the earthquake fill is one of the reasons for enactment of Article 22A of the San Francisco Health Code (previously referred to as the Maher Ordinance), which is described below in Regulatory Framework. Article 22A requires site assessments at specified sites located eastward of the historic 1851 high tide line where the land has been filled, unless a waiver is granted by the Director of the San Francisco Department of Public Health (or the Director designee). Depending on the results of the site assessments, mitigation can be required to clean up hazardous materials identified in the soil. Portions of the East SoMa, Showplace Square/Potrero Hill, and Central Waterfront districts are located eastward of the 1851 high tide line, and these areas would be subject to the requirements of Article 22A.

### Land Uses

The project area has a history of developed uses for over 100 years. Industrial uses are primarily concentrated in the East SoMa and Central Waterfront neighborhoods as well as the northern portions of the Mission District and Showplace Square/Potrero Hill neighborhoods. Nonconforming uses that do not comply with existing zoning designations are located throughout the project area, primarily in the Mission District and Showplace Square/Potrero Hill neighborhoods. The areas south of Market Street were used for industrial uses very early in San Francisco's zoning history, with uses such as iron foundries and machine shops, boiler works, and breweries noted. Stockyards and slaughterhouses were noted in Potrero. Three coal gas manufacturing plants have previously operated in the project area-two in East SoMa and one in the Central Waterfront, at the site of today's Potrero Power Plant-and others operated nearby. Over time, heavy industries gave way to lighter industrial uses. Currently, the industrial areas of the Eastern Neighborhoods are primarily occupied by production, distribution, and repair (PDR) businesses. The Potrero Power Plant is located within the Central Waterfront neighborhood. Hazardous materials associated with these land uses are used at many locations throughout the project area, and in some cases, chemical releases have occurred that resulted in soil and/or groundwater contamination. The descriptions below address current hazardous materials uses throughout the project area and known environmental cases where a chemical release has occurred.

### **Permitted Hazardous Materials Uses**

Permitted uses of hazardous materials include those facilities that use hazardous materials or handle hazardous wastes in accordance with current hazardous materials and hazardous waste

manufactured. A few PAHs are used in medicines and to make dyes, plastics, and pesticides. Others are contained in asphalt used in road construction. They can also be found in substances such as crude oil, coal, coal tar pitch, creosote, and roofing tar. They are found throughout the environment in the air, water, and soil. They can occur in the air, either attached to dust particles or as solids in soil or sediment.

<sup>&</sup>lt;sup>222</sup> Volatile organic compounds (VOCs) are emitted as gases from certain solids or liquids, such as paints and lacquers, paint strippers, cleaning supplies, pesticides, building materials and furnishings, office equipment (i.e., copiers and printers, correction fluids and carbonless copy paper, graphics and craft materials including glues and adhesives, permanent markers, and photographic solutions).

regulations. Because the use and handling of hazardous materials at permitted sites are subject to strict regulation, the potential for a release of hazardous materials from these sites is considered low unless there is a documented chemical release at that same site. In such cases, the site would also be tracked in the environmental databases as an environmental case (described separately below). Permitted sites without documented releases are nevertheless potential sources of hazardous materials in the soil and/or groundwater (compared to sites where there are no hazardous materials) because of the potential for accidental spills, incidental leakage, or spillage that may have gone undetected. A database review<sup>223</sup> of the project area identified several hundred permitted users of hazardous materials, the vast majority of which are former locations of underground storage tanks (UST) for vehicle fuel and other petroleum products. There are about three dozen existing permitted USTs in the project area, along with several above-ground tanks, several facilities that produce (which can mean package and re-label) pesticides, as well as about 15 dry cleaners. Three facilities have reported hazardous materials releases in the U.S. Environmental Protection Agency's (U.S. EPA) most recent (2003) Toxic Release Inventory. Permitted uses associated with handling of hazardous wastes includes 26 large and 212 small quantity generators, permitted under RCRA, and nearly 1,000 facilities that have submitted hazardous waste manifests to the California Department of Toxic Substances Control (DTSC). Finally, the database reported more than 100 facilities that report emissions to the Bay Area Air Quality Management District.

### **Environmental Cases and Spill Sites**

Environmental cases are those sites that are suspected of releasing hazardous materials or have had cause for hazardous materials investigations and are identified on regulatory agency lists. Identification of hazardous materials in the soil or groundwater at these sites is generally due to site disturbance activities, such as removal or repair of a UST, a spill of hazardous materials, or excavation for construction. The status of each environmental case varies and can be either active (ongoing investigations or remediation), closed (remediation or cleanup completed and approved by the regulatory agency), or unknown. However, the status can change with time, and new cases are periodically added to the databases.

The large majority of environmental cases identified within the project area include 313 sites with leaking underground storage tanks (LUSTs), which would generally involve a release of petroleum products. Although the potential to encounter petroleum in the soil and/or groundwater near these sites depends on the extent of the release and remedial status of the individual site, standard treatment and disposal methods are available for remediation of the petroleum products and these sites would not present a substantial barrier to development or an ongoing health risk once remediated. The database review also identified six sites under the jurisdiction of the California Regional Water Quality Control Board; five sites that have entered a voluntary cleanup

<sup>&</sup>lt;sup>223</sup> Environmental Data Resources, 2005. EDR Data Map, Environmental Atlas, Eastern Neighborhoods EIR, San Francisco, CA. March 10, 2005.

agreement with DTSC, four potential hazardous waste sites identified by DTSC, and a single site suspected of contamination by DTSC; four sites with deed restrictions that limit future development due to site contamination; three former manufactured gas plant sites and two former defense sites; and 14 sites with administrative, enforcement, or compliance actions related to the Federal Insecticide, Fungicide, and Rodenticide Act.

Sites listed in one or more databases that have the potential to affect future projects in the Eastern Neighborhoods are discussed below. A more detailed level of review, including an assessment of the potential for environmental cases to affect soil or groundwater quality at a particular development site within the project area, would be conducted as part of the Phase I environmental site assessment that would be required for future development projects as discussed in the Impacts section. Many of the sites reviewed (not reported below but described in the background memorandum) have already been remediated to the satisfaction of the regulatory agencies, demonstrating that development projects have been successfully completed on sites with known contamination within the existing regulatory framework, often through the use of voluntary cleanup agreements.<sup>224</sup>

### East SoMa

There are three environmental cases identified in the East SoMa district including one case identified in the state's Voluntary Cleanup Program database indicating that the owner entered into a voluntary agreement for cleanup with the DTSC. The site, on Sixth Street, was previously used as an elevator service and repair shop and was later used by plant growers. Soil contamination by metals and petroleum products was identified and a voluntary clean up agreement was signed for review of documents to determine if remediation would be required as part of the proposed property transfer. No additional information regarding the status of this site is included in the database review.

Two former manufactured gas plant sites (listed in a privately maintained database of former such sites) located at 120 King Street and 169 Townsend Street (possibly the same facility, as these sites are on the same block). Although these sites are not listed as under investigation by a regulatory agency, residues from former manufactured gas plant sites typically contain polynuclear aromatic hydrocarbons, petroleum hydrocarbons, benzene, cyanide, metals, and phenols which could have remained at the site and affected soil and groundwater quality.<sup>225</sup>

<sup>&</sup>lt;sup>224</sup> Voluntary cleanup agreements are a tool that allow corporations, real estate developers, and local and state agencies to restore low-risk properties quickly and efficiently. They establish requirements for investigation and cleanup of a site. With a voluntary cleanup agreement, the responsible party must be able to fund these activities as well as the costs for DTSC oversight which allows the DTSC to prioritize low risk sites for future development.

<sup>&</sup>lt;sup>225</sup> U.S. EPA, 1999. A Resource for MGP Site Characterization and Remediation, Expedited Site Characterization and Source Remediation at Former Manufactured Gas Plant Sites. May, 1999.

### Mission

There are four environmental cases in the Mission District including three cases under the jurisdiction of the California Regional Water Quality Control Board (RWQCB) (a dry cleaners, a parking lot and a paint store), indicating that there is confirmed groundwater contamination. Based on the database review, one case resulted from a release of solvents discovered during tank closure and another case resulted from a release of diesel discovered during a tank closure, although no information is provided regarding specific contaminants or their concentrations. No details were available concerning the cleaners.

One case identified in the State Water Resources Control Board Proposition 65 database indicating that there has been a facility notification about a release which could affect a drinking water source. (Three other facilities were also identified in the LUST database, and all three LUST cases have been closed.)

### Showplace Square/Potrero Hill

Four environmental cases are identified in the Showplace Square/Potrero Hill neighborhood including two cases identified in the Proposition 65 database (a former paint factory currently undergoing separate environmental review for residential reuse and a former industrial facility on 17th Street). No specific information is provided about the notifications.

One case identified in the RWQCB database indicating that groundwater quality has been affected. The reported substances released are metals, petroleum products, volatile organic compounds, and semivolatile organic compounds. No other information regarding the status of this site was included in the database review.

One site is identified in the state database of properties needing further evaluation, indicating that contamination has been identified and needs further investigation. Lead and petroleum hydrocarbons have been identified at greater than 1,000 mg/kg and 200,000 mg/kg, respectively, at this former Union Pacific Railroad property. The DTSC has determined that a Preliminary Endangerment Assessment is required for this property, located on Pennsylvania Avenue.

### **Central Waterfront**

There are five environmental cases identified in the Central Waterfront including two cases identified in the RWQCB groundwater database, including the former Western Pacific Railroad Yard, where volatile organic compounds, polynuclear aromatic hydrocarbons, lead, and arsenic have been identified in the soil and groundwater, and the Potrero Power Plant (a former gas plant site), where metals, pesticides, polychlorinated biphenyls (PCBs), polynuclear aromatic hydrocarbons and petroleum hydrocarbons, including dense non-aqueous phase liquids have been identified. Although the power plant is being investigated and remediated under the regulatory

oversight of the RWQCB, the facility has also entered into a voluntary cleanup agreement with the DTSC and is identified in the state's Voluntary Cleanup Program database.

One case identified on Port property at Pier 70 is in the state database of contaminated sites indicating that it is considered a potential hazardous waste site by the DTSC. Remediation efforts conducted in 1981, 1984, and 1986 included removal of soil containing lead, copper, zinc, and polynuclear aromatic hydrocarbons; cleaning of dust containing lead, cadmium, copper, and zinc; and a cleanup of PCBs resulting from leaking transformers in various areas of the site. Although the database review states that this site was satisfactorily remediated under the oversight of the DTSC in 1982, two of the remediations took place after the date of certification. As reported in the database, a pile of excavated soil remained at the site and the current tenant and DTSC were working on implementing a removal action for removal of the soil.

One formerly used defense site identified as the Third & Army Street Property (listed in the U.S. Army Corps of Engineers database of Formerly Used Defense Sites).

Permitted hazardous materials uses and environmental cases were also identified within a <sup>1</sup>/<sub>4</sub> mile buffer zone of the study that could affect conditions within the project area, including more than a dozen RCRA permitted large quantity hazardous waste generators, metals plating shops, former metals fabricators, former manufactured gas facilities, and electronics works.

# **Hazardous Building Materials**

Hazardous building materials are included in this discussion because future development may involve demolition or renovation of existing structures that may contain hazardous building materials. Some building materials commonly used in older buildings could present a public health risk if disturbed during an accident or during demolition or renovation of an existing building. Hazardous building materials include asbestos, electrical equipment such as transformers and fluorescent light ballasts that contain PCBs or di (2 ethylhexyl) phthalate (DEHP), fluorescent lights containing mercury vapors, and lead-based paints. Asbestos and leadbased paint may also present a health risk to existing building occupants if they are in a deteriorated condition. If removed during demolition of a building, these materials would also require special disposal procedures.

Asbestos is a common name for a group of naturally occurring fibrous silicate minerals that are made up of thin but strong durable fibers. Because of its physical properties, asbestos was commonly used as a building material, including use as insulation materials, shingles and siding, roofing felt, floor tiles, acoustical ceiling material, and automotive brakes and clutches until the 1970s. Asbestos is a known carcinogen and presents a public health hazard if it is present in friable (easily crumbled) form. Long-term, chronic inhalation of high levels of asbestos can cause lung diseases such as asbestosis, mesolethioma, and/or lung cancer.

PCBs are mixtures of synthetic organic chemicals with physical properties ranging from oily liquids to waxy solids. Due to their nonflammability, chemical stability, high boiling point and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including use in electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastic, and rubber compounds; in pigments, dyes, and carbonless copy paper; and many other applications. More than 1.5 billion pounds of PCBs were manufactured in the United States prior to cessation of production in 1977.<sup>226</sup> PCBs are a known human carcinogen; they are highly toxic substances that remain persistent in the environment, accumulate in biological systems, interfere with the reproductive system, and act as an immunosuppressant. Under §6(e) of the Toxic Substance Control Act, Congress began regulating the use and manufacturing of PCBs in 1976, legislating "cradle to grave" (i.e., from manufacture to disposal) management of PCBs in the United States. Due to the historical industrial land uses in the project area, there is a public health concern associated with historical uses of PCBs and the potential for leaks to have occurred.

Most fluorescent light ballasts manufactured prior to 1978 contain approximately 0.5 ounces of PCBs in a small capacitor; although, the quantity can be up to 2 ounces. Between 1979 and the early 1990s, DEHP was used in place of PCB as a dielectric fluid in some fluorescent light ballasts and other electrical equipment.<sup>227</sup> DEHP is classified as a probable human carcinogen by the US Department of Health and Human Services and as a hazardous substance by the U.S. EPA. Because of this, ballasts containing DEHP must be legally disposed of; ballast incineration or a combination of ballast recycling and incineration are recommended for complete destruction of DEHP.

In addition to the ballasts, fluorescent light tubes are considered hazardous because they contain mercury, a highly toxic heavy metal. Removal of fluorescent light tubes could result in exposure to mercury vapors if the lights are broken. Spent fluorescent light tubes commonly contain mercury vapors at levels high enough to be considered a hazardous waste under California law; depending on the levels of mercury present, the light tubes may also be classified as hazardous under federal law. When these lamps or tubes are disposed of as trash, mercury can be released to the environment if the tubes are broken, and mercury can also be absorbed through the lungs into the bloodstream of people close, and can be washed by rain water into waterways. Approximately 370 pounds of mercury were released in California in the year 2000 due to the breakage of electric lamps and tubes during storage and transportation. It is estimated that nearly 75 million waste fluorescent lamps are generated annually in California and these lamps and tubes contain more than half a ton of mercury. Implementation of Mitigation Measure K-1 in Chapter V, Mitigation Measures, would reduce impacts of PCBs, DEHP, mercury, and other potential hazardous building materials to a less-than-significant level.

 <sup>&</sup>lt;sup>226</sup> U.S. EPA, *Polychlorinated Biphenyls (PCBs)*. Accessed at <u>http://www.epa.gov/opptintr/pcb</u>, April 10, 2005.
 <sup>227</sup> Green Lights Recycling, Inc., 2005. *Ballast Facts*. Accessed at <u>http://www.greenlightsrecycling.com/ballast%20Facts.htm</u> July 31, 2005.

In addition, the Code of Federal Regulations, Title 40, contains the Toxic Substances Control Act regulations. This act restricts the use and storage of PCB-containing transformers (defined as those containing at least 500 parts per million PCBs). The U.S. EPA also requires that all PCB-containing transformers be registered with fire protection personnel, whether in use or in storage, and that they be inspected every three months. If a leak is found, it must be contained to prevent release and exposure, and then the source of the leak must be eliminated. Disposal of hazardous levels of PCBs and mercury is regulated under both federal and state laws.

Lead-based paint was commonly used prior to 1960 and is likely present in buildings constructed prior to 1960. Lead is toxic to humans, particularly young children, and can cause a range of human health effects depending on the level of exposure. When adhered to the surface of the material it is painted to, lead-based paint poses little health risk. Where the paint is delaminated or chipping, the paint can cause a potential threat to the health of young children or other building occupants who may ingest the paint. Lead dust could also present public health risks during demolition of a structure with lead-based paint. Lead-based paint that has separated from a structure may also contaminate nearby soil.

# **Regulatory Framework**

Hazardous materials and hazardous wastes are subject to extensive federal, state, and local regulations, with the major objective of protecting public health and the environment. In general, these regulations define hazardous materials; establish reporting requirements; set guidelines for handling, storage, transport, remediation, and disposal of hazardous wastes; and require health and safety provisions for workers and the public. The major federal, state, and regional agencies enforcing these regulations include the U.S. EPA (federal); the Department of Toxic Substances Control (DTSC), the State Water Resources Control Board and the California RWQCB (state); and the Bay Area Air Quality Management District (BAAQMD) (regional). The San Francisco Department of Public Health (DPH) often acts as lead agency to ensure proper remediation of LUST sites and other contaminated sites in San Francisco.

# City Hazardous Materials Regulations

Local regulations that have been enacted to address the potential to encounter hazardous materials in the soil at development sites and the safe handling of hazardous materials (including hazardous wastes). The following sections of the San Francisco Health Code, briefly summarized below, could apply to sites to be developed or reused in the project area. These include Article 22A (Analyzing the Soil for Hazardous Waste, formerly the Maher Ordinance), Article 21 (Hazardous Materials), Article 21A (Risk Management Program), and Article 22 (Hazardous Waste Management).

Under Article 22A, construction of projects located bayward of the historic high tide line that would involve excavation of greater than 50 cubic yards of soil requires preparation a site history

to identify whether past uses might have cause contamination, characterization of on-site soils, and preparation of a site mitigation plan if contamination is identified. The soil analysis report is submitted to the San Francisco Department of Public Health (DPH), and the measures recommended in the site mitigation plan must be completed during construction; DPH approval may be conditioned upon submittal of a Risk Management Plan, Health and Safety Plan, and possibly a Cap Maintenance Plan if hazardous materials remain in the soil or groundwater to prevent exposure.

Article 21 of the Health Code provides for safe handling of hazardous materials in the City. It requires any person or business that handles, sells, stores, or otherwise uses specified quantities of to keep a current certificate of registration and to implement a hazardous materials business plan. A special permit is required for USTs. (This article also incorporates state tank regulations.).

Article 21A of the Health Code provides for safe handling of federally regulated hazardous, toxic, and flammable substances in the City, requiring businesses that use these substances to register with the DPH and prepare a Risk Management Plan that includes an assessment of the effects of an accidental release and programs for preventing and responding to an accidental release.

Article 22 of the Health Code provides for safe handling of hazardous wastes in the City. It authorizes the DPH to implement the state hazardous waste regulations, including authority to conduct inspections and document compliance.

In addition, construction, demolition, or renovation work that results in disturbance of lead-based paint must comply with Section 3407 of the San Francisco Building Code (discussed under "Exposure to Hazardous Building Materials" in the Impacts discussion, p. IV.L-492.

#### **Brownfields Reuse**

Properties with abandoned, idled, or underused industrial and commercial facilities are referred to as brownfields, where redevelopment or expansion is complicated by suspected or identified past pollution. Historically, the development potential of these sites has adversely affected the unknown costs associated with cleanup of existing contamination and because of the potential for assuming the long-term liability associated with contamination at a property. Both the federal government and the state have developed "Brownfield Initiatives" to reduce or eliminate barriers to development of these properties, including the California Land Reuse and Revitalization Act, which took effect, for five years only, on January 1, 2005. This law allows some landowners to obtain immunity from liability for certain hazardous materials response costs and other damages if they assess and clean up the property as necessary and enter into an agreement with a regulatory oversight agency for the implementation of assessments and response actions. Specific public participation requirements apply to response actions conducted.

### State Regulations Related to Naturally Occurring Asbestos

The California Air Resources Board adopted the Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations, which became effective in the BAAQMD on November 19, 2002.<sup>228</sup> This control measure protects public health and the environment by requiring the use of best available dust mitigation measures to prevent off-site migration of asbestos-containing dust from road construction and maintenance activities, construction and grading operations, and quarrying and surface mining operations in areas of ultramafic rock,<sup>229</sup> serpentine,<sup>230</sup> or asbestos.<sup>231</sup> The BAAQMD implements the regulation.

# Impact Analysis

# Significance Criteria

The proposed Eastern Neighborhoods Rezoning and Area Plans project would be considered to have a significant effect on the environment if it would:

- create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- expose people or structures to a significant risk of loss, injury or death involving fires;
- for a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area; or
- for a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

<sup>&</sup>lt;sup>228</sup> California Air Resources Board, Regulatory Advisory, *Asbestos Airborne Toxic Control Measure for Construction, Grading, Quarrying, and Surface Mining Operations*, July 29, 2002.

<sup>&</sup>lt;sup>229</sup> Ultramafic rocks are formed in high temperature environments well below the surface of the earth.

<sup>&</sup>lt;sup>230</sup> Serpentine is a naturally occurring group of minerals that can be formed when ultramafic rocks are metamorphosed during uplift to the earth's surface. Serpentinite is a rock consisting of one or more serpentine minerals, formed when ultramafic rocks metamorphose. This rock type is commonly associated with ultramatic rock along faults such as the Hayward fault. Small amounts of chrysotile asbestos, a fibrous form of serpentine minerals, are common in serpentinite.

<sup>&</sup>lt;sup>231</sup> Asbestos is a term used for several types of naturally occurring fibrous materials found in many parts of California.

The project area is neither within an airport land use plan area, nor within two miles of a public airport or public use airport, nor within the vicinity of a private airstrip. Therefore, the proposed project would have no adverse effects in terms of air safety.

Definition, identification, and determination of threshold levels of hazardous materials and wastes are provided in the Title 40 of the Code of Federal Regulations and in Title 22 of the California Code of Regulations. Determination of "substantial" hazard or "insignificant" levels of hazardous materials is performed by the regulatory agencies on a case-by-case basis, depending on the proposed uses, potential exposure, and degree and type of hazard.

### **Construction-Related Exposure to Hazards**

Implementation of any of the proposed project's rezoning options would encourage construction of new development within the project area. As discussed above, there is a high potential to encounter hazardous materials during construction activities in many parts of the project area because of the presence of 1906 earthquake fill, previous and current land uses associated with the use of hazardous materials, and known or suspected environmental cases. Without implementation of proper precautions, workers or the community could be exposed to hazardous materials during excavation, grading, and dewatering, or during related site investigation and remediation activities. Existing regulations for facility closure, UST closure, and investigation and cleanup of soil and groundwater would ensure implementation of measures to protect workers and the community from exposure to hazardous materials during construction.

Much of the East SoMa and Central Waterfront neighborhoods as well as the northern portions of the Mission District and Showplace Square/ Potrero Hill neighborhoods are currently zoned for light industry and have been historically used for industrial purposes. In addition, several PDR businesses are located outside of the industrially zoned land, particularly in the Mission District and Showplace Square/Potrero Hill neighborhoods.<sup>232</sup> Many PDR uses in these areas have involved the use, handling and storage of hazardous materials. Prior to regulation beginning in the 1970s, industrial discharges – whether intentional, inadvertent, or accidental – were common sources of soil and groundwater contamination, and normal storage and handling of chemicals over extended periods increased the likelihood of spillage or accidents, which can build up over time in the absence of proper cleanup and management procedures.

USTs for the storage of gasoline, diesel, waste oil, and other chemicals are also commonly found at sites throughout San Francisco, and the environmental database review identified over 200 sites with historic USTs within the project area. If use of a UST was discontinued before permitting requirements were implemented in the 1980s, there would be no regulatory agency tracking of these tanks, and leakage to the soil and/or groundwater could have gone undetected. If encountered during redevelopment activities, these tanks may require proper abandonment or

<sup>&</sup>lt;sup>232</sup> Economic & Planning Systems (EPS), 2005. Final Report. Supply/Demand Study for Production, Distribution, and Repair (PDR) in San Francisco's Eastern Neighborhoods.

removal, and soil or groundwater contamination resulting from a leaking UST could require cleanup.

Based on the database review, there are numerous sites in the project area with permitted hazardous materials uses and environmental cases with known or suspected releases of hazardous materials that are in various stages of site investigation, remediation, or cleanup. Environmental contamination resulting from leaking USTs alone has been documented at 313 sites in the project area. At any of these known sites where remediation has been completed or where the cases are considered closed, regulatory agencies may have allowed residual contamination to be left in place or may have approved health-based cleanup levels that are based on current land use. If hazardous materials have been left in place at a site, they may not pose a threat to human health and the environment under current conditions, but could pose a threat if hazardous substances become airborne or otherwise released during construction activities.

However, as described previously, extensive federal, state, and local regulations exist that are designed to protect public health and safety and the environment. Compliance with these regulations by the City, private developers, and contractors, including proper handling and disposal of excavated materials, would minimize worker, public, and environmental exposure to hazardous materials in the soil or groundwater during construction. Thus, potential short-term construction impacts associated with hazardous materials in soils or groundwater would be less than significant.

Over the long term, implementation of the proposed project would also promote new development and would encourage new construction. These activities would expedite any required hazardous materials cleanup and remediation at development sites and would reduce or eliminate future public health issues or environmental damage posed by hazardous materials present in the soil and groundwater. This would be a beneficial impact. Additionally, future PDR or biotechnology uses in the would be required to comply with existing regulations regarding the transport, handling, use and disposal of hazardous materials, as well as with any new regulations adopted by the City as a result of the report issued by the Biosciences Task Force (see Chapter I, Introduction.)

#### Hazardous Materials Protection Measures

Depending on the location and development activity, several procedures would apply if hazardous materials were encountered during construction: Investigation and Remediation of Hazardous Materials in Soil and Groundwater; UST Closure; Disposal of Soil and Groundwater; Discharge of Contaminated Groundwater; Protection of Worker Safety; and a process for Underground Utility Construction.

#### Investigation and Remediation of Hazardous Materials in Soil and Groundwater

The City would require appropriate closure of permitted hazardous materials handling facilities in accordance with Article 21 of the San Francisco Health Code, which would require investigation and possibly remediation of any identified release as a condition of closure prior to transfer of the site to another party. In addition, the requirement for a site assessment prior to new construction at a site could be triggered by Article 22A of the Health Code for sites located bayward of the historic high tide line. This would require further investigation and cleanup of a site if a release of hazardous materials were indicated by the environmental assessment. The following general process would be required to address the release and reduce the potential threat to human health and the environment during construction:

- Compliance with facility closure requirements of Article 21 would reduce the potential for hazardous materials to be left in place at existing permitted facilities that are closed to facilitate land use changes. The site closure requirements include preparation and implementation of a closure plan addressing the need for further maintenance of the closed facility; methods to ensure that the threat to public health and the environment from residual hazardous materials is eliminated; and methods to ensure that hazardous materials used at the facility are appropriately removed, disposed of, neutralized, or reused. The closure plan must be submitted to the DPH for approval and upon submittal, the DPH may add additional requirements for closure.
- Where a release is discovered, investigation and cleanup could be required under the oversight of the Local Oversight Program. A corrective action plan may be required and the DPH would determine the adequacy of the plan and may also request state or federal agency review. The DPH findings would be published for public review. These requirements would ensure that facilities permitted by the City are cleaned up to appropriate levels for future land uses at the time of closure or that the responsible party commits to an acceptable timeline for cleanup.
- Article 22A would apply to parcels bayward of the historic tideline (including portions of the East SoMa, Showplace Square/Potrero Hill, and Central Waterfront districts) if more than 50 cubic yards of soil were excavated. This ordinance would require preparation of a site history report, and if appropriate, a soil investigation, soil analysis report, site mitigation plan, and certification report. If the presence of hazardous materials is indicated, a site health and safety plan would also be required. The soil analysis report is submitted to the DPH. The site mitigation plan is required to be submitted to and approved by the DPH and would also include the planned disposal method for any wastes generated.
- The potential for hazardous materials at a site that is not located bayward of the historic high tide line would be evaluated by the completion of a site-specific Phase I environmental site assessment prior to development. The site assessment includes visual inspection of the property, review of historical documents, and review of environmental databases to assess the potential for contamination from sources such as underground storage tanks, current and historical site operations, and migration from off-site sources. Phase I environmental site assessments are commonly conducted to comply with the due

diligence requirements of the federal Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and of private real estate lenders.

- Where a Phase I site assessment indicates evidence of site contamination, additional data would be gathered during a Phase II investigation, including sampling and laboratory analysis of the soil and groundwater for the suspected chemicals to identify the nature and extent of contamination. Appropriate cleanup levels for each chemical, based on current and planned land use, would be determined in accordance with accepted procedures adopted by the lead regulatory agency providing oversight (e.g., the DTSC, the RWQCB, or the DPH). At sites where there are ecological receptors such as sensitive plant or animal species that could be exposed, cleanup levels would be determined according to the accepted ecological receptors known to be present at the site.
- If agreed-upon cleanup levels were exceeded, a remedial action plan would be prepared to describe remedial alternatives considered for the site. The remedial action plan and the proposed remedial approach would be presented for review and approval by the lead regulatory agency. The plan would include proposed methods to remove or treat identified chemicals to the approved cleanup levels or containment measures to prevent exposure to chemicals left in place at concentrations greater than cleanup levels.
- Upon determination that a site remediation has been successfully completed, the lead agency would issue a closure letter to the responsible party. For sites that are cleaned to levels that do not allow unrestricted land use, or where containment measures were used to prevent exposure to hazardous materials, the DTSC may require a limitation on the future use of the property. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners. A Risk Management Plan, Health and Safety Plan, and possibly a Cap Maintenance Plan could be required. These plans would specify procedures for preventing unsafe exposure to hazardous materials left in place and safe procedures for handling hazardous materials should site disturbance be required. The requirements of these plans and the land use restriction would transfer to the new property owners in the event that the property is sold. The BAAQMD may also impose specific requirements to protect ambient air quality from dust, lead, hydrocarbon vapors, or other airborne contaminants during site remediation activities.

#### **Underground Storage Tank Closure**

If removal of a permitted or previously unidentified abandoned or no longer used UST is required, tank closure would be required in accordance with Article 21 of the San Francisco Health Code. These requirements include submittal of a closure plan to the City for approval prior to removal of the UST; removing and properly disposing of any remaining hazardous materials in the tank; tank removal and disposal, sampling of soil, and possibly the groundwater; submittal of a release or contamination report to the DPH if a release were indicated on the basis of visual observations or sampling; and filing of a final report with the City documenting tank removal activities and any residual contamination left in place. Upon approval of this report, the City will issue a Certificate of Completion. If a release were indicated, the site owner would be required to submit a corrective action plan, including a community health and safety plan, to the DPH and RWQCB. Remediation would be required in accordance with federal, state and local regulations. Alternatively, the tank could be abandoned in place if removal were infeasible.

#### **Disposal of Soil and Groundwater**

Where remediation or tank removal requires off-site transport of contaminated soil or groundwater, these materials could be classified as a restricted or hazardous waste under state or federal regulations depending on the specific characteristics of the materials. The generator of the hazardous wastes would be required to follow state and federal regulations for manifesting the wastes, using licensed waste haulers, and disposing the materials at a permitted disposal or recycling facility.

#### **Discharge of Contaminated Groundwater**

Where construction requires dewatering of contaminated groundwater, a release of hazardous materials could occur, potentially resulting in exposure to the public and the environment. If dewatering is required, the groundwater could be discharged to the City's combined storm and sanitary sewer system in compliance with the City's Industrial Waste Ordinance (see Section 10, Water, of the Initial Study, in Appendix A of this EIR). These regulations require a permit for discharge to the combined sewer and establish discharge limitations and other criteria for discharge. Article 4.1 also prohibits discharge of hazardous wastes into the combined sewer system. The discharged water would have to be sampled during dewatering to demonstrate that discharge limitations in the ordinance are met. If the groundwater does not meet discharge requirements, on-site pretreatment may be required before discharge to the sewer system. If standards could not be met with on-site treatment, off-site disposal by a certified waste hauler would be required.

#### **Protection of Worker Safety**

Potential worker health and safety impacts associated with site investigations, site remediation, UST removal, excavation, dewatering, and construction at sites that have been affected by hazardous materials would be minimized by implementing legally required health and safety precautions. For hazardous waste workers, federal and California OSHA regulations mandate an initial training course and subsequent annual training. Site-specific training may also be required for some workers. Preparation and implementation of the Site Health and Safety Plan and compliance with applicable federal, state, regional, and local regulations would minimize impacts to worker health and the environment. The plan would include identification of chemicals of concern, potential hazards, protective clothing and devices, and emergency response procedures, as well as required fencing, dust control, or other site control measures. In protecting the workers, who would be closest to potential sources of hazardous materials, the health and safety measures would also serve to protect others who live in, work in, or visit the area construction.

#### **Underground Utility Construction**

Improvement of underground utilities could expose of workers, the public, or the environment to hazardous materials in soil and/or groundwater from adjacent chemical release sites. The City would typically require the construction contractor to follow proper health and safety precautions and to dispose of contaminated soil and groundwater safely and legally, as discussed above. This would ensure the safe handling of contaminated materials during improvement or installation of underground utilities.

#### **Beneficial Impacts**

Much of the project area is located in areas with known environmental cases or in areas where previous land uses may have resulted in chemical releases to the soil or groundwater. If few development were undertaken subsequent to adoption of the proposed project, cleanup of sites that might not otherwise be remediated could be expedited. However, there are real and perceived liabilities associated with development of contaminated properties, and remediation of some properties could require further enhancement through implementation of a coordinated development strategy using developer incentives, which could help coordinate regulatory oversight and provide a more co cost-effective approach.

### **Naturally Occurring Asbestos**

As discussed in the Initial Study (Section 9, Geology/Topography of the Initial Study, in Appendix A of this EIR), bedrock in the Showplace Square/Potrero Hill area and extending into the northern portions of the Mission District and Central Waterfront neighborhood is known to contain chrysotile, a naturally occurring asbestos mineral that can be a human health hazard if it becomes airborne. Construction requiring excavation of the bedrock in this area and of fill materials obtained from this bedrock could cause this asbestos to become airborne and in the absence of proper controls. On-site workers and the public could be exposed to the airborne asbestos unless appropriate control measures are implemented. As stated above on p. IV.L-485, the California Air Resources Board adopted an Asbestos Airborne Toxic Control Measure for construction-related activities in 2002, to protect public health and the environment by requiring the use of best available dust control measures. For construction activities disturbing less than one acre of asbestos-containing rock, the following specific measures must be implemented in accordance with the Asbestos Airborne Toxic Control Measure:

• Limit construction vehicle speed at the work site to 15 miles per hour; sufficiently wet all ground surfaces prior to disturbance to prevent visible dust emissions from crossing the property line; keep all graded and excavated areas adequately wetted during construction to prevent visible dust emissions from crossing the property line; adequately wet all storage piles, treat with chemical dust suppressants, or cover piles when material is not being added to or removed from the pile; wash down all equipment before moving from the property onto a paved public road; and clean all visible track out from the paved public road by street sweeping or a HEPA filter equipped vacuum device within 24 hours.

For construction activities disturbing greater than one acre, construction contractors are required to prepare an asbestos dust mitigation plan specifying measures that will be taken to ensure that no visible dust crosses the property boundary during construction. The plan must specify the following measures:

• Prevent and control visible track out from the property; ensure adequate wetting or covering of active storage piles; control disturbed surface areas and storage piles that will remain inactive for seven days; control traffic on on-site unpaved roads, parking lots, and staging areas – including a maximum vehicle speed of 15 miles per hour or less; control earth moving activities; control dust emissions from off-site transport of naturally occurring asbestos containing materials; and stabilize disturbed areas following construction.

The asbestos dust mitigation plan must be submitted to and approved by the BAAQMD prior to the beginning of construction, and the site operator must ensure the implementation of all specified dust mitigation measures throughout the construction project. In addition, the BAAQMD may require air monitoring to monitor for off site migration of asbestos dust during construction activities and may change the plan on the basis of the air monitoring results.

Assuming compliance with the asbestos ATCM, as required, potential impacts related to exposure to naturally occurring asbestos in soil and rock during construction would be less than significant.

# **Exposure to Hazardous Building Materials**

Implementation of any of the rezoning options proposed by the project would promote new construction within the project area, which would include demolition or renovation of existing structures, some of which are in dilapidated or deteriorated condition. Hazardous building materials are likely to be present in older structures within the project area and could include asbestos-containing materials, lead-based paint, electrical equipment such as transformers and fluorescent light ballasts that contain polychlorinated biphenyls (PCBs) or di (2 ethylhexyl) phthalate (DEHP), and fluorescent lights containing mercury vapors. Demolition or renovation of existing structures could result in potential exposure of workers or the community to hazardous building materials during construction, without proper abatement procedures, and future building occupants could be exposed if hazardous building materials are left in place. Soil around a structure could also become contaminated by hazardous building materials if these materials were released to the environment.

Pursuant to existing regulations, the City would be required to ensure that a hazardous building material survey(s) or audit(s) is conducted for all subsequent development that results from implementation of the project prior to construction or demolition activities. Identified hazardous building materials would be abated in accordance with applicable federal, state, and local laws as described below prior to demolition or renovation. Because of compliance with these regulations, impacts related to exposure to hazardous building materials would be less than significant.

### Asbestos

If friable or non-friable asbestos is present, there is a potential for release of airborne asbestos fibers when the asbestos-containing materials are disturbed, unless proper asbestos abatement precautions are taken. In the absence of proper abatement measures, such a release could expose the public and construction workers to airborne asbestos fibers. However, compliance with applicable regulations, described below, would ensure that asbestos-containing materials are removed and disposed of properly and therefore impacts related to exposure to airborne asbestos-containing materials would be less than significant.

Section 19827.5 of the California Health and Safety Code, adopted January 1, 1991, requires that local agencies not issue demolition or alteration permits until an applicant has demonstrated compliance with notification requirements under applicable federal regulations regarding hazardous air pollutants, including asbestos. The BAAQMD is vested by the California legislature with authority to regulate airborne pollutants, including asbestos, through both inspection and law enforcement. Rule 11-2 of the BAAQMD, *Asbestos Demolition, Renovation, and Manufacturing*, applies to demolition and renovation of structures that include asbestos-containing materials. Section 303.8 requires a survey of the structure for asbestos-containing materials prior to demolition or renovation.<sup>233</sup> Section 401 requires notification of the BAAQMD ten days in advance of any proposed demolition (defined as wrecking, intentionally burning, moving, or dismantling of any structural member of a building) or any renovation in which more than 100 linear feet, 100 square feet, or 35 cubic feet of asbestos-containing material is to be removed.

Notification to the BAAQMD includes: the names, addresses and phone numbers of the owner as wells as the operator of the demolition or renovation; a description and location of the structure to be renovated/demolished including size, number of floors, age, and present and prior use; the approximate amount of friable asbestos-containing materials to be removed; the name, address, and phone number of the person who performed the asbestos survey; scheduled starting and completion dates; the nature of planned work and methods to be employed; procedures to be employed to meet BAAQMD requirements; procedures to be employed should unanticipated friable asbestos-containing material be identified or should non-friable asbestos-containing materials become friable; the name, address, and phone number of the waste transporter; and the name and location of the waste disposal site to be used. The local office of California OSHA must also be notified if asbestos abatement is to be carried out. Pursuant to California law, the DBI would not issue the required permit until the applicant has complied with all survey and notice requirements.

During abatement, asbestos abatement contractors must follow state regulations contained in 8 CCR 1529 and 8 CCR 341.6 through 341.14 where there is asbestos-related work involving 100 square feet or more of asbestos-containing material. Asbestos removal contractors must be

<sup>&</sup>lt;sup>233</sup> A survey is not required for residential buildings having fewer than four dwelling units.

certified as such by the Contractors Licensing Board of the State of California and the owner of the property where abatement would occur must have a Hazardous Waste Generator Number assigned by, and registered with, the California Department of Health Services. The contractor and the hauler of the material are required to file a Hazardous Waste Manifest that details the hauling of the material from the site and the disposal of the material. The BAAQMD randomly inspects asbestos removal operations and also inspects any removal operations about which a complaint has been received. These regulations and procedures, already established as a part of the permit review process, would ensure that any potential impacts due to asbestos would be reduced to a less-than-significant level. Therefore, no further discussion is required in the EIR.

#### Lead-Based Paint

Lead-based paint was commonly used prior to 1960, and this type of paint is present in many older buildings such as those in the project area. Lead, a heavy metal, is toxic to humans, particularly young children, and can cause a range of human health effects depending on the level of exposure. If lead-based paint is present and has delaminated or chipped from the surfaces of the building materials, there is a potential for the release of airborne lead particles, unless proper lead abatement procedures are followed. Lead dust could also present public health risks during demolition of a structure with lead-based paint. Lead-based paint that has separated from a structure may also contaminate nearby soil. However, compliance with applicable regulations, described in this section, would ensure that lead-based paint is removed and disposed of properly and therefore impacts related to exposure to airborne lead-based paint would be less than significant.

Any work that could result in disturbance of lead-based paint must comply with Section 3407 of the San Francisco Building Code, Work Practices for Lead-Based Paint on Pre-1979 Buildings and Steel Structures. Where there is any work that may disturb or remove lead paint on the exterior of any building built prior to December 31, 1978, Section 3407 requires specific notification and work standards, and identifies prohibited work methods and penalties. (The reader may be familiar with notices commonly placed on residential and other buildings in San Francisco that are undergoing re-painting. Generally affixed to a drape that covers all or portions of a building, these notices are a required part of the Section 3407 notification procedure.)

Section 3407 applies to the exterior of all buildings or steel structures on which original construction was completed prior to 1979 (which are assumed to have lead-based paint on their surfaces, unless demonstrated otherwise through laboratory analysis), and to the interior of residential buildings, hotels, and childcare centers. The ordinance contains performance standards, including establishment of containment barriers, that are at least as effective at protecting human health and the environment as those in the Housing and Urban Development (HUD) Guidelines (the most recent Guidelines for Evaluation and Control of Lead-Based Paint Hazards). Any person performing work subject to the ordinance shall, to the maximum extent possible, protect the ground from contamination during exterior work; protect floors and other

horizontal surfaces from work debris during interior work; and make all reasonable efforts to prevent migration of lead paint contaminants beyond containment barriers during the course of the work. Clean-up standards require the removal of visible work debris, including the use of a High Efficiency Particulate Air Filter (HEPA) vacuum following interior work.

The ordinance also includes notification requirements and requirements for signs. Prior to the commencement of work, the responsible party must provide written notice to the Director of the Department of Building Inspection (DBI) of the address and location of the project; the scope of work, including specific location; methods and tools to be used; the approximate age of the structure; anticipated job start and completion dates for the work; whether the building is residential or nonresidential, owner-occupied or rental property; the dates by which the responsible party has or will fulfill any tenant or adjacent property notification requirements; and the name, address, telephone number, and pager number of the party who will perform the work. (Further notice requirements include a sign when containment is required, notice to occupants, availability of pamphlet related to protection from lead in the home, and Early Commencement of Work [Requested by Tenant].) The ordinance contains provisions regarding inspection and sampling by DBI for compliance and enforcement, and describes penalties for non-compliance. These regulations and procedures contained in the San Francisco Building Code would ensure that potential project-related impacts due to lead-based paint would be reduced to a less-than-significant level. Therefore, no further discussion is required in the EIR.

### Polychlorinated Biphenyls (PCBs), DEHP, and Fluorescent Light Tubes

If PCBs are present in a structure to be renovated, leakage could expose workers to unacceptable levels of PCBs (greater than 5 parts per million, based on Title 22, California Code of Regulations). Leakage of DEHP from fluorescent light ballasts could also cause public health effects. Because of this, ballasts containing DEHP must be legally disposed of; ballast incineration or a combination of ballast recycling and incineration are recommended for complete destruction of DEHP. When fluorescent lamps or tubes are disposed of as trash, mercury can be released to the environment if the tubes are broken, and mercury can also be absorbed through the lungs into the bloodstream of people close, and can be washed by rain water into waterways. Implementation of Mitigation Measure K-1 in Chapter V, Mitigation Measures, would reduce impacts of PCBs, DEHP, mercury, and other potential hazardous building materials to a less-than-significant level.

In addition, the Code of Federal Regulations, Title 40, contains the Toxic Substances Control Act regulations. This act restricts the use and storage of PCB-containing transformers (defined as those containing at least 500 parts per million PCBs). The U.S. EPA also requires that all PCB-containing transformers be registered with fire protection personnel, whether in use or in storage, and that they be inspected every three months. If a leak is found, it must be contained to prevent release and exposure, and then the source of the leak must be eliminated. Disposal of hazardous levels of PCBs and mercury is regulated under both federal and state laws.

# Land Use Compatibility Due to Changes in Land Use

Rezoning under the proposed project could result in a reduction in the amount of currently zoned industrial (PDR) land in the Mission, East SoMa and Showplace Square/Potrero Hill neighborhoods. In all areas, some land currently zoned for industrial purposes would no longer allow any PDR uses. In addition, the number of nonconforming businesses would be expected to gradually decline, potentially replaced by residential, commercial or open space uses.

The amount of space dedicated to PDR use would likely decrease under each of the three rezoning options as well as a future No-Project scenario. On a citywide basis, PDR uses are expected to concentrate in three main areas: Western SoMa, Hunters Point, and the NEMIZ.

In general, Option A would result in greater maintenance of land devoted to PDR uses (net loss of about half a million square feet) and smaller increases in the number of projected housing units, compared to the other rezoning options. Under Option B, the Eastern Neighborhoods would see a net decline of more than two million square feet, or 13 percent of PDR floor space, while Option C would result in the greatest decrease in PDR building space, with a loss of 4.9 million square feet, or a 29 percent decrease, within the Eastern Neighborhoods as a whole, from the 2000 base year.

These changes would ultimately involve the closure of some industrial business, the conversion of land uses and the introduction of new businesses and residential uses, with the effects varying by degree among the three rezoning options. Without measures to ensure adequate cleanup of closed facilities and cleanup of soil and groundwater to appropriate cleanup levels, future site occupants could be exposed to unacceptable levels of hazardous materials. In addition, at sites where remediation has been completed or in the cases where closure has been granted, regulatory agencies may have approved health-based cleanup levels that are based on current land uses and in some cases closure may have included containment controls such as a cap as adequate to prevent unacceptable exposure to hazardous materials for a given land use. (Such measures allow the site owner to leave hazardous materials in the soil and/or groundwater at concentrations higher than otherwise applicable cleanup levels.)

If land uses change to a more sensitive use as a result of implementation of the project, such as changing from an existing industrial use to new residential units, stricter cleanup levels would apply. Without additional remediation, new site occupants could be exposed to unacceptable levels of hazardous materials in the soil and/or groundwater. However, compliance with facility closure requirements specified in Article 21 of the San Francisco Health Code, and site assessment and remediation requirements that may be triggered by Article 22A or the California Land Reuse and Revitalization Act, would ensure that the potential for hazardous materials to be present is addressed and that further remediation would be conducted under the oversight of the appropriate regulatory agency, if required. Further, a deed restriction would be placed on any property where hazardous materials are left in place, and in accordance with this restriction, new

site owners would be required to comply with any approved plans, such as a Risk Management Plan, Health and Safety Plan, or Cap Maintenance Plan, specifying procedures to be followed to prevent unacceptable exposure to hazardous materials left in place. Because of the wellestablished regulatory framework for site assessment and remediation, impacts related to exposure to hazardous materials due to land use changes are considered less than significant.

### Accidental Release of Hazardous Materials or Wastes

Although implementation of the proposed project would likely result in a decrease in the number of permitted users of hazardous materials under each option, compared to existing conditions (as well as the no project alternative), Core PDR uses such as small trucking operations, apparel manufacturing, food and flower distribution centers, construction material suppliers, paper manufacturing, large publishing operations, and large showrooms would be retained in each of the districts. Much of the land retained for PDR uses would be concentrated in the Mission District and Central Waterfront. In all neighborhoods, areas zoned for Residential Mixed with Commercial and PDR would allow residential land uses mixed with Light and Medium PDR uses such as auto repair, catering services, graphic design, small radio stations, small messenger operations, printers and publishers, showrooms, landscaping and horticultural services, and film producing. In addition, nonconforming uses would be allowed to remain in all areas, with a majority of those uses being concentrated in the Mission District and Showplace Square/Potrero Hill neighborhoods.

Uses operating within areas zoned for Core PDR and Residential mixed with Commercial and PDR as well as non-conforming industrial operations would likely be similar to existing hazardous materials uses and therefore could involve the use, handling and storage of hazardous materials or petroleum products or generation of hazardous wastes as part of normal business operations. Even though these businesses would be required to comply with applicable federal, state, and local regulations, there would remain the potential for an accidental release of hazardous materials or petroleum products, such as a tank leak, spill, or rupture, which could potentially affect public health and/or the environment unless appropriate precautions are in place. The proximity of residential uses to industrial or commercial uses throughout the project area would further increase the potential for public exposure during an accidental release of hazardous materials. However, as discussed below, compliance with hazardous materials and waste regulations would minimize the risk for accidental releases and would ensure safe handling of hazardous materials and wastes at permitted facilities. Furthermore, new business introduced to the project area would implement newer and improved technology for handling and storage of hazardous materials that would further reduce the risk of a release that could affect public health or the environment.

Similar to existing conditions, any business that handles or stores hazardous materials or petroleum products would be required to comply with the requirements of the City's hazardous materials handling requirements specified in Article 21 of the San Francisco Health Code. In

accordance with this article, any facility that handles hazardous materials in excess of specified quantities would be required to obtain a Certificate of Registration from the DPH and to implement a Hazardous Materials Business Plan that includes inventories, a program for reducing the use of hazardous materials and generation of hazardous wastes, site layouts, a program and implementation plan for training all new employees and annual training for all employees, and emergency response procedures and plans.

Facilities subject to the state Hazardous Waste Reduction and Management Review Act must submit a source reduction evaluation review and plan, hazardous waste management plan, hazardous waste management performance report, and summary progress reports to the DPH. New facilities not subject to the Act may be required to complete a DTSC hazardous waste audit if one is available for that industry classification. Facilities subject to these requirements must submit a hazardous materials reduction plan if their inventory includes one or more hazardous materials that do not enter a waste stream.

Facilities that store petroleum products in USTs would be required to obtain a permit for the UST in compliance with Article 21 of the Health Code and to comply with the regulatory requirements for inspection, monitoring, and secondary containment of USTs. Facilities that store petroleum products in above-ground tanks (ASTs) beyond a specified size would be required to submit a storage statement to the State Water Resources Control Board and prepare a Spill Prevention Control and Countermeasure Plan. In the unlikely event of a leak or tank rupture from a UST or AST, the spill would likely be contained within the secondary containment system for the tank.

In addition, the DPH implements its Risk Management and Prevention Program specified in Article 21A of the Health Code and requires businesses that handle regulated substances to prepare a written Risk Management Plan. Similarly, any new businesses that handle hazardous waste must comply with the City's hazardous waste handling requirements specified in Health Code Article 22.

Compliance with the San Francisco Health Code, which incorporates state and federal requirements, would minimize potential exposure of site personnel and the public to any accidental releases of hazardous materials or waste and would also protect against potential environmental contamination. Therefore, the potential impact of accidental releases of hazardous materials associated with development of new land uses resulting from implementation of the project would be less than significant.

### Accidental Release During Transport

Although core PDR uses that may require the delivery of hazardous materials would be retained in each of the neighborhoods, the quantity of hazardous materials transported would likely be lower than existing conditions, over time, because of the reduction in PDR uses anticipated under each option. In addition, delivery trucks would be required to use established truck routes. Because of this, and with compliance with applicable federal, state, and local regulations, potential impacts related to accidental releases of hazardous materials during normal transport operations would be less than significant.

### **Emergency Response and Evacuation Plans**

Development subsequent to adoption of the proposed project would encourage new construction in the project area that could result in an increased numbers of residents and employees who, in turn, could result in congestion in the event of an emergency evacuation. San Francisco ensures fire safety primarily through provisions of the San Francisco Building Code and Fire Code. Existing buildings are required to meet standards contained in these codes. In addition, the building plans for any new residential project greater than two units are reviewed by the Fire Department (as well as the DBI) in order to ensure conformance with these provisions. Buildings constructed as part of potential future redevelopment activities would be required to conform to these standards, which (depending on building type) may also include development of an emergency procedure manual and an exit drill plan.

The proposed project, as adoption of changes in the City's Planning Code and General Plan, would not result in any direct physical changes. Although the project could facilitate subsequent development projects within the Eastern Neighborhoods, all such development would occur in the developed area of San Francisco, where for fire, medical, and police services are available and provided. The existing street grid provides ample access for emergency responders and egress for residents and workers, and the proposed project would neither directly nor indirectly alter that situation to any substantial degree. Moreover, the Fire Department reviews building permits for multi-story structures. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Finally, for the reasons just set forth, the proposed project would not directly or indirectly result in any additional exposure of residents or workers to fire risk, as any development and/or redevelopment in the Eastern Neighborhoods would occur in a fully urbanized area that lacks the "urban-wildland interface" that tends to place new development at risk in undeveloped areas of California. Therefore, the proposed project would not expose people or structures to a significant risk of loss, injury or death involving fires.

Compliance with the San Francisco Building Code and Fire Code through the City's ongoing permit review process would ensure that potential fire hazards related to redevelopment activities (including those associated with hillside development, hydrant water pressure, and emergency access) would be minimized during the permit review process and that future projects would not interfere with an existing emergency response or emergency evacuation plan. Therefore, this impact would be less than significant.

# M. Other Items Not Included in the Initial Study

On May 23, 2006, following publication of the Initial Study, the Board of Supervisors adopted Ordinance 116-06, directing that the City employ a CEQA Initial Study Checklist based on the form included in Appendix G of the state CEQA Guidelines. Accordingly, the Planning Department has recently adopted a new Initial Study Checklist, consistent with Appendix G but also incorporating additional questions specific to the urban environment of San Francisco. This new checklist includes some questions not included in the Initial Study for the proposed project, published on April 8, 2006. The following discussion provides information about the proposed project's effects on those issues included in the new checklist that are not otherwise addressed in the Initial Study or in this EIR.

# **Biological Resources**

There are no adopted habitat conservation plans applicable to the project site, nor does the site include any riparian habitat.

# Hydrology

Flooding hazards are not an issue because the project area is not subject to flooding and the project would have no impacts on flooding, as the amount of impervious surface at the site would not change due to the project. No portion of San Francisco is within a 100-year flood zone, and the project site is not subject to inundation in the event of reservoir failure.

# **Mineral and Energy Resources**

All land in San Francisco, including the project site, is designated Mineral Resource Zone 4 (MRZ-4) by the California Division of Mines and Geology (CDMG) under the Surface Mining and Reclamation Act of 1975 (CDMG, Open File Report 96-03 and Special Report 146 Parts I and II). This designation indicates that there is inadequate information available for assignment to any other MRZ and thus the site is not a designated area of significant mineral deposits. Since the project site is already developed, future evaluation or designation of the site would not affect or be affected by the proposed project. There are no operational mineral resource recovery sites in the project area whose operations or accessibility would be affected by the construction or operation of the proposed project.

# Agricultural Resources

No agricultural resources are located in the project area, and the project would have no effect on agricultural resources.