EXHIBIT C
Vehicle Miles Traveled

Vehicle Miles Traveled measures the amount and distance vehicles would travel on the roadway as a result of a project or plan. An increase in Vehicle Miles Traveled results in an increase of emissions of air pollutants, including greenhouse gases, as well as increased consumption of energy. Typically, development at a greater distance from other uses, located in areas with poor access to non-auto modes of travel, would generate more driving than one that is located proximate to other complementary uses and/or where there are transportation options other than the car.

Shift

Encourage Sustainable Travel. The Shift component of the Transportation Sustainability Program creates a TDM Program through an ordinance amending the Planning Code. TDM measures are recognized as effective in reducing Vehicle Miles Traveled generated by projects by supporting transportation choices, including walking, bicycling, public or private transit, car-share, carpooling and other sustainable modes. The TDM Program requires property owners to implement TDM measures that support project residents, tenants, employees, and visitors in making sustainable trip choices thereby reducing their Vehicle Miles Traveled.

The SHIFT component of the Transportation Sustainability Program is consistent with the approach being put forward by the Office of Planning and Research and SB 743, as well as numerous other local, regional, and state policies as described in Chapter 2 of the TDM Technical Justification. It is also consistent with best practices of other jurisdictions around the country, while being tailored to varying San Francisco settings.

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1 U.S. Environmental Protection Agency, Our Built and Natural Environments 2nd Ed, June 2013.
2 Office of Planning and Research, Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, January 2016.
Chapter 3

Applicability and Targets

This chapter provides a justification for the TDM Program applicability, including exemptions and targets. In addition, this section describes a Cambridge, Massachusetts case study on which components of the TDM Program was modeled.

Land Use Categories and Accessory Parking

Planning Code Section 169 lists the types of Development Projects that the TDM Program applies to. Each Development Project is required to meet a target. The target is based upon the land use(s) associated with the Development Project and the number of Accessory Parking spaces proposed for the land use. The more Accessory Parking proposed for a land use, the higher the target for the Development Project to achieve.

The rationale for tying the target to Accessory Parking is based on relevant literature and local data collection, discussed further in Chapter 4 of the TDM Technical Justification, which indicate that areas with more parking are associated with more overall vehicular traffic than areas with less parking.

Similarly, as discussed further in Chapter 4 of the TDM Technical Justification, individuals who do not have dedicated offsite parking at their origins or destinations are less likely to drive than those who do. Therefore, more incentives and tools to support non-auto modes and disincentives to using personal vehicles are needed at a site with a greater amount of Accessory Parking spaces than a site with fewer Accessory Parking spaces to encourage sustainable travel and reduce Vehicle Miles Traveled. These incentives, disincentives, and tools that affect mode choice are TDM measures. This approach does not restrict the ability of a property owner to build Accessory Parking up to existing Planning Code requirements or allowances; instead, it provides flexibility to property owners in developing a TDM Plan to reduce Vehicle Miles Traveled that best fits the needs of the Development Project and neighborhood.

The purpose of trips made to land uses often varies. In order to simplify application of the TDM Program, definitions were classified into four land use categories based upon reducing Vehicle Miles Traveled from the primary trip generator associated with that land use. The four land use categories were organized, based upon research, into categories representing a continuum from highest to lowest estimated number of vehicle trips per parking space provided for primary users (visitors and customers, employees, or residents): Land Use Category A represents uses with the highest rate of vehicle trips per parking space and Land Use Category D represents uses with the lowest rate of vehicle trips per parking space.

Exceptions are schools and hospitals, where those trips and associated parking are much shorter in duration and are often a side trip within a larger tour. Therefore, the visitor/customer trips are more effectively influenced at the origin (e.g., home) and/or ultimate destination (e.g., work) of those tours. In addition, it may be necessary to accommodate driving trips for medical visits.
provision of off-street parking and the choice to drive among individuals traveling to or from the site (similar to the focus of one of the questions in the nine city United States study). Following data collection and an empirical review of the data, this research found that reductions in off-street vehicular parking for office, residential, and retail developments reduce the overall automobile mode share associated with those developments, relative to projects with the same land uses in similar contexts that provide more off-street vehicular parking. In other words, more off-street vehicular parking is linked to more driving and that people without dedicated parking spaces are less likely to drive.

Based upon the recent research, besides Shuttle Bus Service, a reduced Parking Supply is the most effective TDM measure available in the menu. Therefore, for the purposes of the TDM Program, the maximum point value a Development Project could receive from the Parking Supply measure was assigned a high value of 11 points. Eleven options are provided for this TDM measure, depending upon the Development Project's parking supply compared to the neighborhood parking rate.

The neighborhood parking rate is number of existing Accessory Parking spaces provided per Dwelling Unit or per 1,000 square feet of non-residential uses for each transportation analysis zone within San Francisco. A full description of the methodology for estimating the neighborhood parking rate is included in Appendix B of the TDM Technical Justification document and may be refined over time. If a Development Project is parked at or below the neighborhood parking rate, the Development project would receive points for this TDM measure.

Using the neighborhood parking rate as a basis for assigning points accounts for the variability in geography throughout San Francisco and the effect this can have on travel behavior. The purpose of the TDM Program is to reduce the Vehicle Miles Traveled that would be otherwise estimated to occur from new development (in SF-CHAMP or other transportation modeling software) based upon the new development's transportation analysis zone location. SF-CHAMP provides an estimate of Vehicle Miles Traveled at the geographic scale of a transportation analysis zone, but it does not include inputs for site level characteristics like TDM measures, including Accessory Parking supply. Although not an input into SF-CHAMP, based upon the recent research, the existing Accessory Parking supply within a transportation analysis zone has a relationship with the Vehicle Miles Traveled for that transportation analysis zone. Therefore, a new development would mostly likely not reduce Vehicle Miles Traveled as it relates to Parking Supply, if the new development is not parked at least at or below the neighborhood parking rate.

Factors Rejected for Point Value Assignment

Other factors were considered in assigning point values, such as cost, other City policy goals, and Municipal Code requirements, but those factors were dismissed because they do not reflect the core purpose of the TDM Program of reducing Vehicle Miles Traveled. In regards to cost, the economics of each project will vary greatly as to whether the TDM measures selected for the project will result in an additional cost or cost savings. For example, the upfront cost of constructing a garage structure parking and underground parking is approximately $50,000 to $80,000 per space, respectively, in 2014

51 Fehr and Peers, 2015b.
52 In the future, as more research is conducted and as part of updates to the TDM Program Standards, Planning staff may recommend to the Planning Commission that Development Projects parked above the neighborhood parking rate should receive negative points.
Memorandum

Date: 04.04.2016

To: Wade Wietgrefe, San Francisco Planning Department
    Carli Paine, San Francisco Municipal Transportation agency

From: Drew Cooper, Michael Schwartz, San Francisco County Transportation Authority

Subject: Land Use Categories

The City and County of San Francisco recommends introduction of a Transportation Demand Management (TDM) ordinance which, if approved, will require developers to choose from a menu of improvements to reduce their project's impact on the transportation network through a reduction in vehicle miles traveled (VMT). While the goal of reduced VMT applies to all new development, the applicable measures and points target varies depending on the land use. With this in mind, the TDM Program (Program) has four (4) land use categories. Each use outlined in Section 102 of the Planning Code (Definitions) has been assigned to a category and must meet the requirements of that category.

The remainder of this memo describes the trips associated with the land use and parking spaces for each of the categories.

Category A: Land uses in Category A most closely reflect retail use. Sample land uses include formula retail, museums, entertainment venues, and grocery stores. Many Category A trips are associated with visitors and customers. These trips tend to be shorter in nature, and each parking space accommodates significantly more driving than parking spaces in other groups (see Attachment 1). TDM measures in this category are intended to reduce VMT from visitors and customers (as opposed to store employees), and the targets reflect the higher trip rate associated with each parking space.

Category B: Land uses in Category B most closely reflect office use. Sample land uses include Office, Child Care Facility, and School. While these uses may be associated with some visitor/customer trips, many of the trips will be made by employees and the TDM measures should focus on reducing employee related VMT. Since parking spaces associated with Category B land uses tend to have less turnover (and therefore lower VMT) than Category A, the Program assigns lower targets per parking space.

Category C: Projects in Category C reflect residential use. Parking spaces in Category C generate fewer trips than Category B, reflected in the Program targets. TDM measures for projects in this category target VMT reduction for residents.

Category D: Land uses in Category D are associated with the lowest amount of trip generation, due to lower employment density and a low rate of visitors/customers. Sample land uses in Category D include Manufacturing, Power Plant, and Shipyard. TDM measures for Category D target employee VMT reduction and Program targets are commensurately lower than all other categories.
Attachment

1. Estimated Auto Trips Per Parking Space by Land Use, Results of 2014/15 SF Field Survey

cc: A. Ben-Pazi, R. Schuett – Planning
    M. Munowitch – SFMTA
    S. Cleveland-Knowles, A. Ruiz-Esquide – CAO
    JC, RGR – File: TSP (TDM Ordinance)
Average Peak Period Auto Trips Per Parking Space
Summer 2014/15 SF Field Data Collection

<table>
<thead>
<tr>
<th></th>
<th>AM</th>
<th>PM</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Residential</td>
<td>0.37</td>
<td>0.50</td>
<td>0.87</td>
</tr>
<tr>
<td>Retail</td>
<td>3.75</td>
<td>9.87</td>
<td>13.61</td>
</tr>
</tbody>
</table>

Ratio -- Retail:Residential

AM + PM Peak Period Auto Trips by Number of Parking Spaces at Residential Buildings

AM + PM Peak Period Auto Trips by Number of Parking Spaces at Retail Establishments
Quantifying Greenhouse Gas Mitigation Measures

A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures

August, 2010
Lack of Detailed Information: The quantification methods provided in this report have been developed to allow them to be applied to a range of project conditions and still yield accurate and reliable results. In order to do this, the methods require data inputs that reflect the specific conditions of the project. Because the project has not yet been completed, however, certain information about the project will not be known and must be either estimated or assumed based on standard procedures. For example, at the time of the CEQA process a project proponent might know the number of residential dwelling units that will be in the project, but not know the actual square footage individual units will have. Similarly, while the project proponent may know a general type of non-residential land uses planned, these are often generalized categories such as retail and do not reflect the true diversity and range of source category parameters that would occur between the specific types of retail that the project eventually has. Nor can a project proponent predict specific appliances that will be in buildings or frequency of use. Further, most projects rely on generalized trip rate and trip lengths information that are not specific to the project; these estimates may over or underestimate the actual trip rates and trip lengths generated by the project. In each of these cases, estimates of future conditions are made based on accepted procedures and available data. This Report does not provide, or in any way alter, guidance on the level of detail required for the review or approval of any project. For the purposes of CEQA documents, the current CEQA guidelines address the information that is needed.²

The lack of precise and accurate data inputs limits the quality of the quantified project baseline and mitigated emissions, however. This limitation can be minimized to the extent the project proponent is able to provide better predictive data, or establish incentives, agreements, covenants, deeds, or other means of defining and restricting future uses to allow more precise estimates of the emissions associated with them. Some of these means of refining the data may also be creditable as mitigation of the project. The approval of any such enhancements of the data, or credit as mitigation, is at the discretion of the agency reviewing the project.

Use of Case Studies: One method of enhancing the data available for a project is the use of case studies. Case studies generally have detailed information regarding a particular effect. However, there are limitations of using this information to quantify emissions in other situations since adequate controls may not have been studied to separate out combined effects. There may be features or characteristics in the case-study that do not translate to the project and therefore may over or underestimate the GHG emission reductions. For the most part, case studies were not used as the primary source in the development of the quantification methods in this report. Where case studies were used to enhance underlying data, the studies were carefully reviewed to ensure that appropriate controls were used and the data meet the quality requirements of this Report.

at these levels based on empirical evidence. Maximums are provided for the location/development type of the project. The Global Maximum values can be found in the top row of Chart 6-2.

These include:
- Urban: 75% VMT
- Compact Infill: 40% VMT
- Suburban Center (or Suburban with NEV): 20%
- Suburban: 15% (limited empirical evidence available)

Specific Rules for Subcategories within Transportation - Because of the unique interactions of measures within the Transportation Category, each subcategory has additional rules or criteria for combining measures.

- Land Use/Location Strategies – Maximum Reduction Factors: Land use measures apply to a project area with a radius of ½ mile. If the project area under review is greater than this, the study area should be divided into subareas of radii of ½ mile, with subarea boundaries determined by natural “clusters” of integrated land uses within a common walkshed. If the project study area is smaller than ½ mile in radius, other land uses within a ½ mile radius of the key destination point in the study area (i.e. train station or employment center) should be included in design, density, and diversity calculations. Land use measures are capped based on empirical evidence for location setting types as follows:
  - Urban: 65% VMT
  - Compact Infill: 30% VMT
  - Suburban Center: 10% VMT
  - Suburban: 5% VMT

- Neighborhood/Site Enhancements Strategies – Maximum Reduction Factors: The neighborhood/site enhancements category is capped at 12.7% VMT reduction (with Neighborhood Electric Vehicles (NEVs)) and 5% without NEVs based on empirical evidence (for NEVs) and the multiplied combination of the non-NEV measures.

- Parking Strategies – Maximum Reduction Factors: Parking strategies should be implemented in one of two combinations:
  - Limited (reduced) off-street supply ratios plus residential permit parking and priced on-street parking (to limit spillover), or
  - Unbundled parking plus residential permit parking and priced on-street parking (to limit spillover).

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4 As reported by Holtzclaw, et al for the State of California. Note that CTR strategies must be converted to overall VMT reductions (from work-trip VMT reductions) before being combined with strategies in other categories.

3.3 Parking Policy/Pricing

3.3.1 Limit Parking Supply

**Range of Effectiveness:** 5 – 12.5% vehicle miles travelled (VMT) reduction and therefore 5 – 12.5% reduction in GHG emissions.

**Measure Description:**
The project will change parking requirements and types of supply within the project site to encourage “smart growth” development and alternative transportation choices by project residents and employees. This will be accomplished in a multi-faceted strategy:

- Elimination (or reduction) of minimum parking requirements
- Creation of maximum parking requirements
- Provision of shared parking

**Measure Applicability:**
- Urban and suburban context
- Negligible in a rural context
- Appropriate for residential, retail, office, industrial and mixed-use projects
- Reduction can be counted only if spillover parking is controlled (via residential permits and on-street market rate parking) [See PPT-5 and PPT-7]

**Baseline Method:**
See introduction to transportation section for a discussion of how to estimate trip rates and VMT. The CO₂ emissions are calculated from VMT as follows:

\[ CO₂ = VMT \times EF_{\text{running}} \]

Where:

- VMT = vehicle miles traveled
- EF_{\text{running}} = emission factor for running emissions

**Inputs:**
The following information needs to be provided by the Project Applicant:

- ITE parking generation rate for project site
- Actual parking provision rate for project site

---

52 This may require changes to local ordinances and regulations.
Mitigation Method:

\[
\text{% VMT Reduction} = \frac{\text{Actual parking provision} - \text{ITE parking generation rate}}{\text{ITE parking generation rate}} \times 0.5
\]

Assumptions:

Data based upon the following references:


All trips affected are assumed average trip lengths to convert from percentage vehicle trip reduction to VMT reduction (% vehicle trips = %VMT).

Emission Reduction Ranges and Variables:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Category</th>
<th>Emissions Reductions</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2e</td>
<td></td>
<td>5 - 12.5% of running</td>
</tr>
<tr>
<td>PM</td>
<td></td>
<td>5 - 12.5% of running</td>
</tr>
<tr>
<td>CO</td>
<td></td>
<td>5 - 12.5% of running</td>
</tr>
<tr>
<td>NOx</td>
<td></td>
<td>5 - 12.5% of running</td>
</tr>
<tr>
<td>SO2</td>
<td></td>
<td>5 - 12.5% of running</td>
</tr>
<tr>
<td>ROG</td>
<td></td>
<td>3 - 7.5% of total</td>
</tr>
</tbody>
</table>

Discussion:

The literature suggests that a 50% reduction in conventional parking provision rates (per ITE rates) should serve as a typical ceiling for the reduction calculation. The upper range of VMT reduction will vary based on the size of the development (total number of spaces provided). ITE rates are used as baseline conditions to measure the effectiveness of this strategy.

Though not specifically documented in the literature, the degree of effectiveness of this measure will vary based on the level of urbanization of the project and surrounding areas, level of existing transit service, level of existing pedestrian and bicycle networks and other factors which would complement the shift away from single-occupant vehicle travel.

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53 The percentage reduction reflects emission reductions from running emissions. The actual value will be less than this when starting and evaporative emissions are factored into the analysis.
Example:
If the ITE parking generation rate for the project is 100 spaces, for a low range a 5% reduction in spaces is assumed. For a high range a 25% reduction in spaces is assumed.

- Low range % VMT Reduction = \((100 - 95)/100 \) * 0.5 = 2.5%
- High range % VMT Reduction = \((100 - 75)/100 \) * 0.5 = 12.5%

Preferred Literature:
To develop this model, Nelson\Nygaard [1] used the Institute of Transportation Engineers' Parking Generation handbook as the baseline figure for parking supply. This is assumed to be unconstrained demand. Trip reduction should only be credited if measures are implemented to control for spillover parking in and around the project, such as residential parking permits, metered parking, or time-limited parking.

Alternative Literature:
- 100% increase in transit ridership
- 100% increase in transit mode share

According to TCRP Report 95, Chapter 18 [2], the central business district of Portland, Oregon implemented a maximum parking ratio of 1 space per 1,000 square feet of new buildings and implemented surface lot restrictions which limited conditions where buildings could be razed for parking. A "before and after" study was not conducted specifically for the maximum parking requirements and data comes from various surveys and published reports. Based on rough estimates the approximate parking ratio of 3.4 per 1,000 square feet in 1973 (for entire downtown) had been reduce to 1.5 by 1990. Transit mode share increased from 20% to 40%. The increases in transit ridership and mode share are not solely from maximum parking requirements. Other companion strategies, such as market parking pricing and high fuel costs, were in place.

Alternative Literature Sources:

Other Literature Reviewed:
None
3.3.4 Require Residential Area Parking Permits

Range of Effectiveness: Grouped strategy. (See PPT-1, PPT-2, and PPT-3)

Measure Description:
This project will require the purchase of residential parking permits (RPPs) for long-term use of on-street parking in residential areas. Permits reduce the impact of spillover parking in residential areas adjacent to commercial areas, transit stations, or other locations where parking may be limited and/or priced. Refer to Parking Supply Limitations (PPT-1), Unbundle Parking Costs from Property Cost (PPT-2), or Market Rate Parking Pricing (PPT-3) strategies for the ranges of effectiveness in these categories. The benefits of Residential Area Parking Permits strategy should be combined with any or all of the above mentioned strategies, as providing RPPs are a key complementary strategy to other parking strategies.

Measure Applicability:
- Urban context
- Appropriate for residential, retail, office, mixed use, and industrial projects

Alternative Literature:
- \(-0.45 = \text{elasticity of vehicle miles traveled (VMT) with respect to price}\)
- \(0.08\% \text{ greenhouse gas (GHG) reduction}\)
- \(0.09-0.36\% \text{ VMT reduction}\)

Moving Cooler [1] suggested residential parking permits of $100-$200 annually. This mitigation would impact home-based trips, which are reported to represent approximately 60% of all urban trips. The range of VMT reductions can be attributed to the type of urban area. VMT reductions for $100 annual permits are 0.09% for large, high-density; 0.12% for large, low-density; 0.12% for medium, high-density; 0.18% for medium, low-density; 0.18% for small, high-density; and 0.12% for small, low-density. VMT reductions for $200 annual permits are 0.18% for large, high-density; 0.24% for large, low-density; 0.24% for medium, high-density; 0.36% for medium, low-density; 0.36% for small, high-density; and 0.24% for small, low-density.

Alternative Literature References:
http://www.movingcooler.info/Library/Documents/Moving%20Cooler_Appendix%20B_Eff ectiveness_102209.pdf
EXHIBIT F
San Francisco Parking near Laurel Village Shopping Center

Laurel Village Shopping Center Parking

3445 California St, San Francisco, CA 94118, USA

PARKING OPTIONS (44)

- California Pacific Medical Center
  8 min walking
  Parking Garage
  $8
  for 2h
- 47-53 Manzanita Ave SF
  2 min walking
- 3490a California St SF
  2 min walking
  Free
- 3490a California St SF
  2 min walking
  Free
- 47-53 Manzanita Ave SF
Abstract

Little research has been done to understand the effect of guaranteed parking at home—in a driveway or garage—on mode choice. The research presented here systematically examines neighborhoods in the three New York City boroughs for which residential, off-street parking is possible but potentially scarce. The research is conducted in two stages. Stage one is based on a Google Earth® survey of over 2,000 properties. When paired with the City’s tax lot database, that survey served as the basis to estimate on-site parking for New York City neighborhoods. With parking availability estimated, a generalized linear model based on census tracts as the unit of analysis, is used to estimate the maximum likelihood parameters that predict the proportion of residents who drive to work in the Manhattan Core. The research shows a clear relationship between guaranteed parking at home and a greater propensity to use the automobile for journey to work trips even between origin and destinations pairs that are reasonably well and very well served by transit. Because journey to work trips to the downtown, for most cities, and New York City is no exception, are the most easily served by transit we infer from this finding that non-journey to work trips are also made disproportionately from these areas of high on-site parking.
Disciplines

Transportation (http://network.bepress.com/social-and-behavioral-sciences/public-affairs-public-policy-and-public-administration/transportation) and

Publication Date

2012

Citation Information

Available at: http://works.bepress.com/rachel_weinberger/8/
Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA

Implementing Senate Bill 743 (Steinberg, 2013)

January 20, 2016
Residential and Office Projects. A tour-based analysis is usually the best way to analyze VMT associated with residential and office projects. Where tour-based models are employed for office project analyses, because workplace location influences overall travel, either employee work tour VMT or VMT from all employee tours may be attributed to the employment center (and the same should be used to set the significance threshold). For this reason, screening maps (discussed in more detail below) using tour-based regional travel demand models can be used where they are available. Where tour-based tools or data are not available for all components of an analysis, an assessment of trip VMT can serve as a reasonable proxy. For example, where research-based evidence on the efficacy of mitigation measures is available for trip-based, then estimating the threshold, analyzing unmitigated project VMT, and mitigation would all need to be undertaken using a trip-based methods, for an apples-to-apples comparison. In this case, home based trips can be the focus for analysis of residential projects; home-based work trips can be the focus of the analysis for office projects.

For office projects that feature a customer component, such as a government office that serves the public, a lead agency can analyze the customer VMT component of the project using the methodology for retail development (see below).

Models and methodologies used to calculate thresholds, estimate project VMT, and estimate VMT reduction due to mitigation should be comparable. For example:

- A tour-based estimate of project VMT should be compared to a tour-based threshold, or a trip-based estimate to a trip-based VMT threshold.
- Where a travel demand model is used to estimate thresholds, the same model should also be used to estimate trip lengths as part of estimating project VMT
- Where only trip-based estimates of VMT reduction from mitigation are available, a trip-based threshold should be used

Retail Projects. Lead agencies should usually analyze the effects of a retail project by assessing the change in total VMT, because a retail projects typically re-route travel from other retail destinations. A retail project might lead to increases or decreases in VMT, depending on previously existing retail travel patterns.

Considerations for All Projects. Lead agencies should not truncate any VMT analysis because of political or other boundaries. CEQA requires environmental analyses to reflect a “good faith effort at full disclosure.” (CEQA Guidelines § 15151.) Thus, where methodologies exist that can estimate the full extent of vehicle travel from a project, the lead agency should apply them to do so. Analyses should also consider both short- and long-term effects on VMT.
General Principles to Guide Consideration of VMT Thresholds

The CEQA Guidelines set forth the general rule for determining significance:

The determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data. An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban area may be significant in a rural area.

(CEQA Guidelines § 15064(b) (emphasis added).) SB 743 directs OPR to establish specific “criteria for determining the significance of transportation impacts of projects[,]” (Pub. Resources Code § 21099(b)(1).)

As noted above, CEQA Guidelines Section 15064(b) confirms that context matters in a CEQA analysis. Further, lead agencies have discretion in the precise methodology to analyze an impact. (See Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal. 3d 376, 409 (“the issue is not whether the studies are irrefutable or whether they could have been better” ... rather, the “relevant issue is only whether the studies are sufficiently credible to be considered” as part of the lead agency’s overall evaluation.) Therefore, lead agencies may perform multimodal impact analysis that incorporates those technical approaches and mitigation strategies that are best suited to the unique land use/transportation circumstances and specific facility types they are evaluating. For example, pedestrian safety need not be addressed on the mainline portion of a limited access freeway that prohibits pedestrian travel. Likewise, where multimodal transportation is to be expected, analysis might address safety from a variety of perspectives.

To assist in the determination of significance, many lead agencies rely on “thresholds of significance.” The CEQA Guidelines define a “threshold of significance” to mean “an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant.” (CEQA Guidelines § 15064.7(a) (emphasis added).) Agencies may adopt their own, or rely on thresholds recommended by other agencies, “provided the decision of the lead agency to adopt such thresholds is supported by substantial evidence.” (Id. at subd. (c).) Substantial evidence means “enough relevant information and reasonable inferences from this information that a fair argument can be made to support a conclusion, even though other conclusions might also be reached.” (Id. at § 15384 (emphasis added).)

Thresholds of significance are not a safe harbor under CEQA; rather, they are a starting point for analysis:

[T]hresholds cannot be used to determine automatically whether a given effect will or will not be significant. Instead, thresholds of significance can be used only as a measure of whether a certain environmental effect “will normally be determined to be significant” or “normally will be determined to be less than significant” by the agency. ... In each instance, notwithstanding compliance with a pertinent threshold of significance,
the agency must still consider any fair argument that a certain environmental effect may be significant.


Finally, just as the determination of significance is ultimately a “judgment call,” the analysis leading to that determination need not be perfect. The CEQA Guidelines describe the standard for adequacy of environmental analyses:

An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

(CEQA Guidelines § 15151 (emphasis added).)

These general principles guide OPR’s recommendations regarding thresholds of significance for vehicle miles traveled set forth below.

D. Recommendations Regarding Significance Thresholds

Section 21099 of the Public Resources Code states that the criteria for determining the significance of transportation impacts must promote: (1) reduction of greenhouse gas emissions; (2) development of multimodal transportation networks; and (3) a diversity of land uses.

Various state policies establish quantitative greenhouse gas emissions reduction targets. For example:

- **Assembly Bill 32** requires statewide greenhouse gas reductions to 1990 levels by 2020, and continued reductions beyond 2020.

- Pursuant to **Senate Bill 375**, the California Air Resources Board establishes greenhouse gas reduction targets for metropolitan planning organizations to achieve based on land use patterns and transportation systems specified in Regional Transportation Plans and Sustainable Community Strategies. Targets for the largest metropolitan planning organizations range from 13% to 16% reduction by 2035.

- **Executive Order B-30-15** sets a GHG emissions reduction target of 40 percent below 1990 levels by 2030.

- **Executive Order 5-3-05** sets a GHG emissions reduction target of 80 percent below 1990 levels by 2050.

- **Executive Order B-16-12** specifies a GHG emissions reduction target of 80 percent below 1990 levels by 2050 specifically for transportation.
than significant transportation impact. (In other words, a project that generates greater than 85 percent of regional per capita VMT, but less than 85 percent of city-wide per capita VMT, would still be considered to have a less than significant transportation impact.) Residential development in unincorporated county areas generating VMT that exceeds 15 percent below VMT per capita in the aggregate of all incorporated jurisdictions in that county, and exceeds 15 percent below regional VMT per capita, may indicate a significant transportation impact. These thresholds can be applied to both household (tour-based) VMT and home-based (i.e. trip-based) VMT assessments.

**Recommended threshold for office projects:** A project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact.

Office projects that would generate vehicle travel exceeding 15 percent below existing VMT per employee for the region may indicate a significant transportation impact. In cases where the region is substantially larger than the geography over which most workers would be expected to live, it might be appropriate to refer to a smaller geography, such as the county. Tour-based analysis of office project VMT, for example development of a tour-based screening map, typically should consider either total employee VMT or employee work tour VMT. Where tour-based information is unavailable for threshold determination, project assessment, or assessment of mitigation, home-based work trip VMT may be used throughout the analysis to maintain and “apples-to-apples” comparison.

**Recommended threshold for retail projects:** A net increase in total VMT may indicate a significant transportation impact.

Because new retail development typically redistributes shopping trips rather than creating new trips, estimating the total change in VMT (i.e. the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project’s transportation impacts.

By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Lead agencies generally, therefore, may presume such development creates a less than significant transportation impact. Regional-serving retail development, on the other hand, which can lead to substitution of longer trips for shorter ones, might tend to have a significant impact. Where such development decreases VMT, lead agencies may consider it to have a less than significant impact.

*framed in terms of efficiency is superior to a simple numerical threshold because CEQA is not intended as a population control measure*.)

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6 As used in these recommendations, the term “regional” refers to the metropolitan planning organization or regional transportation planning agency boundaries within which the project would be located.

7 Lovejoy et al. 2012.
accessibility created by transportation infrastructure investments (whether at the project or program level), the resulting changes in VMT might provide an appropriate basis for tiering.

Mitigation and alternatives.

Induced VMT has the potential to reduce or eliminate congestion relief benefits, increase VMT, and increase other environmental impacts that result from vehicle travel. If those effects are significant, the lead agency will need to consider mitigation or alternatives. In the context of increased travel induced by capacity increases, appropriate mitigation and alternatives that a lead agency might consider include the following:

- Tolling new lanes to encourage carpools and fund transit improvements
- Converting existing general purpose lanes to HOV or HOT lanes
- Implementing or funding travel demand management offsite
- Implementing Intelligent Transportation Systems (ITS) strategies to improve passenger throughput on existing lanes

Tolling and other management strategies can have the additional benefit of preventing congestion and maintaining free-flow conditions, conferring substantial benefits to road users as discussed above.

F. Analyzing Safety Impacts Related to Transportation

Public Resources Code section 21099 suggests that while automobile delay is not an environmental impact, lead agencies may still evaluate project impacts related to safety. The CEQA Guidelines currently suggest that lead agencies examine projects' potential to "[s]ubstantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)".

As with any other potential impact, CEQA requires lead agencies to make a judgment call "based to the extent possible on scientific and factual data." (State CEQA Guidelines § 15064(b).) Also like any other potential impact, "the significance of an activity may vary with the setting." (Ibid.) Lead agencies must base their evaluations of safety on objective facts, and not personal or subjective fears. The purpose of this section is to review some relevant considerations in evaluating potential transportation-related safety impacts.

Transportation by its nature involves some degree of collision risk. Every project will affect transportation patterns, and as a result may involve some redistribution of that risk.

Lead agencies may consider whether a project may cause substantially unsafe conditions for various roadway users. This section is not intended to provide a comprehensive list of potential transportation safety risks, but rather guidance on how to approach safety analysis given numerous potential risks.

Generally:

- Safety analysis in CEQA should focus on risk of fatality or injury, rather than property damage.
- Lead agencies should focus on concerns that affect many people, not just an individual.
3333 California Street, Mixed-use Project

Devincenzi Comments on Draft Environmental Impact Report

Planning Department Case No: 2015-014028ENV

Exhibits to Transportation Comments Part 2, Exhibits K-V
RESOLVED, That Proposal No. Z-52.62.2, an application to change the Use District Classification of the hereinbefore described parcel of land from a First Residential District to a Commercial District, be, and the same is hereby APPROVED; subject to the stipulations submitted by the applicant and set forth herein:

Commencing at a point on the S/L of California Street distant therefrom 157 feet west of the W/L of Presidio Avenue (produced), thence westerly on said line 707.375 feet to a curve to the left having a radius of 15 feet, thence 235.562 feet measured on the arc of the curve to the left to the E/L of Laurel Street, thence southerly on the E/L of Laurel Street 127.227 feet to the curve to the left having a radius of 60 feet, thence 77.113 feet measured on the arc of the curve to the left to a curve to the right having a radius of 120 feet, thence 149.133 feet measured on the arc of the curve to the right to a curve to the right having a radius of 4033 feet, thence 568.710 feet measured on the arc of the curve to the right to a curve to the left having a radius of 20 feet, thence 35.186 feet measured on the arc of the curve to the left to the northwest line of Euclid Avenue, thence N 73° 12' E on the northwest line of Euclid Avenue 512.634 feet to a curve to the left having a radius of 65 feet, thence 42.318 feet measured on the arc of the curve to the left to the northwest line of Masonic Avenue (proposed extension), thence N 36° 54' E; 380.068 feet to the arc of a curve to the left having a radius of 625 feet, thence 254.176 feet measured on the arc of the curve to the left, thence N 52° 36' 29.74" W; 262.860 feet to the point of commencement. Being the major portion of Lot 1A, Block 1032, containing 10.271 acres, more or less.

RESOLVED, FURTHER, That this change shall be and at all times remain contingent upon observance by the owner or owners and by his or their successors in interest of the conditions contained in the following stipulations as to the use of the land affected:

1. The character of the improvement for commercial purposes of the subject property, or any portion thereof, shall be limited to a building or buildings designed as professional, institutional, or office buildings, including service buildings which are normally accessory thereto.

2. The aggregate gross floor area of all such buildings, calculated exclusive of cellars, of basement areas used only for storage or services incidental to the operation and maintenance of a building, and of indoor or other covered automobile parking space, shall not exceed the total area of the property allotted to such use.
3. For each five hundred square feet of gross floor area in such buildings, calculated as in stipulation 2, above, there shall be reserved and kept available on the property or the portion thereof allotted to such use, one off-street automobile parking space, or equivalent open space suitable for the ultimate provision of such parking space as needed for the accommodation of users of the premises.

4. No such building, other than a minor accessory building having a floor area of not more than 400 square feet, shall occupy any portion of the property which is within 100 feet of the line of the Euclid Avenue boundary thereof, or which is within 100 feet of the easterly line of Laurel Street and south of the northerly line of Mayfair Drive extended.

5. If the subject property, or any portion thereof, is developed as a site for residential buildings, such buildings shall be limited as follows:

a. No residential building other than a one-family dwelling or a two-family dwelling shall occupy any portion of the property which is within 100 feet of the Euclid Avenue boundary line thereof, or which is within 100 feet of the easterly line of Laurel Street and south of the northerly line of Mayfair Drive extended.

b. No dwelling within the said described portion of the subject area shall occupy a parcel of land having an area of less than thirty three hundred (3300) square feet, nor shall any such dwelling cover more than fifty percent (50%) of the area of such parcel or be less than twelve (12) feet from any other such dwelling, or be set back less than ten (10) feet from any presently existing or future public street, or have a height in excess of forty (40) feet, measured and regulated as set forth in pertinent sections of the Building Code of the City and County of San Francisco.

c. No residential building in other portions of the subject property shall have a ground coverage in excess of fifty percent (50%) of the area allotted to such building.

6. Development of the subject property, or of any separate portion thereof, for commercial use as stipulated herein, shall include provisions for appropriate and reasonable landscaping of the required open spaces, and prior to the issuance of a permit for any building or buildings there shall be submitted to the City Planning Commission, for approval as to conformity with these stipulations, a site plan showing the character and location of the proposed
building or buildings, and related parking spaces and landscaped areas upon the property, or upon such separate portion thereof as is allotted to such building or buildings. It shall be understood that approval of any such plan shall not preclude subsequent approval by the Commission of a revised or alternative plan which conforms to these stipulations.

I hereby certify that the foregoing resolution was adopted by the City Planning Commission at its special meeting on November 13, 1952, and I further certify that the stipulations set forth in the said resolution were submitted in a written statement placed on file.

[Signature]
Joseph Mignola, Jr.
Secretary

Ayes: Commissioners Kilduff, Towle, Devine, Williams
Noes: None
Absent: Commissioners Brooks, Lopes, Prince
Passed: November 13, 1952
EXHIBIT M
Hello Kathy,

The below webpage includes documentation for the SF-CHAMP model, the model we use to estimate vehicle miles traveled by transportation analysis zone. The executive summary under model documentation discusses the transportation (aka traffic) analysis zones.

https://www.sfcta.org/modeling-and-travel-forecasting

Wade Wietgrefe, AICP, Principal Planner
Environmental Planning Division
San Francisco Planning Department
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Direct: 415.575.9050 | www.sfplanning.org
San Francisco Property Information Map

Thank you very much.

[Quoted text hidden]
San Francisco Travel Demand Forecasting Model Development

Executive Summary

Final Report

prepared for
San Francisco County Transportation Authority

prepared by
Cambridge Systematics, Inc.

Updated by:
San Francisco County Transportation Authority

October 1, 2002
1.0 Introduction

■ Overview

The San Francisco County Travel Demand Forecasting Model (San Francisco Model) was developed for the San Francisco County Transportation Authority (SFCTA) to provide detailed forecasts of travel demand for various planning applications. These applications included developing countywide plans, providing input to microsimulation modeling for corridor and project-level evaluations, transit planning, and neighborhood planning. The objective was to accurately represent the complexity of the destination, temporal and modal options and provide detailed information on travelers making discrete choices. These objectives led to the development of an activity-based model that uses a synthesized population as the basis for decision-making rather than zonal-level aggregate data sources. The activity-based model has nine primary components.

Most of the model components were estimated using household survey data collected by the Metropolitan Transportation Commission (MTC) for San Francisco residents only. Each model component was calibrated using various observed data sources, then the full model was validated using traffic count and transit ridership data for each of five time periods. The model is applied as a focused model, which combines trip-making from the entire Bay Area (derived from the MTC’s BAYCAST trip tables) with the travel demand from San Francisco residents produced by the activity-based model.

■ Contents of this Report and Related Reports

This executive summary discusses all nine model components and provides an overview of the data required to run the model. It is designed to provide an overview of the process and a brief summary of the results. There were numerous technical reports developed during the process; these should be referred to for more detail. The primary reports are listed below:

- Data Development
- Population Synthesis
- Vehicle Availability Model
- Tour and Trip Generation and Time-of-day Models
- Destination Choice Models
3.0 Data Development

There were three primary areas of data development: data collected as part of the stated preference survey, the development of the synthetic population data, and data used as input to the San Francisco model. There are individual reports for each of these areas. An overview of these data is provided below.

■ Stated Preference Survey

The stated preference survey was conducted for 609 households in San Francisco in June, 1999 to collect data on transit and auto travel characteristics. The primary focus of the survey was to collect preference data on transit reliability, crowding and personal security and auto parking availability and cost. The survey was conducted by Corey, Canapary and Galanis and the design of the survey was completed by Mark Bradley Research and Consulting, with other members of the Cambridge Systematics team.

The purpose of the survey was to provide data that can be incorporated into the mode choice model estimation process, in the areas of transit reliability, crowding and personal security and auto availability and cost. The analysis of these data was conducted as part of the mode choice model process.

■ Synthetic Sample Generation

A prototypical sample of persons and households was generated for San Francisco County using three primary data sources: the U.S. Census Public Use Microdata Sample (PUMS), the population and employment data developed for San Francisco County, and other socioeconomic data developed for the MTC. There is a hierarchy of zonal systems for these three datasets:

- Six Public Use Microdata Areas (PUMAs), containing
- 127 MTC Traffic Analysis Zones (MTAZs), containing
- 766 San Francisco Traffic Analysis Zones (SFTAZs).

Figure 3.1 shows the boundaries of the SFTAZs and MTAZs. The PUMAs are not shown because they are relatively large areas used to preserve the anonymity of long form respondents.
The prototypical sample contains marginal distributions across three dimensions:

- Household size and number of workers (nine categories);
- Household income (four categories); and
- Age of head of household (three categories).

There are a total of 108 possible combinations of the above dimensions (9x4x3). The nine categories for household size/number of workers were chosen because they efficiently distinguish between important household life-cycle groups. The specific breakdowns for income and age were chosen because they correspond to categories that are available in the MTC future year land use files, so updating the populations to future years can be kept consistent with MTC breakdowns within zones. Also, all of these categorizations are compatible with the Census tables available in the Census Transportation Planning Package (CTPP) Urban Element.

Figure 3.1 Map of San Francisco Model & MTC regional model TAZ boundaries
Other Model Data

Aggregate Zonal Data

Some of the data used by the model components are aggregate zonal data developed as either necessary inputs or because these are desired for testing planning policies. Table 3.1 provides a list of these aggregate variables and the model components that use these variables. The socioeconomic data were developed from parcel-level data aggregated to traffic analysis zones and adjusted to match control totals, as follows:

- The San Francisco Planning Department provided a current parcel database and a current business and employment database. The parcel database provides current estimates of residential units at the block and lot level and the business and employment database contains current estimates of employment by type at the block and lot level. These are aggregated to the traffic analysis zones.

- The San Francisco Planning Department, the Presidio Trust, the San Francisco Redevelopment Agency and the Port of San Francisco maintain lists of new development projects under construction, approved, and under review, as well as information on development potential for major area plans. These are used to allocate forecast data by traffic analysis zone.

- The Association of Bay Area Governments' Projections '98 was used as a control total for countywide forecasts of population and employment. The San Francisco Planning Department has subsequently updated these forecasts to reflect the Projections 2000 data.

The employment data in San Francisco uses a different categorization compared to the MTC data. The original MTC databases classified employment by six categories - retail, service, other, agricultural, manufacturing and trade. The new San Francisco socioeconomic databases classified employment by a different set of six categories:

- Cultural, institutional and educational services (CIE),
- Medical and health services (MED),
- Management, information, and professional services (MIPS),
- Production, distribution and repair (PDR),
- Retail and entertainment (RETAIL), and
- Visitor (VISITOR).

These employment categories were defined by the San Francisco Planning Department in the 1998 Citywide Land Use Study. Most models retained the distinctive employment categories, but some used a common set of categories across all areas, where basic information on the SIC codes falling under each category was used to regroup the MTC categories into four San Francisco categories - PDR, MIPS, Retail and Service.

Pedestrian environment factors (PEF) were developed to evaluate urban design projects and estimate changes in pedestrian and bicycle modal options. PEFs will allow local planners to:
Vehicle Availability Model

The vehicle availability model is a multinomial logit model that predicts the vehicles available in each household for each San Francisco resident. Given the location of the household, the characteristics of the household members, and the primary work place location of each of its workers, the model estimates the probabilities of having none, one, two, or three or more vehicles available.

A large number of households (42.9%) in San Francisco in 1990 had only one vehicle and the average number of vehicles for all households was 1.16. The number of vehicles is defined as automobiles plus trucks; also available in the survey data are the numbers of motorcycles, mopeds and bicycles owned by the household, but these were not included in the number of vehicles available for household travel. The model was limited to four alternatives (0, 1, 2, or 3+ vehicles available) because of the relatively small number of households with four or more vehicles available (1.8%). The average number of vehicles in the fourth alternative (households with three or more vehicles available) was 3.36.

Information was assembled from a number of sources to create the estimation data set. For example, the household survey came from MTC, population and employment datasets were developed by the consultant team working with Planning Dept data, Pedestrian Environment Factors were developed by SFCTA staff with assistance from staff of other city departments and consultant team, and parking costs based on small survey undertaken by consultant team. The structure of this data set is a file with one record for each San Francisco household in the travel survey, with data on income, location, and the age and employment status of the various household members. (Driver’s license status was not used in estimation, because it is not available in the PUMS Census data used to apply the models.) The household file was supplemented by adding zonal data, level of service data, and accessibility data. The zonal data included population, households, and employment by type, area in square miles, area type, pedestrian environment factor, and parking costs. The level of service data included both auto and transit travel times and costs between the residence zone and each household member’s workplace. The accessibility data included measures of how many jobs of various types could be reached by transit or car in various travel time bands.

The Full Day Pattern Models

As Table 4.1 indicates, the full day pattern model predicts:

- The purpose class of the primary home-based tour (work, education, other, or none)
- The trip chain type of the primary home-based tour (1 or more stops before, after, neither, or both)
- The number of home-based secondary tours (0, 1, or 2+)
6.0 Model Validation

Details of the model validation results are in the corresponding model validation report. Highlights of these results are presented here for travel behavior and trip assignment.

- **Travel Behavior Validation**

Travel behavior was validated by comparing travel data in a household travel survey to related travel data in the travel demand forecasting model. For the validation of the 1998 SFCTA regional travel demand forecasting model, we compared the trip data in the 1990 Census, the 1990 MTC household survey data with the same data in the model.

The model components were calibrated individually using various observed data sources, including the decennial census, household surveys, observed traffic counts and transit ridership, vehicle registrations, and many other sources. The specific sources used to calibrate each individual model are described below. This effort involved calibrating each model separately, then reviewing highway and transit assignment results for each of the five time periods to make additional adjustments in the model components. The adjustments were all made to constants within the models, there were no adjustments to model coefficients. Highlights of results of the calibration are summarized below for each model component.

**Vehicle Availability**

The vehicle availability model was calibrated primarily on two key variables, number of workers per household and super-district, using the 1990 Census as the primary source of observed data. A second validation test was used to evaluate the total number of vehicles estimated by the vehicle availability model compared to Department of Motor Vehicle (DMV) estimates of auto registrations. These data were different by 5 percent. Unfortunately, the 1990 MTC survey, which was used to estimate the model, contained different results for vehicle availability than the 1990 Census. Since, the 1990 Census has a much larger sample size; these data were used to calibrate the vehicle availability model. The results, therefore, have indirect effects on the market segmentation of autos and workers that were carried out in the mode split model.
Full-Day Pattern Tour Models

The full-day pattern tour models were calibrated by converting tours to trips and comparing these to the 1996 MTC household survey of San Francisco and Bay Area residents, expanded to match the 1998 population. The MTC survey trips were summarized as only those weekday trips in the survey that had an origin and destination within San Francisco County. The comparison of trips was developed from the full-day pattern tour model by reallocating the following “trips” from each “tour” for comparison purposes. The 1996 MTC Survey was used because the number of trips within San Francisco County was very low in the 1990 MTC Survey because of under-reporting of trips that occurred in this survey. The under-reporting of trips is not consistent across time periods or across trip purposes, which may have influenced model estimation that was based on the 1990 MTC survey. The differences between trips by time period was confirmed with initial assignments by time periods using the un-calibrated San Francisco model that revealed the off-peak time periods were significantly under-estimated compared to traffic counts. The vast majority of under-reporting of trips in the 1990 MTC survey were in other tours. A comparison of the calibrated San Francisco model trips to the 1996 MTC survey by tour type and time of day shows that the all trips by tour type and by time of day are within +/- 10 percent compared to the 1996 MTC survey.

Trip rates per household were compared by trip purpose and time of day. Trip rates overall are similar, but the trips per household by trip purpose are quite different. The San Francisco model differentiates between trips to work or school with an intermediate stop from those without an intermediate stop and thus has fewer trips identified as work or school trips and many more trips identified as non-home-based. The comparison of trip rates across time period is reasonable, except that early AM and evening time periods are somewhat underestimated compared to the MTC survey. This is most likely a result of the model estimation process, which was based on the 1990 MTC survey that showed significantly fewer trips in these time periods.

Destination (Primary and Intermediate Stop) Choice Models

The destination choice models were calibrated against the 1990 MTC survey data for primary destinations by purpose and trip length frequency distributions. The results reflect very reasonable allocation of destinations among four areas of the City and those destinations located outside the City. Another evaluation of work locations is the estimate of employment that results from the work location model compared to actual employment by neighborhood. Because some of these data were not actually observed, these results were considered reasonable when compared to estimated values by neighborhood. The biggest differences were the two neighborhoods in the Core business district, which were underestimating employment, but calibration results also show that the destinations in the core are within three percent for each tour type and are actually overestimated in these results.

The destination choice model was also calibrated by comparing trip length and duration frequency distributions. The observed trip lengths are derived from the 1990 MTC survey and reported as the average time and distance to/from the primary destination. These results
show reasonable average trip lengths for all tour types. Trip duration frequency distributions were evaluated to determine reasonable by tour purpose. Observed and estimated values of trip duration by travel time increment reflect reasonable comparisons.

The validation of the intermediate stop choice model was challenging because similar models of destination choice have not included separate validation of the intermediate stop choice component for comparison. The validation test was to review the total tour length by tour purpose compared to the observed values. Distance was selected as the primary validation test for this model to isolate the location of the destination from the congestion effects during a particular time period. The results of this validation test are that both work and other tours are over-estimated slightly by the model, while work-based tours are under-estimated. Additional calibration adjustments to try and reconcile these differences were not pursued because further adjustments would have negatively impacted the results of the highway assignments by time period.

Mode Choice (Tour and Trip) Models

The tour and trip mode choice models were calibrated by tour purpose. Alternative-specific constants for each mode were adjusted to match observed modal shares from the 1990 MTC Household Survey. The structure of the activity-based models require that tour models are calibrated first to match tours by mode and market segment, then trip models are calibrated to match trips by trip mode and tour mode. The trips resulting from applying the calibrated alternative-specific constants were then assigned to highway and transit networks and compared to observed traffic counts and transit boardings by mode. The calibration results for tour and trip modes show a very close match between estimated and adjusted observed tours and trips by mode and purpose.

Initially, estimated transit boardings were discovered to be much higher than observed boardings, particularly for local bus and MUNI Metro transit modes. There are four possible reasons for the transit over-estimation; there may be too many trips generated by the pattern models (too many trips going in to mode choice); the transfer rate may be too high; the calibration targets observed in the 1990 MTC survey may be incorrect; or, the observed transit boardings may be too low.

A comparison of estimated versus observed traffic volumes on the highway network confirmed that the number of trips generated by the pattern models was reasonable when compared to independent estimates of travel. An analysis of the estimated transfer rates also confirmed that the number of estimated transfers for San Francisco residents is reasonable. Therefore, it was concluded that either the transit calibration target values generated from the household survey were too high or the observed transit boardings are low. Because the transit boardings are calculated annually by MUNI, they were held constant and both the observed and estimated transit shares were adjusted to better match boardings.
DATA

The SFCTA DataMart includes data and reports of interest to the technical as well as general community. SFCTA maintains this information as part of ongoing transportation planning activities. [Disclaimer: This data should be used for planning purposes only.]

DATAMART CATEGORIES:

- SF-CHAMP Model Documents and Data
- Statistics about San Francisco.
- Survey Data and Reports.
- Geographic Information System (GIS) maps and data.

For modeling and/or GIS related information, please send an email to data@sfcta.org.

The Transportation Authority does not collect traffic counts nor maintain the City's GIS database.

Please contact MTA (http://www.sfmta.com/cms/rtraffic/trafficrelatedindx.htm) for traffic counts and datasci.org (http://datasci.org/) for GIS files for the GIS database.
SF-CHAMP 5 - FROGGER - San Francisco's Newly-updated Travel Model
Show the geometric expansion of years x #projects x version

Don’t want to spend a ton recoding the same project, exactly the same way, unnecessarily
People are very error-prone and often we had to re-run scenarios b/c of minor network coding inconsistencies (not even nec. Errors)
Dependencies need to be explicitly represented somewhere, as opposed to building a BRT (in the transit files) w/out the bus lane (in the highway files)
Executive Summary
Transportation Impact Analysis Guidelines – Update
HEARING DATE: SEPTEMBER 28, 2017

Project Name: Transportation Impact Analysis Guidelines for Environmental Review – Update
Staff Contact: Manoj Madhavan, (415) 575-9095
manoj.madhavan@sfgov.org
Reviewed by: Wade Wietgrefe, (415) 575-9050
wade.wietgrefe@sfgov.org
Recommendation: None – Informational Only

PURPOSE OF HEARING:
The Planning Department uses the Transportation Impact Analysis Guidelines for assessing project's transportation impacts as part of the California Environmental Quality Act. The department is undergoing comprehensive updates to the guidelines, which the department last updated in 2002. The purpose of this informational hearing is to provide an understanding on the transportation topics within the guidelines, a brief overview of the update, status of the update, feedback sought, and the anticipated outcomes and schedule.

The public can find more information and sign up to receive notifications from the department about updates here: http://sf-planning.org/transportation-impact-analysis-guidelines-environmental-review-update#resources.

THE WAY IT IS NOW:
The Environmental Planning division within the Planning Department reviews projects for potential impacts on the environment, a process known as environmental review. The Planning Department conducts environmental review pursuant to the California Environmental Quality Act (CEQA). As part of environmental review, the Planning Department reviews background technical studies, such as transportation impact studies, to assess a project’s effects on the physical environment.

These background technical studies support the conclusions of the environmental impact evaluation and guide decision-makers during project approval. To assist in the preparation of transportation impact studies, the Planning Department provides to consultants and city staff a guidance document, the Transportation Impact Analysis Guidelines. The Planning Department periodically updates the guidelines, with the last update in 2002.

The current guidelines updated and revised the Guidelines for Environmental Review: Transportation Impacts (July, 1991) and Interim Transportation Impact Analysis Guidelines for Environmental Review (January 2000). The current guidelines cover the following transportation topics (in the order presented in the guidelines):
Executive Summary

Hearing Date: September 28, 2017

Transportation Impact Analysis Guidelines for Environmental Review – Update

- Traffic
- Transit
- Parking
- Pedestrian
- Bicycle
- Freight Loading and Service
- Passenger Loading
- Construction

To assess these impacts, the department estimates how many trips people in newer developments may take, the ways they travel, and their common destinations based on the findings of the Citywide Travel Behavior Survey - Employees and Employers (May, 1993); the Citywide Travel Behavior Survey - Visitor Travel Behavior (August, 1993); revolving five-year estimates from US Census, American Community Survey data; San Francisco County Transportation Authority San Francisco Chained Activity Model, which is based upon, among other sources, observed behavior from California Household Travel Survey (2010-2012), and major San Francisco transportation studies.

The guidelines are just that. The Planning Commission does not formally adopt the guidelines. The department may use the guidelines for multiple projects, but the department has discretion on applying specifics within the guidelines on a project by project basis. The guidelines provide basic details regarding methodologies and standards, but individual transportation study scopes of work are required to provide a level of detail tailored to fit the size and complexity of transportation issues associated with particular projects. Once the department approves a scope of work, the specific direction contained within that scope will provide a more precise focus than that which appears in the guidelines.

Since 2002, the department has instituted various updates to the conditions, data, and methodology within the guidelines. Records of these updates exist in various materials. One substantial example of updates that occurred was a March 2016 Planning Commission resolution that removed automobile delay from CEQA and added vehicle miles traveled as a transportation criterion. Since that time, the state has not issued subsequent guidance and the department has taken a leadership role in working with other jurisdictions on updates to their own transportation criteria. The state also changed the CEQA Guidelines to remove parking, by itself, as a significant impact under CEQA.

Also since that time, San Francisco has experienced changes in the demographics of the population, the types of new jobs, and the cost of housing, among other variables that affect travel behavior. Some of these changes create greater constraints on our transportation systems, including more competition for curb space. One of the major changes has been with emerging mobility services and technologies that have changed the way some people travel (using transportation network companies such as Uber and Lyft) and interact with goods (home deliveries). These changes also affect the percentages of how people travel (known as mode splits in the transportation analysis methodology). For example, we understand anecdotally that people may be shifting from using their own vehicles or transit to instead use transportation network companies such as Uber and Lyft.
Executive Summary  
Hearing Date: September 28, 2017

THE WAY IT WOULD BE:
The department is in the midst of updating the guidelines comprehensively. The purpose of the update is to achieve high quality deliverables, meaningful analysis, efficient reviews, and better project outcomes through clear standards, methodology, and criteria; understandable, transparent, and predictable process; updated mitigation measures, designs, outcomes, and policies; user-friendly figures; and illustrative examples of project analysis.

To address some of the changes since 2002 described in earlier paragraphs, San Francisco has undertaken a substantial amount of planning and policy work the last 15 years. For example, the San Francisco Municipal Transportation Agency was only three months old when the department last updated the guidelines; now the SFMTA includes a planning division. Over these years, interagency coordination to address issues has also improved. This includes coming together on things like transportation ordinances; developing land use and transportation area plans together; creating an inter-agency team that reviews projects compliance with the better streets plan; and embarking on a long-range transportation vision for San Francisco. Some of these planning and policies changes have affected the CEQA transportation review process. For example, our analysis has placed greater emphasis on safety, in reaction to San Francisco’s Vision Zero commitments. On the other hand, the work of these agencies and some of these policies result in fewer projects with significant transportation impacts and sometimes avoid them altogether. Therefore, the department is focusing the guidelines updates on addressing CEQA issues and not focusing on other issues that San Francisco can better address through policies, programs, and projects.

Potential Updates
This update may change process for transportation review, thresholds of significance, and analysis methodology concerning transportation impacts. It may also affect the transportation review process. At this point in time, staff is considering the following substantive updates to the following topics (in the order the department will present the topics in the guidelines):

- Process – scoping out topics from transportation review earlier in the process based upon the characteristics of the project, site, and surroundings (e.g., through a checklist)
- Walking/Accessibility– Assessing the need to conduct a quantitative capacity analysis and update definitions and examples of hazards and accessibility impediments.
- Bicycling– Assessing the need to update definitions and examples of hazards and accessibility impediments.
- Transit – Assessing the need to conduct a quantitative capacity analysis and revisiting the need, methodology and thresholds for transit delay.
- Emergency Access – Update definitions and examples of inadequate emergency access.
- Loading – Refine estimates of passenger and commercial loading demand, attempting to account for rise in for-hire vehicles and e-commerce deliveries.
- Vehicle Miles Traveled/Induced Auto Travel – Potential quantification of the relationship between parking supply and induced automobile travel.
- Traffic Hazards – Update definitions of types of traffic hazards as well and standards that can be implemented to potentially avoid traffic hazards (which may be incorporated into walking/accessibility and bicycling).
- Construction – Consideration of the effects of excavation on overall project construction and the resulting duration/intensity of construction phases.
Executive Summary
Hearing Date: September 28, 2017

- Parking – Further updates that reflect Senate Bill 743, including potentially a checklist or map-based approach for when projects will not require a parking demand and supply estimate and secondary effect analysis.

PROCESS
For this effort, the department is undertaking a few different efforts to inform the updates, as described below.

Travel Demand
Substantial data collection and analysis is currently underway, primarily at newer development sites. This data collection will result in the creation of refined estimates of how many trips people in newer developments take, the ways they travel, and their common destinations.

The department contracted with a transportation consulting firm, Fehr & Peers, to develop a methodology for collecting data and updating the travel demand methodology used in the guidelines. Fehr & Peers has collected the following data and are in the process of analyzing and interpreting this data in order to update:

- The number of trips people in newer developments take using 24-hour person counts using cameras at all access points to 81 sites across San Francisco (including 19 office, 11 hotel, 30 retail, and 22 residential sites);
- The estimates of passenger and commercial loading demand, using 24-hour time lapse recordings (5-minute resolution) at one designated loading zone for 70 sites; and
- The way people travel (using transit, car, bike etc.) and their destinations, using PM peak period (3PM – 7PM) intercept surveys (i.e., by intercepting people to ask questions) at 72 sites.

The department will review the results of the analysis and determine what estimates to incorporate into the guidelines update or whether the department or others will need to collect additional data to provide such estimates.

Kick-Off Meeting and Survey
The department held a kick-off meeting for the guidelines update on July 27, 2017. We invited several local and regional government agencies (i.e., the SF Fire Department, SF Police Department, SF Municipal Transportation Agency, SF Public Works, SF Public Utilities Commission, SF Department of Public Health, SF Office of Community Investment and Infrastructure, University of California – SF, Mayor’s Office of Disability and Mayor’s Office and Community and Workforce Development, SF County Transportation Authority, Caltrans, BART, Caltrain, SamTrans, and AC Transit) and environmental planning and transportation planning consultants.

At the meeting, the department presented an overview of the guidelines update and a topic by topic technical breakdown of current guidelines and what the department is considering updating in terms of analysis methodology and thresholds of significance. Following the presentation, attendees could attend breakout sessions for each topic to provide technical approach feedback. We also followed up with a survey soliciting general feedback, as well as adding questions soliciting specific technical feedback on each topic based on what we heard from attendees at the kick-off meeting. We received approximately 30 responses to the follow-up survey when we closed the feedback period on August 25, 2017.
Executive Summary

Hearing Date: September 28, 2017

From the kick-off meeting and survey, we received feedback about some recurring themes, which are themes we regularly encounter from members of the public commenting on CEQA documents: how to analyze the impacts of Transportation Network Companies (e.g., loading and vehicle miles traveled), loading issues, particularly related to people with disabilities and senior citizens, and project’s compliance with various codes and policies.

Planning Commission Hearing

One of the basic purposes of CEQA is to inform decision makers and the public about the potential, significant environmental effects of activities before decision makers decide to approve or deny a project. The decision making process since 2002 has likely become more complicated. However, the fundamental purposes of CEQA have not changed. Therefore, a goal of the outcomes from the guidelines update is to provide informative analysis to the Planning Commission and the public regarding the CEQA transportation impacts of projects. For this hearing, we are soliciting feedback on how the department can do just that. Members of the public can provide feedback at the Planning Commission Hearing or by sending an email to CPC.TransportationReview@sfgov.org until by 5 PM on October 20, 2017.

Future

Based upon feedback from the Planning Commission at this hearing, the public by October 20, and earlier outreach efforts, the department will summarize feedback received into a memorandum outlining which topics the department is considering as part of the guidelines update. The department will categorize feedback not related to CEQA and will forward that feedback to agencies who may be responsible for addressing it. In addition, the department will continue to engage on the guidelines updates consultants (e.g., brownbags) and San Francisco agencies, particularly the San Francisco Municipal Transportation Agency and San Francisco County Transportation Authority, and regional and state transportation agencies as relevant.

The department will issue a series of memorandums in 2017 and 2018 that provide updates to topics within the guidelines. Staff will be posting these memorandums, as well as other relevant materials, to this webpage: http://sf-planning.org/transportation-impact-analysis-guidelines-environmental-review-update#resources.

REQUIRED COMMISSION ACTION

Informational item. No action required.
WHAT HAS CHANGED SINCE 2002

BETWEEN 1/1/2003 AND 1/1/2017

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<td>Bay Area Population</td>
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Source: California Dept. of Finance


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<tr>
<td>Leisure/ Hospitality</td>
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</table>

Source: SF City Scorecard
TRANSPORTATION NETWORK COMPANIES (TNCs)

TNCs are vehicles!

Icons Source: The Noun Project
Data Collection Sites
- Hotel (11)
- Office (19)
- Residential (22)
- Retail (30)

Superdistricts
- SD1
- SD2
- SD3
- SD4
"TNCs and Congestion" report provides the first comprehensive analysis of how Transportation Network Companies Uber and Lyft collectively have affected roadway congestion in San Francisco.

Key findings in the report:

The report found that Transportation Network Companies accounted for approximately 50 percent of the rise in congestion in San Francisco between 2010 and 2016, as indicated by three congestion measures: vehicle hours of delay, vehicle miles travelled, and average speeds.

Employment and population growth were primarily responsible for the remainder of the worsening congestion.

Major findings of the TNCs & Congestion report show that collectively the ride-hail services accounted for:

- 51 percent of the increase in daily vehicle hours of delay between 2010 and 2016;
- 47 percent of the increase in vehicle miles travelled during that same time period; and
- 55 percent of the average speed decline on roadways during that same time period.

On an absolute basis, TNCs comprise an estimated 25 percent of total vehicle congestion (as measured by vehicle hours of delay) citywide and 36 percent of delay in the downtown core.

Consistent with prior findings from the Transportation Authority’s 2017 TNCs Today report, TNCs also caused the greatest increases in congestion in the densest parts of the city - up to 73 percent in the downtown financial district - and along many of the city’s busiest corridors. TNCs had little impact on congestion in the western and southern San Francisco neighborhoods.

The report also found that changes to street configuration (such as when a traffic lane is converted to a bus-only lane), contributed less than 5 percent to congestion.
TNCs & Congestion
Executive Summary

Congestion in San Francisco worsened between 2010 and 2016. The Transportation Authority's Congestion Management Program monitoring indicates that average AM peak arterial travel speeds decreased since 2009 by -26%, while PM peak arterial speeds have decreased by -27% during this same time period. Vehicle hours of delay on the major roadways increased by 40,000 hours on a typical weekday, while vehicle miles travelled on major roadways increased by over 630,000 miles on a typical weekday.

During this period significant changes occurred in San Francisco. Roadway and transit networks changed, including the implementation of transit red carpet lanes, the expansion of the bicycle network, and the opening of the Presidio Parkway (rebuilt Doyle Drive). San Francisco added 70,000 new residents and over 150,000 new jobs, and these new residents and workers added more trips to the City's transportation network. Finally, new mobility alternatives emerged, most visibly TNCs.

In recent years, the vehicles of transportation network companies (TNCs) such as Uber and Lyft have become ubiquitous in San Francisco and many other major cities. Worldwide, the total number of rides on Uber and Lyft grew from an estimated 190 million in 2014 to over 2 billion by mid-2016 (1). In San Francisco, this agency (the San Francisco County Transportation Authority or SFCTA) estimated approximately 62 million TNC trips in late 2016, comprising about 15% of all intra-San Francisco vehicle trips and 9% of all intra-San Francisco person trips that fall (2).

The rapid growth of TNCs is attributable to the numerous advantages and conveniences that TNCs provide over other modes of transportation, including point-to-point service, ease of reserving rides, shorter wait times, lower fares (relative to taxis), ease of payment, and real-time communication with drivers. The availability of this new travel alternative provides improved mobility for some San Francisco residents, workers and visitors, who make over one million TNC trips in San Francisco every week, though these TNC trips may conflict with other City goals and policies.

The purpose of this report is to identify the extent to which TNCs contributed to increased roadway congestion in San Francisco between 2010 and 2016, relative to other potential contributing factors including employment growth, population growth, and changes to the transportation system. This information is needed to help the Transportation Authority fulfill our role as the county Congestion Management Agency and inform our policy and planning work. As the Congestion Management Agency for San Francisco, the Transportation Authority is required by state law to monitor congestion and adopt plans for mitigating traffic congestion that falls below certain
thresholds. The report is also intended to inform the Transportation Authority board which is comprised of the members of the San Francisco Board of Supervisors, as well as other state and local policy-makers, and the general public, on the relationship between TNCs and congestion in San Francisco.

This document:
- Identifies common measures of roadway congestion;
- Discusses factors that contribute to roadway congestion; and
- Quantifies the relative contributions of different factors, including population, employment, road network changes and TNCs, to observed changes in congestion in San Francisco between 2010 and 2016, by location and time of day.

The report utilizes a unique TNC trip dataset provided to the Transportation Authority by researchers from Northeastern University in late 2016, as well as INRIX data, a commercial dataset which combines several real-time GPS monitoring sources with data from highway performance monitoring systems. These data are augmented with information on network changes, population changes, and employment changes provided by local and regional planning agencies, which are used as input to the Transportation Authority’s activity-based regional travel demand model SF CHAMP.

DO TNCs AFFECT CONGESTION?

Yes. When compared to employment and population growth and network capacity shifts (such as for a bus or bicycle lane), TNCs accounted for approximately 50% of the change in congestion in San Francisco between 2010 and 2016, as indicated by three congestion measures: vehicle hours of delay, vehicle miles travelled, and average speeds. Employment and population growth—encompassing citywide non-TNC driving activity by residents, local and regional workers, and visitors—are primarily responsible for the remainder of the change in congestion.

- Daily vehicle hours of delay (VHD) on the roadways studied increased by about 40,000 hours during the study period. We estimate TNCs account for 51% of this increase in delay, and for about 25% of the total delay on San Francisco roadways and about 36% of total delay in the downtown core in 2016, with employment and population growth accounting for most of the balance of the increased in delay.
- Daily vehicle miles travelled (VMT) on study roadways increased by over 630,000 miles. We estimate TNCs account for 47% of this increase in VMT, and for about 5% of total VMT on study roadways in 2016.
- Average speeds on study roadways declined by about 3.1 miles per hour. We estimate TNCs account for 55% of this decline.
WHEN DO TNCS AFFECT CONGESTION?

During the AM peak, midday, and PM peak periods, TNCs cause between 43% and 48% of the increased delay and account for about 20% of total delay during these time periods. Employment growth and population growth combined account for just over half of the increased delay. In the evening time period, TNCs are responsible for 69% of the increased delay, and for about 40% of the total delay.

Similarly, during the AM peak, midday, and PM peak periods, TNCs cause about 40% of the increased vehicle miles travelled, while employment and population growth combined are responsible for about 60% of the increased VMT. However, in the evening time period, TNCs are responsible for over 61% of the increased VMT and for about 9% of total VMT.

TNCs are responsible for about 45%-55% of the decline in average speed during most times of day, and are responsible for 75% of the declines in speed during the evening time period.
WHERE DO TNCs AFFECT CONGESTION?

TNCs increase congestion throughout the city, but their effects are concentrated in the densest parts of the city, and along many of the city’s busiest corridors, as shown in Figure 4. In Supervisorial District 6, TNCs add almost 6,000 daily hours of delay, accounting for about 45% of the increased delay, and 30% of total weekday delay. In District 3, TNCs add almost 5,000 daily hours of delay, accounting for almost 75% of the increased delay and about 50% of total delay. TNCs are responsible for approximately 40%-60% of increases in VMT in many areas of the city. District 6 and District 10 have experienced the greatest increases in VMT between 2010 and 2016, and TNCs account for 41% and 32% of the increases in these districts, respectively.
What Factors Affect Congestion San Francisco?

POPULATION AND EMPLOYMENT

Population and employment changes can directly affect roadway congestion. Increases in population will lead to increases in trip-making as people seek to participate in activities such as working, shopping, and going to school. Depending on travelers’ choices of travel modes (such as walking, biking, taking transit, or driving), roadway motor vehicle congestion may be affected. Between 2010 and 2016, the population of San Francisco increased 8.8% from approximately 805,000 people to 876,000 (3). While about half of San Francisco trips are by walking, transit, and biking, a significant share of trips involve private vehicles, likely leading to increased congestion. Similarly, increases in employment lead to total travel as more people go to work. Between 2010 and 2016, employment in San Francisco increased significantly (28.4%) from approximately 545,000 jobs to over 700,000 jobs (4). According to the Census, approximately 48% of commute trips to, from or within San Francisco were by automobile.

NETWORK CAPACITY

Changes to network capacities affect roadway congestion. Increases in roadway capacity may alleviate motor vehicle congestion, at least in the short term, while decreases in roadway capacity may increase congestion. The analyses in this paper capture capacity changes between 2010 and 2016 and therefore encompass network capacity changes such as the rebuilding of Doyle Drive and medium-term changes such as the reallocation of right-of-way to transit red carpet lanes and bicycle lanes. To a more limited extent, the analyses could reflect short-term changes in capacity, for example the effect on congestion of construction-related, permitted lane closures that may temporarily reduce capacity for a number of days or hours. However, there is no data on unpermitted short-term capacity reductions associated with construction, delivery or other activities, and thus they are not considered in this analysis. In addition to roadway network changes, changes to transit network capacities may influence roadway congestion by inducing people to shift modes or take new trips, and are included in this analysis.

TNCs

As the TNCs Today report documents, TNCs comprise a significant share of intra-San Francisco travel. TNCs may decrease congestion by inducing mode shifts to more sustainable modes by providing first- and last-mile connections to transit services, or by reducing auto ownership levels and thus incentivizing people to make more transit, bike and walk trips. In addition, higher TNC
vehicle passenger occupancies resulting from “ridesplitting” where TNCs are shared concurrently could, in theory, reduce the number of vehicles trips if they are replacing a trip that would otherwise be in a vehicle with fewer occupants. Conversely, TNCs may increase congestion if their convenience causes a walk, transit, or bike trip to shift to a TNC vehicle trip. According to recent studies, between 43% and 61% of TNC trips substitute for transit, walk, or bike travel or would not have been made at all (5,6,7,8). TNC passenger pick up and drop off activity may also result in increased congestion by disturbing the flow in curb lanes or traffic lanes. Finally, out-of-service miles (or “deadhead” miles) resulting from TNCs repositioning themselves to more optimal locations for getting new passengers, or from driving to pick up passengers who have reserved rides (whether single passenger or shared), also increases the amount of vehicular traffic and congestion.

OTHER FACTORS
Given the rapid pace of technological change in the transportation sector, other factors may also be contributing to changes in congestion. For example, increased use of online shopping and delivery services might exacerbate roadway congestion due to an increase in delivery vehicle trips and loading durations. Conversely, if these deliveries are in place of multiple vehicle trips that would have been made by individuals, they may reduce roadway congestion. New emerging mobility alternatives such as dockless shared bikes and scooters may reduce congestion if they induce mode shifts away from vehicle trips, though if these trips are shifted from transit, walk, or bike their effect on congestion would likely be minimal.
EMPIRICAL ANALYSIS

This study is structured as a before-and-after assessment between 2010 conditions when TNC activity was negligible and 2016 conditions when it was significant. We derived measures of roadway conditions in both years from GPS-based speed data licensed from INRIX as previously described. We estimated the relationship between the change in TNC activity and the change in roadway travel time, assuming zero TNCs in 2010, and incorporating a 2016 "counterfactual" scenario in which TNCs do not exist. We do this using a fixed-effects panel data regression model (9). The fixed-effects models estimate coefficients based on the change between 2010 and 2016 conditions. There is precedent for using both before-and-after analysis and panel data models in transportation analysis, including to study changes in congestion (10), TNC growth (11), and the effects of new technology (12).

We converted the observed travel times to implied volumes using volume-delay functions (VDFs). This time-implied volume is the model's dependent variable, and the conversion ensures that it is linearly related to the background volumes and TNC volumes. There is one observation for each directional roadway segment, for each time-of-day, with data in 2010 and in 2016 for each observation. To control for road and transit network changes, as well as changes in socioeconomic conditions, the model includes the background traffic volume as a variable, as estimated by SF-CHAMP version 5.2. Because SF-CHAMP version 5.2 does not account for TNCs, this background traffic reflects the expected traffic volume change with no TNCs. The model also includes measures of TNC activity for each observation, with those measures set to zero in 2010. Table 1 shows the model estimation results.

The estimated parameter on the SF-CHAMP background volume is approximately 0.92, not significantly different than 1. This is logical, because we expect that each vehicle added in background traffic should have an effect on congestion of adding about 1 vehicle to the implied volume. The Presidio Parkway scaling factor accounts for major construction that was underway on those links in 2010 but not 2016.

We include two measures of time and location-specific TNC activity. The TNC volume parameter measures net effect of TNCs. If TNCs purely substitute for other car trips, the estimated TNC parameter should be 0 as they substitute for other vehicles already counted in the background volumes. Negative values would be consistent with TNCs reducing traffic, while a value of positive 1 would be consistent with TNCs purely adding itself to background traffic. The estimated coefficient of 0.69 can be interpreted as meaning that TNCs do not purely add to traffic through induced travel or shifts from non-vehicular modes.

<table>
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<th>Parameter Estimates</th>
<th>Parameter</th>
<th>Standard Error</th>
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| Model Statistics |
|------------------|----------------|
| Number of Entities | 7081 |
| Number of Time Periods | 2 |
| R-squared between groups | 0.5819 |
| R-squared within groups | 0.2985 |
Conclusion

Congestion in San Francisco worsened between 2010 and 2016. The Transportation Authority’s Congestion Management Program monitoring indicates that average AM peak arterial travel speeds decreased since 2009 by -26%, while PM peak arterial speeds have decreased by -27% during this same time period. Vehicle hours of delay on the study roadways increased by 40,000 hours on a typical weekday, while vehicle miles travelled on study roadways increased by over 600,000 miles on a typical weekday. In addition, travel times have become less reliable.

During this period significant changes occurred in San Francisco. Roadway and transit networks changed, including the rebuilding of Doyle Drive, the implementation of transit red carpet lanes, and the expansion of the bicycle network. San Francisco added 70,000 new residents and over 150,000 new jobs, and these new residents and workers add more trips to the city’s transportation network. Finally, new mobility alternatives emerged, most visibly TNCs. TNCs have become an important travel option in San Francisco.

By late 2016, TNCs were estimated to generate over one million intra-San Francisco vehicle trips in a typical week, representing approximately 15% of all intra-SF vehicle trips, and the number and share of TNC trips in San Francisco has undoubtedly increased since 2016. The rapid growth of TNCs is attributable to the numerous advantages and conveniences that TNCs provide over other modes of transportation, and the availability of this new travel alternative has undeniably provided improved mobility for many San Francisco residents and workers.

TNC vehicle trips contribute significantly to increased congestion. After accounting for the effects of increased employment, increased population, and transportation network changes, TNCs are estimated to cause 51% of the increase in vehicle hours of delay, 47% of the increase in vehicle miles traveled, and 55% of the decline in speeds citywide between 2010 and 2016.

It is important to note that the effect of TNCs on congestion varies considerably by time-of-day. During most of the day, approximately 40% to 50% of the increase in vehicle hours of delay is attributable to TNCs, but in the evening, almost 70% of the increase in vehicle delay is due to TNCs. Similarly, during most of the day approximately 40% on the increase in vehicle miles traveled is due to TNCs, but in the evening TNCs account over 60% of increased VMT. Speeds declined by about 2 to 3 miles per hour during most of the day, with TNCs accounting for about 45% to 55% of this decrease. However, evening speeds declined by almost 4.5 miles per hour on study roadways, and TNCs are estimated to cause 75% of this decrease.

The effects of TNCs on congestion also varies significantly by location. The greatest increases in vehicle hours of delay occurred in Supervisorial Districts 3, 5 and 6, with over 70% of the increase in delay in Districts 3 and 5 due to TNCs, and about 45% of the increase in delay in District 6 due to TNCs. Vehile miles traveled increased most significantly in Districts 6 and 10, with TNCs accounting for 41% and 32% of the increased VMT in these districts, respectively. While the total increase in VMT in Districts 3 and 5 were less than observed in other districts, the share of this increase attributable to TNCs in these districts was between 65% and 75%, the highest in the city. Average speeds have declined in all districts, with the greatest relative declines occurring in Districts 3, 6, 6 and 9.
Disruptive Transportation: The Adoption, Utilization, and Impacts of Ride-Hailing in the United States

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Keywords: shared mobility, carsharing, ridesharing, ride-hailing, Uber, Lyft, travel behavior

RECOMMENDATION CITATION:
Among adopters of prior carsharing services, 65% have also used ride-hailing. More than half of them have dropped their membership, and 23% cite their use of ride-hailing services as the top reason they have dropped carsharing.

**Vehicle Ownership and Driving**

- Ride-hailing users who also use transit have higher personal vehicle ownership rates than those who only use transit: 52% versus 46%.
- A larger portion of “transit only” travelers have no household vehicle (41%) as compared with “transit and ride-hail” travelers (30%).
- At the household level, ride-hailing users have slightly more vehicles than those who only use transit: 1.07 cars per household versus 1.02.
- Among non-transit users, there are no differences in vehicle ownership rates between ride-hailing users and traditionally car-centric households.
- The majority of ride-hailing users (91%) have not made any changes with regards to whether or not they own a vehicle.
- Those who have reduced the number of cars they own and the average number of miles they drive personally have substituted those trips with increased ride-hailing use. Net vehicle miles traveled (VMT) changes are unknown.

**Ride-hailing and Public Transit Use**

- After using ride-hailing, the average net change in transit use is a 6% reduction among Americans in major cities.
- As compared with previous studies that have suggested shared mobility services complement transit services, we find that the substitutive versus complementary nature of ride-hailing varies greatly based on the type of transit service in question.
- Ride-hailing attracts Americans away from bus services (a 6% reduction) and light rail services (a 3% reduction).
- Ride-hailing serves as a complementary mode for commuter rail services (a 3% net increase in use).
- We find that 49% to 61% of ride-hailing trips would have not been made at all, or by walking, biking, or transit.
- Directionally, based on mode substitution and ride-hailing frequency of use data, we conclude that ride-hailing is currently likely to contribute to growth in vehicle miles traveled (VMT) in the major cities represented in this study.
EXHIBIT S
TNCs Today

A Profile of San Francisco Transportation Network Company Activity
Executive Summary

Transportation network companies (TNCs) such as Uber and Lyft are an increasingly visible presence on San Francisco streets, but there has been no comprehensive data source to help the public and decision-makers understand how many TNC trips occur in San Francisco, how much vehicle travel they generate, and their potential effects on congestion, transit ridership, and other measures of system performance. The California Public Utilities Commission (CPUC) regulates TNCs and requires data reporting by TNCs, but will not share these data with local jurisdictions and the public.

The purpose of this report is to provide information on TNC activity in San Francisco, in order to help the San Francisco County Transportation Authority fulfill its role as the Congestion Management Agency for San Francisco County. The report is also intended to inform the Transportation Authority board which is comprised of the members of the San Francisco Board of Supervisors, as well as state and local policy-makers in other arenas, and the general public, on the size, location and time-of-day characteristics of the TNC market in San Francisco.

The information presented is a profile of estimated local TNC usage (trips made entirely within San Francisco) from mid-November to mid-December of 2016. The TNC data was originally gathered by researchers at Northeastern University from the Application Programming Interfaces (APIs) of Uber and Lyft and then shared with the Transportation Authority. The Transportation Authority’s data team cleaned and analyzed the data for presentation here.

While this document provides a broad range of descriptive information about TNC trips, it does not evaluate the effects of these TNC trips on the performance of the San Francisco transportation system, nor does it explain TNC customer trip purposes, demographic characteristics, or longer term effects on vehicle ownership and residential and employment location. This report does not identify the extent to which TNCs affect congestion. Many factors contribute to increased congestion—population and employment growth, construction activity, increased delivery and other transportation services, and TNCs.

Subsequent reports and studies by the Transportation Authority and others will address these important analytic and policy topics in depth, including the effects of TNCs on roadway congestion, public transit operations and ridership, disabled access, and equity.

The report is structured around six primary questions:

HOW MANY TNCs OPERATE IN SAN FRANCISCO TODAY?

- The San Francisco Treasurer’s Office estimates that 45,000 Uber and Lyft drivers may operate in San Francisco, and in 2016 sent notices requiring them to register their business with the city.
- Almost 21,000 drivers are estimated to have complied with the requirements to register their business with the city. Of that number, only 29% are San Francisco residents.
- On a typical weekday, over 5,700 TNC vehicles operate on San Francisco streets at peak times, with the peak period occurring between 6:30pm and 7:00pm. On Fridays, over 6,500 TNC vehicles are on the street during the peak of 7:30pm to 8:00pm. This is over 15 times the number of taxis on the street at these times of day.

HOW MANY TNC TRIPS ARE OCCURRING IN SAN FRANCISCO?

- On a typical weekday, TNCs make over 170,000 vehicle trips within San Francisco, which is approximately 12 times the number of taxi trips, and 15% of all intra-San Francisco vehicle trips. This represents a conservative estimate of total TNC trips in San Francisco because the study’s dataset does not include trips with a regional origin or destination.
- Assuming TNC occupancy rates are similar to taxi occupancy rates, it is estimated that at least 9% of all San Francisco person trips use TNCs.
WHEN ARE TNC TRIPS OCCURRING IN SAN FRANCISCO?

- Significant numbers of TNC vehicle trips occur on both weekdays and weekends, with the highest number on Fridays with over 222,500 trips, and the lowest number on Sundays with approximately 129,000 trips.
- On weekdays, TNC usage is concentrated during the AM and PM peak periods when congestion is greatest, and extends into the evenings on Friday. Saturday and Sunday TNC trips occur primarily in the afternoon and evening.

WHERE ARE TNC TRIPS OCCURRING IN SAN FRANCISCO?

- TNC trips are concentrated in the densest and most congested parts of San Francisco including the downtown and northeastern core of the city. At peak periods, TNCs are estimated to comprise 25% of vehicle trips in South of Market.
- TNC trips are concentrated on the busiest arterials, yet also operate extensively on neighborhood streets, including along major public transit lines.

HOW MANY VEHICLE MILES TRAVELED (VMT) DO TNCs GENERATE WITHIN SAN FRANCISCO?

- Intra-SF TNC trips generate approximately 570,000 vehicle miles of travel (VMT) on a typical weekday, comprising as much as 20% of intra-SF-only VMT, at least 6.5% of average total weekday VMT citywide, and may account for more than 10% of weekend VMT, primarily during the AM peak, PM peak, and early evening time periods. These estimates include both in-service and out-of-service vehicle miles.
- Approximately 20% of total TNC VMT are out-of-service miles. This is significantly lower than the more than 40% of taxi VMT that are out-of-service miles. The greater efficiency of TNCs is likely due to the higher number of TNC vehicles and more efficient technology.

DO TNCs PROVIDE A HIGH DEGREE OF GEOGRAPHIC COVERAGE THROUGHOUT THE ENTIRE CITY?

- TNCs provide broader service across the city than taxis, particularly in the western neighborhoods.
- TNCs provide fewer trips per population and employment in southern and southeastern areas of the city, which may reflect the presence of fewer TNC vehicles, or neighborhood preferences or demographics.

For more information, or to obtain a downloadable file of Transportation Authority processed data, visit the TNCs Today website at www.sfcta.org/tncstoday.
Introduction

Transportation network companies (TNCs) such as Uber and Lyft are visible presences on San Francisco’s streets, in both the downtown core as well as in the city’s neighborhoods. These companies allow people to use a smartphone app to request and pay for rides sourced from a pool of available drivers. These services are taxi-like in that they provide point-to-point transportation primarily in private vehicles. The success of TNCs in attracting rides in San Francisco and other cities reflects the high unmet demand for premium services and the extensive benefits they provide to users who can afford their services. Initially TNCs offered some distinct advantages over taxis including the ability to easily reserve a ride, the ability for both driver and passenger to contact each other and to know the location of the other using GPS, ease of payment, cheaper fares, shorter wait times, and more availability at all times of day due to a larger supply of vehicles. Taxis now offer some of these features, although the supply of taxis is still significantly smaller than TNCs, and taxi fares are higher.

The advantages of TNCs over taxis and other transportation modes are in part a result of the technological innovation of directly connecting travelers and drivers, but are also in part an outcome and reflection of the relatively light regulatory requirements under which TNCs operate, relative to taxis and other for-hire vehicles. The biggest difference between TNCs and other modes is the significantly lower barrier for drivers to enter the market. California state law grants municipalities the ability to regulate taxis, and in San Francisco, the taxi medallion system limits the number of taxi vehicles that can serve the city. In addition, taxis are subject to price controls, must provide access to all areas of the city, must provide service to people with disabilities, have greater insurance requirements, and are subject to driver background checks and vehicle inspections. In contrast, there is no limit on the number of TNCs that may operate on San Francisco streets, no price controls, no geographic service area requirements, minimal disabled access requirements, limited driver background checks and few vehicle inspection or driver training requirements (TRB 2015).

There is a perception that TNC vehicles now comprise a significant number of the vehicles on San Francisco streets, having increased rapidly since TNCs started operating in the city seven years ago. However, there has been little data to either confirm or refute this perception. The California Public Utilities Commission (CPUC), which regulates TNCs due to the inter-city, non-hail nature of the service they provide, requires TNCs to report to the CPUC an extensive set of information on service provision including where and when trips are starting and ending, the availability of disabled-accessible vehicles, traffic incidents, and hours and miles logged by drivers. However, the CPUC has refused to share these TNC data with San Francisco, stating that it is authorized to withhold official information if disclosure of the information is against the public interest (CPUC Letter to the Transportation Authority, 2017). However, recent SFMTA Travel Decisions Survey results indicate that TNCs are growing in significance as a share of overall San Francisco travel, doubling in mode share served between 2014 and 2015 (SFMTA 2014, SFMTA 2015). In addition, it has been noted that Uber reported an annual tripling of trips in San Francisco (TRB 2015). However, these data sources provide no reliable estimates of the true number of TNC trips occurring in San Francisco, where TNC trips are occurring, or when TNC trips are occurring.
The purpose of this report is to provide information on TNC activity in San Francisco, in order to help the San Francisco County Transportation Authority (Transportation Authority) fulfill its role as the Congestion Management Agency for San Francisco County. The report is also intended to inform the Transportation Authority board which is comprised of the members of the San Francisco Board of Supervisors, as well as state and local policymakers in other arenas, and the general public, on the size, location and time-of-day characteristics of the TNC market in San Francisco.

This document provides estimates of how many TNCs are operating in San Francisco during all times of day and days of week, imputes the number, location, and timing of intra-San Francisco TNC trips based on TNC driver trip acceptance information (referred to in this report as pick-ups) and TNC driver drop off information (referred to as drop-offs). The report estimates the amount of daily vehicle miles travelled (VMT) generated by TNCs, and contextualizes these relative to the other travel modes operating in San Francisco, including private vehicles, public transit, walking and biking. TNC trips between San Francisco and other counties (regional TNC trips) are not included in these estimates, and as a result these numbers represent a lower-bound estimate of the number of actual TNC vehicles and trips operating in San Francisco. Note that the data on which this report is based does not include any information on TNC trip purposes, travel party size, fares paid, traveler attributes such as gender, income, disability, mode choice shifts, or induced travel.

The information presented is a profile of local TNC usage in San Francisco from mid-November to mid-December of 2016, excluding dates around the Thanksgiving 2016 holiday. The TNC data was originally gathered by researchers at Northeastern University from the Application Programming Interfaces (APIs) of Uber and Lyft which show the locations of available vehicles to mobile apps, and then was shared with the Transportation Authority through a research collaboration over the past year. The other data referenced in the report come from a variety of sources including Caltrans, the San Francisco Municipal Transportation Agency (SFMTA), and the Transportation Authority’s SF-CHAMP travel demand model.

This document does not evaluate the near-term impacts of TNCs on the performance of the San Francisco transportation system, nor does it explain potential longer-term effects of TNC provision on vehicle ownership or residential and employment location.

This report does not identify the extent to which TNCs affect congestion. Many factors contribute to increased congestion—including population and employment growth, construction activity, increased delivery and other transportation services, and TNCs. Subsequent reports by the Transportation Authority through this project and the larger Emerging Mobility Services and Technology (EMST) policy framework and the Connect SF long-range planning process, both being undertaken in coordination with other City agencies, will address these important analytic and policy questions in depth.
Methodology

This research team developed and applied multiple procedures to estimate TNC trips within San Francisco. First, the team acquired data on TNC vehicle locations that was gathered from the Uber and Lyft APIs. The research team then cleaned this location data, removing unnecessary, anomalous, or redundant information. Finally, the team identified trips and imputed missing attributes.

DATA COLLECTION

In order to provide real-time information to drivers and passengers, Lyft and Uber expose certain data through public-facing APIs. This information includes nearby vehicle locations, estimated times-to-pickup, and sometimes, estimated costs. The data exposed through the APIs also includes, among other things, a vehicle identifier associated with a sequence of time-stamped coordinates, and the service types associated with that vehicle, such as UberX or UberPOOL. Sending a request to the API returns a text file response containing this information for the nearest available vehicles. When a vehicle becomes unavailable, either because the driver has turned off their app or they have accepted a ride request, the vehicle disappears from the datastream. Similarly, when the vehicle becomes available, either because the driver has turned on their app or they have completed a ride request, it reappears in the datastream. Researchers at Northeastern University implemented a systematic method for collecting this datastream such that it geographically covers all of San Francisco. The Northeastern University researchers collected information on vehicle locations every five seconds for approximately six weeks. The data collection methodology has no impacts on either drivers or riders.

DATA CLEANING

The research team collected data by sampling available TNC vehicles using a geographic grid that covers all of San Francisco. This sampling procedure means that any available Uber or Lyft vehicle may be detected by multiple sampling locations. Furthermore, because data is being collected almost continuously in time for each sampling location, the same vehicle will often appear repeatedly in the datastream for each individual sampling location. The first step in the data preparation process involved cleaning the information in the datastream. In addition, the raw data may at times contain anomalous data, which was also screened out to ensure the reasonableness of the GPS traces. The result was a set of unique GPS traces for each TNC vehicle.

TRIP IDENTIFICATION, TRIP MATCHING AND ATTRIBUTE IMPUTATION

Cleaning resulted in a set of unique "pre-trip" vehicle trajectories that reflect when a vehicle became available (due to the driver dropping off a passenger or starting a shift) and when the vehicle became unavailable (due to the driver accepting a passenger or ending a shift). Once pre-trips and pickup and drop-off locations were defined, "trips" were imputed by linking the pickup and trip drop-off locations. Lyft trips were created first because the Lyft API reveals a persistent vehicle identifier, with which it is possible to build an aggregate matrix of Lyft flows from pickup locations to dropoff locations by detailed time-of-day. This matrix of flows is used to estimate the vehicle miles traveled generated by TNCs. Uber's API does not have persistent identifiers that are necessary to connect pickup and dropoff locations, so the research team used the Lyft matrix of pickup and dropoff flows by travel analysis zone (TAZ) and time-of-day as a starting point, and then proportionally fitted the matrix to match Uber trip pickup locations and drop-off locations by time-of-day.

A unique aspect of the Uber and Lyft driver labor market is that drivers may drive for both services simultaneously. As a result, these driver vehicles may appear in both the Uber and Lyft datastreams. It is necessary to identify these "matched pre-trips" in order to avoid double-counting of TNC pre-trips and trips. Matched pre-trips were identified by comparing the start and end times of the pre-trips and selecting only those pre-trips whose start and end times both occurred within a limited time window, as well as selecting only pre-trips that traversed the same set of network links in the same sequence. The pre-trip (and associated trip) were then assigned to either Lyft or Uber, based on which pre-trip ended first, representing the first platform on which a driver accepted the trip.

For pre-trips, out of service travel times and distances could be calculated directly from the cleaned and processed datastream. For Lyft trips, trip travel times could be derived from the datastream. Because the datastream does not contain the information on the actual paths used by TNCs on trips, it was necessary to impute distances between observed pickup and dropoff locations using information from the Transportation Authority's SF-CHAMP model. For Uber trips, both travel times and distances were imputed from the model system.

DATA LIMITATIONS

It must be emphasized that the TNC information documented in this report does not represent direct observa-
HOW MANY TNC TRIPS ARE OCCURRING IN SAN FRANCISCO?

Two types of TNC trips were estimated: vehicle trips and person trips. The number of TNC vehicle trips is important because more vehicle trips generally leads to increased congestion and conflicts with other street users, while more person trips may indicate enhanced mobility. Again, only those trips with both pickup and drop-off location within San Francisco are considered in the following summaries.

“Vehicle trips” in Table 2 refers to movements by motor vehicles with origins and destinations entirely within San Francisco. Vehicles may carry different numbers of people, or may be public transit vehicles or taxis. Trucks are excluded. Approximately 170,000 TNC vehicle trips are estimated to occur within San Francisco during a typical weekday. This represents approximately 15% of all weekday vehicle trips that both start and end within the city, as shown in Table 2. There are approximately 12 times as many TNC trips as taxi trips during a typical weekday.

Table 2. Weekday Intra-SF Vehicle Trips by Mode

<table>
<thead>
<tr>
<th>MODE</th>
<th>VEHICLE TRIPS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Auto</td>
<td>940,000</td>
<td>83%</td>
</tr>
<tr>
<td>Public Transit Vehicle</td>
<td>11,000</td>
<td>1%</td>
</tr>
<tr>
<td>Taxi</td>
<td>14,000</td>
<td>1%</td>
</tr>
<tr>
<td>TNC</td>
<td>170,000</td>
<td>15%</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1,135,000</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
Person trips refers to movements by people with origins and destinations in San Francisco. Person trips are different than vehicle trips because person trips include walking and biking trips (which don’t require motor vehicles), and also because private vehicles, public transit vehicles and taxis may carry more than one person. For TNCs and taxis, vehicle trips were converted to person trips using an assumed occupancy rate of 1.66, based on observed taxi data (Schaller, 2017). This assumed occupancy rate affects the TNC share of overall travel. Use of a lower occupancy rate would result in lower TNC person trip mode shares. Approximately 290,000 TNC person trips are estimated to occur within San Francisco during a typical weekday. This represents approximately 9% of all weekday person trips within the city, as shown in Table 3.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Person Trips</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive</td>
<td>1,099,000</td>
<td>34%</td>
</tr>
<tr>
<td>Public Transit</td>
<td>512,000</td>
<td>16%</td>
</tr>
<tr>
<td>Bike</td>
<td>163,000</td>
<td>3%</td>
</tr>
<tr>
<td>Walk</td>
<td>1,193,000</td>
<td>37%</td>
</tr>
<tr>
<td>Taxi</td>
<td>24,000</td>
<td>1%</td>
</tr>
<tr>
<td>TNC</td>
<td>263,000</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>3,214,000</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

| When are TNC Trips Occurring in San Francisco? |

The timing of TNC trips is important because trips that occur during peak periods and weekdays are more likely to exacerbate congestion and delay on roads, affecting both general traffic, surface public transit as well as conflicts with bicycles and pedestrians.

Figure 5 shows the total number of estimated TNC vehicle trips and taxi trips by day-of-week. It shows that TNC trips increase as the week progresses, reaching their peak volume on Friday and hitting their lowest volume on Sunday. This indicates that TNCs are serving both the weekday and weekend.
Figure 14. Weekday Pickups and Dropoffs by Supervisorial District

Figure 15. Saturday Pickups and Dropoffs by Supervisorial District

Figure 16. Sunday Pickups and Dropoffs by Supervisorial District
HOW MUCH VMT DO TNCs GENERATE WITHIN SAN FRANCISCO?

The amount of VMT, or vehicle miles travelled, that is generated by TNCs is important because VMT is a fundamental measure of transportation system performance. Higher levels of VMT are associated with greater levels of emissions of greenhouse gases such as CO2 as well as other pollutants. In addition, higher levels of VMT are also associated with greater roadway congestion and conflicts. For TNCs and taxis, two types of VMT are important, in-service VMT and out-of-service VMT. In-service VMT refers to the vehicle miles traveled when transporting a passenger. Out-of-service VMT refers to the vehicle miles traveled while circulating to pickup a passenger.

Tables 4–6 show the total trips, total VMT, average total trip length, in-service trip length, out-of-service trip length, and percent out-of-service trip length by day-of-week for local TNCs and taxis. These tables indicate that TNCs and taxis are generally similar in terms of average in-service trip length. However, a notably smaller share of TNCs' total trip lengths are out-of-service miles, while a significant share of total taxi trip length (over 40%) are out-of-service miles. The greater efficiencies of TNCs, as reflected in a lower share of out-of-service miles, are likely primarily a reflection of the larger fleets of TNC drivers operating on the road at any given time, enabling shorter distances to pickup locations. In addition, TNCs' routing software may be more efficient than the taxi dispatch systems.

Most critically, Table 4 indicates that the estimated TNC total VMT on a typical weekday is approximately 570,000 VMT, and this estimate is clearly conservative given that it:

- Includes only intra-SF TNC trips (such as trips to and from San Francisco International Airport).
- Underestimates out-of-service VMT because it excludes the additional distance from acceptance location to where the passenger is actually picked up.
- Excludes VMT associated with TNC drivers commuting to SP from non-SF home origins.

This TNC VMT estimate indicates that intra-SF TNCs generate as much as 20% on weekday VMT for intra-SF vehicle trips and at least 6.5% of total weekday VMT in San Francisco, given Caltrans' most recent estimate of weekday VMT traveled on San Francisco streets and highways (Caltrans 2014). Saturday roadway volumes are lower than weekday volumes, yet Saturday TNC VMT is even greater than average weekday TNC VMT. It is possible that TNCs may account for approximately 10% of VMT on Saturdays.

Figure 20 (next page) illustrates the amount of estimated in-service and out-of-service VMT generated by local TNCs and taxis for typical weekdays, Saturdays and Sundays. TNCs generate more than 10 times as many VMT as taxis on a typical weekday, while generating 12 times as many trips.

Figure 21 (next page) shows the distribution of weekday VMT by time-of-day for TNCs and taxis. It indicates that most of the VMT generated by TNCs occurs during the AM peak and PM peak hours, with significant VMT also occurring during the evening hours, following the PM peak. VMT generated during periods of peak demand likely exacerbates existing peak period congestion.
Figure 20. Intra-SF TNC and Taxi Vehicle Miles Traveled (VMT)

- TNC In-Service
- TNC Out-of-service
- Taxi In-Service
- Taxi Out-of-service

Source: TNC data

Figure 21. Intra-SF Weekday TNC and Taxi VMT by Time-of-Day

- TNC VMT
- Taxi VMT

Source: TNC data
EXHIBIT T
Memorandum

Date: 04.06.2016
To: Wade Wietgrefe, San Francisco Planning Department
From: Drew Cooper, SFCTA
Subject: General Non-Residential Off-Street Parking Rate Estimation for San Francisco

The purpose of this memo is to document the estimation of a generalized non-residential off-street parking rate to be used in the TDM program in order to evaluate the parking requirements for new development at a fine-grained spatial level. The Transportation Authority did not make any attempt to separate or consider the distinctions of the various types of non-residential land uses, due to complications in relating off-street publicly available parking to the particular land uses it serves, although this analysis could be done if deemed desirable.

METHODOLOGY

The Transportation Authority estimated a general non-residential off-street parking rate as the number of public and private off-street parking spaces per 1000 square feet of non-residential land use. For each TAZ, we summarize the non-residential square footage and off-street parking supply for the TAZ and other nearby TAZs within 0.75 miles of network-based walking distance, with decreasing weight given to more distant TAZs. We did this in order to derive a parking rate that is representative of the neighborhood and is not artificially truncated at arbitrary TAZ boundaries, and because parking for land uses within the TAZ may actually be located outside of the TAZ.

Land Use Data: Land use data were provided at a parcel level by the San Francisco Planning Department for 2013, and summarized to Traffic Analysis Zones (TAZs), which are the geographic unit used by SF-CHAMP travel demand model. Table 1 describes the types of land use included.

<table>
<thead>
<tr>
<th>LAND USE CATEGORY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIE</td>
<td>Cultural, Institutional &amp; Educational Services</td>
</tr>
<tr>
<td>MED</td>
<td>Medical and Health Services</td>
</tr>
<tr>
<td>MIPS</td>
<td>Management, Information &amp; Professional Services</td>
</tr>
<tr>
<td>PDR</td>
<td>Production, Distribution &amp; Repair</td>
</tr>
<tr>
<td>RETAIL</td>
<td>Retail / Entertainment</td>
</tr>
<tr>
<td>VISITOR</td>
<td>Visitor Lodging</td>
</tr>
</tbody>
</table>

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1 The weight is a function of distance in the formula \( w = e^{-11.8d} \), where \( d \) is the distance in miles.
Parking Data: Off-street, publicly available parking data were available through SFPark. Off-street, private parking estimates were taken from the Transportation Authority’s Parking Supply and Utilization Study.

Network Data: Pedestrian network-based walking distances were taken from SF-CHAMP 2012 Base Year model run.
Non-Residential Parking Supply Rate (Parking Spaces per kSF)

Non-Residential Parking Supply Estimated from SF Park Data

This map shows TAZ-level estimates of parking supply rates for San Francisco, based off-street parking supply from SFPark and scaled up by 3% to match citywide totals to match the estimated supply from the PSUS parking estimation model.

Source: 2013 Parcel Land Use and Zoning District Methodology, San Francisco Planning Department
© 2015, San Francisco County Transportation Authority. Unauthorized reproduction prohibited. This map is for planning purposes only.
Draft Environmental Impact Report

901 16th Street and 1200 17th Street Project

PLANNING DEPARTMENT
CASE NO. 2011.1300E

STATE CLEARINGHOUSE NO. 2015022048

Written comments should be sent to:
Sarah B. Jones Environmental Review Officer | 1650 Mission Street, Suite 400 | San Francisco, CA 94103
or Sarah.B.Jones@sfgov.org
### Table IV.A-7 – Person-Trip Rate and Generation

<table>
<thead>
<tr>
<th>Site Use</th>
<th>Area (SF)/Units</th>
<th>Trip Rate</th>
<th>Trip Generation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Daily Rate</td>
<td>PM Peak Hour</td>
<td>Daily Person</td>
</tr>
<tr>
<td><strong>1200 17th Street Retail</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Restaurant (Composite)</td>
<td>4,650</td>
<td>0.600</td>
<td>13.5%</td>
<td>2,790</td>
</tr>
<tr>
<td><strong>901 16th Street Retail</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Retail</td>
<td>2,600</td>
<td>0.150</td>
<td>9.0%</td>
<td>390</td>
</tr>
<tr>
<td>Community market</td>
<td>15,218</td>
<td>0.297</td>
<td>7.3%</td>
<td>4,520</td>
</tr>
<tr>
<td>Restaurant (Composite)</td>
<td>2,500</td>
<td>0.600</td>
<td>13.5%</td>
<td>1,500</td>
</tr>
<tr>
<td>Total Retail</td>
<td>24,968</td>
<td>0.368</td>
<td>10.3%</td>
<td>9,200</td>
</tr>
<tr>
<td><strong>Residential (Both Buildings)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential (Studio)</td>
<td>53</td>
<td>7.5</td>
<td>17.3%</td>
<td>398</td>
</tr>
<tr>
<td>Residential (1-bedroom)</td>
<td>182</td>
<td>7.5</td>
<td>17.3%</td>
<td>1,365</td>
</tr>
<tr>
<td>Residential (2-bedroom)</td>
<td>146</td>
<td>10.0</td>
<td>17.3%</td>
<td>1,460</td>
</tr>
<tr>
<td>Residential (3-bedroom)</td>
<td>14</td>
<td>10.0</td>
<td>17.3%</td>
<td>140</td>
</tr>
<tr>
<td>Total Residential</td>
<td>395</td>
<td>8.513</td>
<td>17.3%</td>
<td>3,363</td>
</tr>
<tr>
<td><strong>New Person Trips</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12,563</td>
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<tr>
<td><strong>Existing Land Use Credit</strong></td>
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<td></td>
<td>-202</td>
</tr>
<tr>
<td><strong>Net New Person Trips</strong></td>
<td></td>
<td></td>
<td></td>
<td>12,361</td>
</tr>
</tbody>
</table>

Source: DKS Associates, 2014

Notes:
1. Trip generation rates, PM peak hour percentages, and inbound/outbound splits from City’s SF Guidelines Table C-1 and C-2.
### Table IV.A-8 — Mode Split and Daily Trip Generation by Trip Type

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Auto</th>
<th>Transit</th>
<th>Walk</th>
<th>Other</th>
<th>Total Trips</th>
<th>Average Vehicle Occupancy</th>
<th>Total Vehicle Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto Transit Walk</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Daily Person Trips</td>
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<tr>
<td>Auto Transit Walk</td>
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</tr>
<tr>
<td>Residential</td>
<td></td>
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<td></td>
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<tr>
<td>Trip Credit</td>
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<tr>
<td>Project Total</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Source: DKS Associates, 2015</td>
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</tbody>
</table>

**Notes:**
1. Retail mode splits and AVO are based on SF Guidelines Appendix E; retail, community market, and restaurant uses combined.
2. Residential mode splits and AVO are based on an average of the American Community Survey for Census Tracts 607 and 227.04, Appendix J.

### Table IV.A-9 — PM Peak Hour Trip Generation by Trip Type and Mode

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Auto</th>
<th>Transit</th>
<th>Walk</th>
<th>Other</th>
<th>Total Trips</th>
<th>Average Vehicle Occupancy</th>
<th>Total Vehicle Trips</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
<td>%</td>
<td>%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto Transit Walk</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Residential</td>
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<tr>
<td>Trip Credit</td>
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<td>Project Total</td>
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<tr>
<td>Source: DKS Associates, 2015</td>
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</tbody>
</table>

**Notes:**
1. Retail mode splits and AVO are based on SF Guidelines Appendix E; retail, community market, and restaurant uses combined.
2. Residential mode splits and AVO are based on an average of the American Community Survey for Census Tracts 607 and 227.04, Appendix J.

### Trip Distribution

The trip distribution in Table IV.A-10 shows the trip distribution patterns assumed for the proposed project and would include origins or destinations within San Francisco, the East Bay, North Bay, South Bay, and beyond. San Francisco trips are separated into four “Superdistrict” areas of San Francisco as shown in Appendix M in the TIS as 1, 2, 3, and 4. Each Superdistrict corresponds to a quadrant of San Francisco. The project site is located in Superdistrict 3, but the proposed project would include trips to other Superdistricts as described further below.
Table IV.A-10 – Trip Distribution Patterns

<table>
<thead>
<tr>
<th>Origin/ Destination</th>
<th>Retail (Work)</th>
<th>Retail (Non-Work)</th>
<th>Residential</th>
<th>Aggregate PM peak hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superdistrict 1</td>
<td>8%</td>
<td>6%</td>
<td>60%</td>
<td>27%</td>
</tr>
<tr>
<td>Superdistrict 2</td>
<td>11%</td>
<td>9%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>Superdistrict 3</td>
<td>24%</td>
<td>61%</td>
<td>10%</td>
<td>40%</td>
</tr>
<tr>
<td>Superdistrict 4</td>
<td>8%</td>
<td>5%</td>
<td>5%</td>
<td>5%</td>
</tr>
<tr>
<td>East Bay</td>
<td>16%</td>
<td>6%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>North Bay</td>
<td>6%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>South Bay</td>
<td>28%</td>
<td>11%</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>


As shown in Table IV.A-10, a majority of the non-work, retail trips would travel within San Francisco with the largest percentage of those, 61 percent, traveling within Superdistrict 3, where the project is located. Outside San Francisco, most retail trips would travel to or from the South Bay area. The distribution of residential work and non-work trips correspond to the general distribution of employment in San Francisco, with 60 percent of trips destined to greater downtown San Francisco (SD-1) and the remaining 40 percent split between outlying San Francisco neighborhoods and surrounding areas.

These trip distribution patterns have been applied to the vehicle trip generation for the existing and proposed uses on the project site. This process produces a weighted or aggregate trip distribution pattern based on the total PM peak hour vehicle trips each land use would generate and are shown in Table IV.A-10.

Freight and Service Loading Demand

The longest truck expected to be accessing the project site would be 45 feet. Based on the service vehicle type distribution, loading demand for approximately 76 percent of the time would be in the form of shorter vehicles (cars, pickups, vans, and small delivery trucks), whose length would be 20 feet or less.

As shown in Table IV.A-11, it is estimated that less than one daily truck trip would be generated for the proposed general retail use, about 26 trips for the proposed restaurant use, 20 trips for the community market use, and 14 daily truck trips would be generated for the residential use, for a total of 59 daily truck trips. It is estimated that the proposed project’s loading demand would be approximately three loading trips during an average hour and approximately four loading trips during the peak hour.
Re: Draft EIR for 3333 California Street, San Francisco, CA 94118
Planning Department Case No: 2015-014028ENV
State Clearinghouse No: 2017092053

In these comments, the term “project” shall include the proposed project and the proposed project variant, unless otherwise indicated.

1. The DEIR Fails to Adopt Feasible Mitigation Measures for the Significant Impact From Construction Noise.

The Draft EIR (DEIR) admits that construction of the proposed project or project variant would expose people to or generate noise levels in excess of applicable standards or cause a substantial temporary or periodic increase in ambient noise levels. DEIR p. 4.D.36. Despite this significant impact, the DEIR fails to adopt feasible mitigation measures required by the California Environmental Quality Act (CEQA). The DEIR is inadequate because it proposes only that the project sponsor prepare a noise control plan at a later time that would be approved by the Planning Department, and the DEIR does not specify the required contents of the plan and does not adopt a specific performance standard for mitigation of the significant noise impact.

The following mitigation measures are feasible and must be adopted to substantially reduce the significant impact from construction noise:

MITIGATION MEASURE - NOISE-1: COMPLIANCE WITH SAN FRANCISCO NOISE ORDINANCE

1. As a condition of approval of the project, contractors or representatives of the project sponsor shall comply with the provisions of Article 29 of the San Francisco Police Code as to Regulation of Noise, except as indicated herein.

MITIGATION MEASURE - NOISE-2: SPECIFIC NOISE CONTROL MEASURES
2. As a condition of approval of the project, the noise control plan for the proposed project shall include all of the construction noise control measures described in Mitigation Measure M-NO-1: Construction Control Measures set forth at DEIR pp. 4.D.42-51. Notwithstanding the foregoing, the monitoring noise stations shall be required to provide continuous noise monitoring at the nearest potentially impacted receptors whenever construction activities are being conducted and not merely from 7 am to 3 pm on Saturdays.

Also notwithstanding the foregoing, night noise permits shall not be sought except in an emergency and at the time that any night noise permits are requested, the Construction Manager shall also provide written copies of the application for a night noise permit and all accompanying writings to the Laurel Heights Improvement Association by email to KRDevincenzi@gmail.com and frfbeagle@gmail.com or such other email address as LHIA may provide for notice.

**MITIGATION MEASURE - NOISE-3: PROHIBITION ON NIGHT CONSTRUCTION WORK EXCEPT IN EMERGENCY**

3. At the 3333 California Street site, construction work shall not be performed at night during the hours of 8:00 pm of any day and 7:00 am of the following day except in an emergency.

**MITIGATION MEASURE - NOISE-4: PROCEDURES FOR NOTICE TO RESIDENT ASSOCIATION OF APPLICATION FOR A PERMIT TO PERFORM CONSTRUCTION WORK AT NIGHT**

4. A complete copy of any application for a special permit to perform construction work at night pursuant to section 2908 of the San Francisco Police Code or any other law or regulation must be provided by contractors or representatives of the project sponsor to the Laurel Heights Improvement Association (LHIA) at the same time as it is submitted to the Department of Public Works (DPW) or the Department of Building Inspection (DBI) or any other government agency, and DPW, DBI and any other government agency shall consider comments and/or objections made by LHIA as to any such application. Representatives of the project sponsor shall provide complete copies of any such application to LHIA by email to KRDevincenzi@gmail.com and to frfbeagle@gmail.com or to such other email addresses as LHIA may provide for notice.

**MITIGATION MEASURE - NOISE-5: PROVISIONS FOR NOISE MEASUREMENTS**
5. As a condition of approval of the project, the Department of Public Health Noise Prevention and Control Officer shall arrange for a qualified noise measurement professional(s) to be on call to travel to 3333 California Street and take noise measurements upon complaint about the level of noise by any resident of the area. The qualified noise professional shall arrive at the 3333 California Street site and commence the noise measurements within 15 minutes of receipt by the City of any complaint about the level of noise emanating from the project. The cost of such noise measurement and all related work and travel shall be assessed against the project sponsor as a condition of approval of this project. Receipt of a noise complaint by the City shall include without limitation initial receipt of a noise complaint by DBI, DPW, the Department of Public Health, the Police Department, 311, or any other government agency to which a noise complaint may be made. Copies of all writings regarding noise measurements made by such qualified noise measurement professional(s) and remedial action required or recommended shall be provided immediately to the Laurel Heights Improvement Association at the email addresses described above.

In the event the qualified noise measurement professional retained by the Department of Public Health fails to arrive at the 3333 California Street site and take noise measurements in accordance with this provision, the project sponsor shall deposit the sum of $20,000.00 (twenty thousand dollars) with the Laurel Heights Improvement Association, and that Association shall be entitled to use these funds to retain a qualified noise professional to perform all the measurements and activities described in this provision. As said sums are drawn down to $2,000, the project sponsor shall deposit additional $10,000 payments with said Association for ongoing noise measurements and mitigation in accordance with this provision. The project sponsor hereby grants permission for any qualified noise professional described in this provision to enter onto the 3333 California Street site and take noise measurements and monitor noise conditions and mitigation measures.

**MITIGATION MEASURE - NOISE-6: PROHIBITION ON VARIANCES TO NOISE REGULATIONS**

6. In relation to construction or operational noise that occurs at 3333 California Street, the Directors of Public Health, Public Works, Building Inspection, or the Entertainment Commission, or the Chief of Police or any other government representative, may not grant variances to noise regulations, over which they have jurisdiction pursuant to Section 2916 of the SF Police Code. The variance procedure provided by section 2910 of the SF Police Code shall not apply to construction or operational noise that occurs at 3333 California Street.

**MITIGATION MEASURE - NOISE-7: STORAGE AND IGNITION OF**
CONSTRUCTION EQUIPMENT IN UNDERGROUND GARAGE

7. To the greatest extent feasible, project sponsor shall store all construction equipment in the existing underground garage located on the project site at all times when such equipment is not in use, and all construction workers shall start up, turn on or perform ignition of all construction equipment in that underground garage.

MITIGATION MEASURE - NOISE-8: PROOF OF USE OF MUFFLERS AND SOUND ATTENUATING DEVICES

8. Project sponsor shall provide to the Laurel Heights Improvement Association (LHIA) written evidence that impact tools and equipment shall have intake and exhaust mufflers recommended by the manufacturers thereof and approved by the Director of Public Works or the Director of Building Inspection as best accomplishing maximum noise attenuation, and written evidence that pavement breakers and jackhammers shall also be equipped with acoustically attenuating shields or shrouds recommended by the manufacturers thereof and approved by the Director or Public Works or the Director of Building Inspection as best accomplishing maximum noise attenuation, as described in section 2907 of the SF Police Code. Project sponsor shall provide such written evidence to LHIA by email to the addresses described above for each impact tool or equipment to be used at the 3333 California site at least 48 hours prior to use of any such impact tool(s) and equipment on the site.

MITIGATION MEASURE - NOISE-9: NOTICE TO RESIDENTS' ASSOCIATION OF NOISE COMPLAINTS AND REPORTS

9. The Construction Manager or other designated person will provide copies of the noise monitoring log on a weekly basis to the Laurel Heights Improvement Association at the email addresses herein. The log shall include any complaints received, whether in connection with an exceedance or not, as well as any complaints received through calls to 311, DBI, or any other government agency if the contractor is made aware of them (for example, via a DBI notice, inspection, or investigation). The Construction Manager or other designated person shall also contemporaneously submit to the Laurel Heights Improvement Association copies of all reports submitted to the Planning Department Development Performance Coordinator.

2. The DEIR Is Inadequate Because It Fails to Analyze and Mitigate the Proposed Project's Significant Adverse Impact on a Scenic Vista, Substantial Damage to Scenic Resources and Substantial Degradation of the Existing Visual Character or Quality of the Site and Its Surroundings.
Page V.C-11 of the Final EIR for the 2004 and 2009 Housing Element states that a project would have a significant effect on the environment is it would:

1. Have a substantial adverse effect on a scenic vista;

2. Substantially damage scenic resources, including, but not limited to, trees, rock outcropping, and other features of the built or natural environment which contribute to a scenic public setting;

3. Substantially degrade the existing visual character or quality of the site and its surroundings, or

4. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties.

Since the project site was determined eligible for the National Register of Historic Places and has been listed in the California Register of Historical Resources, its aesthetic qualities are protected by CEQA and are not exempt from CEQA review. Both the existing office building and its integrated landscaping are historically significant resources. (Ex. A, final version of nomination that was approved by State Historical Resources Commission)

A. The Proposed Project Would Have a Substantial Impact on Scenic Vistas.

The project site is atop Laurel Hill and commands valued scenic vistas of the downtown and eastern portion of the City and also of the Golden Gate Bridge and other neighborhoods of the City to the northwest. During my years living in the neighborhood, I have seen innumerable members of the public enjoy these views during daytime as well as during nighttime. I have seen jubilant crowds of people view lunar eclipses from the sidewalks atop Laurel Hill at the corner of Laurel Street and Euclid Avenue and from the landscaped green spaces surrounding the main office building. Some photographs I have taken which show the existing condition of some of these views are attached hereto. (Ex. B, photographs taken on October 24, 2017 and January 7, 2019) These photographs show that the portions of the Bank of America Building, Transamerica Pyramid, Salesforce Building and Golden Gate Bridge can be seen from the high ground at Laurel Street and Euclid Avenue, from the landscaped green spaces surrounding the main office building and from public sidewalks along Laurel Street and Euclid Avenue. Also, the historically significant architecture of the main building can be seen across the landscaping on the perimeter of the site, and the site was designed so that the building and landscaping would function as an integrated composition.

The public has used the green landscaped areas surrounding the main building as
recreational space for many years, and the public has acquired a permanent right of recreational use in these areas. (Ex. D, letter of attorney Fitzgerald)

The proposed project would construct new buildings on the south site of the site near Euclid Avenue and Masonic Avenue and on the western portion of the site near Laurel Street that would obstruct these public scenic vistas and obstruct the public view of the historically significant main building as viewed from the surrounding landscaping. Also, the proposed new buildings constructed on the landscaped areas surrounding the site would block public access to such vistas. In addition, the project proposes to add new trees/shrubs near the perimeter of the south side of the site and also street trees at this location that would also impair and/or obstruct these scenic vistas. (Ex. E, developer’s renderings)

The Final EIR for the 2004 and 2009 Housing Element acknowledges that new residential housing could result in an impact related to scenic vistas if it would be developed in a manner that obstructs views from a scenic vista from a public area or introduces a visual element that would dominate or upset the quality of a view. (Ex. F, p. V.C-11) Figure V.C-1 shows street views of an important building in the area of the 3333 California site. Does this Figure describe a streetview of the main building at 3333 California Street as an important building?

The Community Preservation Alternative/Variant would avoid this significant impact on public vistas because it would retain the existing landscaped areas largely in their present form and existing public vistas from sidewalks and open space used by the public. Also, DEIR Alternatives B and C would retain the existing landscaped areas largely in their present form and avoid this significant impact on public vistas. DEIR 6.35 and 6.67.

Under CEQA, the City may not approve the Proposed Project/Variant, because a feasible alternative is available that would avoid or substantially reduce the project's significant impact upon scenic resources.

Mitigation Measure: Approve an alternative that would preserve the existing landscaped areas surrounding the main building on the southern and western portions of the site in their present form and do not locate any new construction on these areas.

B. The Proposed Project Would Substantially Damage Scenic Resources, Including but not Limited to Trees, Slopes of Laurel Hill and other Features of the Built or Natural Environment Which Contribute to a Scenic Public Setting.

The Final EIR for the 2004 and 2009 Housing Element acknowledges that: “New construction could result in impacts related to damaging scenic resources if new housing would directly affect environmental features, such as topographic features, landscaping, or a built
landmark that contributes to a scenic public setting,” and that “2009 Housing Element Policy 11.6 preserves landmark buildings, some of which could be considered a scenic resource of the built environment.” Ex. F, p. V.C-24-25. As previously stated in my comments of June 8, 2018 on the Initial Study for 3333 California Street, which are incorporated by reference herein, the proposed project would excavate and remove substantial portions of the topography and existing slope of Laurel Hill (a scenic high point known for its scenic vistas), the historically significant landscaping and the historically significant built environment that contributes to a scenic public setting. The proposed project would remove 185 onsite trees, including 19 onsite Significant Trees (i.e. trees within 10 feet of the public right-or-way that meet specific height, trunk, diameter, and canopy width requirements) and 15 protected street trees along California Street. (Initial Study p. 69.) The project would remove significant portions of the landscaping surrounding the main building and all of the Terrace designed by the renowned landscape architecture firm of Eckbo, Royston and Williams. Also, new buildings constructed on presently landscaped areas would obstruct public views of the historically significant main building that contributes to the scenic setting as a significant example of modern architecture in the International Style.

The Mitigation Measure above would avoid or substantially reduce this significant impact on the environment.

C. The Proposed Project Would Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings.

The Final EIR for the 2004 and 2009 Housing Element acknowledges that new construction could result in impacts related to visual character if new housing would be developed with greater densities or heights than surrounding land uses or introduce incompatible uses in such a way as to substantially degrade the character or quality of the site. (Ex., p. 25.)

The proposed density of the project would be over twice the predominant density of the surrounding residential areas (which are predominantly RH-2 areas) and would add two-three stories to the main building to increase its height to 80 and 92 feet, which would be over twice the scale of the existing neighborhood, which has a predominant 40-foot height limit. The proposed project would fail to comply with 2009 Housing Element Policy 1.1, that requires housing projects to respect existing neighborhood character. (See, for example, Ex. G, photographs of residences along western side of Laurel Street). For the reasons stated above, the proposed project would develop the site with densities and heights that are substantially greater than the densities and heights of the surrounding land uses and would construct new buildings where historically significant landscaping integrated with the main building now exists, thereby substantially degrading the connection between the building and the existing landscaping. The Mitigation Measure set forth above would avoid this significant impact on the environment.
D. The Proposed Project Could Create a New Source of Glare or Substantial Light Which Could Adversely Affect Day or Nighttime Views in the Area or Which Could Substantially Impact Other People or Properties.

The Final EIR for the 2004 and 2009 Housing Element acknowledges that new housing could result in impacts related to glare and light if new housing would introduce new sources of glare or light that are unusual for an urban area, and that new housing could introduce new sources of glare and glare if reflective glass or if bright, decorative or security lighting is used. Renderings of the project show a predominant glass-design, and security lighting would be needed along the proposed pathways and other areas on site. Since the exact type of materials and lighting is not known, the project has the potential to produce significant impacts on light and glare, which the DEIR failed to address. The following mitigation measures would reduce the potential impacts if incorporated as conditions of approval of the proposed project.

MITIGATION MEASURE. The project must comply with City Resolution 9212 (or any successor or similar regulation adopted to reduce glare), which prohibits the use of highly reflective or mirrored glass in new construction.

MITIGATION MEASURE. The project will not use bright, decorative or security lighting.

3. The EIR’s Statement of Project Objectives Is Unreasonably Narrow, and the DEIR is Inadequate Because It Lacks a Reasonable and Accurate Statement of Project Objectives.

The DEIR’s statement of “Objectives” of the proposed project is unreasonably narrow, and biased toward the developer’s proposed project concept, and inaccurately characterizes the proposed project/variant and its potential impacts on the environment. As a result, the DEIR fails to provide a reasonable or accurate statement of project objectives under CEQA standards.

The DEIR’s allegation that the developer’s proposal would redevelop an underutilized commercial site into a new mixed-use community is inaccurate. The 446,490 square-foot site is currently mixed-use commercial and retail (café) and is completely utilized for a 362,000 square-foot commercial main structure which contains an 1,183 assignable square foot café and an 11,500 gs square childcare center (455,000 gs of largely below grade parking garage), a 14,000 gs service building, historically significant landscaping throughout the site and approximately 93,000 square feet of largely below grade parking. (DEIR p. 2.1; Ex. H, café permit; Ex. I; census data describing project site as “MIXED” land use with existing retail use) Under Resolution 4109/Stipulation as to Character of Improvements, the aggregate gross floor area is limited to the total area of the property (approximately 435,600 square feet, according to Dean Macris). (Ex. J, Dean Macris MEMO dated June 25, 1986.) According to the
The DEIR is also inaccurate, because it does not acknowledge that the site is now highly walkable, with pathways throughout that lead out to Walnut, Mayfair, Laurel and Euclid/Masonic Streets. The EIR fails to acknowledge that there is currently a pathway that leads from the front of the existing office building, through the building to the Eckbo Terrace and out onto Masonic/Euclid streets.

The City’s Preliminary Project Assessment specified that the proposed Walnut “walk” would not be an extension of a City street but would be an internal pathway. (See June 8, 2018 comments by Kathryn Devincenzi on Initial Study for 3333 California Street, Ex. M. p. 15, stating as to measurement of height “curb along the Walnut street extension may not be used as the base of measurement because the Walnut street extension is not a public right-of-way.”) The same analysis applies equally to the proposed Mayfair “extension.” Thus, the DEIR inaccurately described the project’s objectives as extending the “surrounding street grid into the site through a series of pedestrian and bicycle pathways and open spaces.”

Also, since the plans do not specify the size of the proposed new retail uses, it cannot be determined whether the type of retail provided would be of a size that is neighborhood-serving, and some portions of the proposed retail space are very large and could accommodate on-local retail uses. (See August 17, 2017 plan sheet A4.03, and compare with sheet A4.02). Also, by its nature, the proposed 54,000 square feet of retail uses are of a size that would attract customers from areas that are not in the neighborhood. Moreover, the proposed 9,826 square feet of composite food and beverage retail uses (DEIR p. 4.C.54) would attract substantial numbers of persons from outside the neighborhood and are one step up from fast food.

The project’s objective to create complementary designs is inaccurate, because the design and architectural character of the proposed project/variant buildings would not be compatible with the scale or character of any of the neighborhoods surrounding the project site. Another objective acknowledges the incompatibility, acknowledging the “diverse surrounding context.” Also the Preliminary Project Assessment stated that the architectural design should be made high quality, but the plans have not been revised to do so.
San Francisco Planning Department  
January 8, 2019  
Page 10

The description of the objective of creating a green, welcoming space that will encourage the use of the outdoors and community interaction is not applicable to the proposed project, which would create a concrete jungle with mostly strip planted beds constructed over underground concrete garage structures, in the place of natural, verdant expanses of lawns, shrubs, plants and trees planted into the ground. Also, the paved pathways proposed in the project fail to comply with the requirements of Planning Code section 135, which requires that "[u]sable open space shall be composed of an outdoor area or areas designed for outdoor living, recreation or landscaping." Proposed concrete pathways are inaccurately designated as open space on August 19, 2017 plan sheet L0.01.

The fact the proposed project/variant inaccurately characterized proposed paved pathways as open space is acknowledged by the objective to incorporate open space that would maximize pedestrian accessibility.

Also, the DEIR fails to acknowledge that the objective to integrate the existing office building into the development is inaccurate since the proposed project proposes to divide it in two and demolish its executive wing.

In addition, the DEIR and project plans do not specify the type and amount of affordable housing that might be constructed on site, and the San Francisco Planning Code allows a development agreement to increase or decrease the amount of affordable housing otherwise required by the Planning Code. Thus, the DEIR contains no evidence that the proposed project/variant would achieve the objective of providing on-site affordable units consistent with ABAG’s Regional Housing Needs Allocation for the City of San Francisco. The DEIR fails to specify how the proposed project/variant would achieve such ABAG allocation or evaluate the manner in which the proposed project/variant and alternatives would actually meet such ABAG allocation for all income levels.

In addition, the DEIR fails to identify the following conflicts between the developer’s proposed project/variant and the requirements of Resolution 4109/Stipulation as to Character of Improvements. Those requirements provide that: (a) no residential building other than a one-family dwelling or a two-family dwelling shall occupy any portion of the property which is within 100 feet of the Euclid Avenue boundary line thereof, or which is within 100 feet of the easterly line of Laurel Street and south of the northerly line of Mayfair Drive extended, (b) no dwelling within the said described portion of the subject area shall occupy a parcel of land having an area of less than 3300 square feet, nor shall any such dwelling cover more than fifty percent of the area of such parcel or be less than twelve feet from any other such dwelling, or be set back less than 10 feet from any presently existing or future public street, or have a height in excess of forty (40) feet, and (c) no residential building in other portions of the subject property shall have ground coverage in excess of 50% of the area allotted to such dwelling. The developer’s proposed Euclid Building and proposed Laurel duplexes violate these provisions, and the
developer's proposed buildings on other portions of the site violate provision (c) because they have ground coverage in excess of 50% of the area allotted to such dwelling. Do you dispute that the developer's proposed project/variant would violate each of these provisions in the manner set forth above? The DEIR is inaccurate as to the proposed project's conflict with applicable laws.

In addition, under Resolution 4109/Stipulation as to Character of Improvements, development of the property was required to include provisions for appropriate and reasonable landscaping of the required open spaces, and prior to the issuance of a permit for any building, a site plan was required to be submitted to the City Planning Commission showing the character and location of the proposed building or buildings and related parking spaces and landscaped areas upon the property, or upon each separate portion thereof as is allotted to such building or buildings. Such site plan was to be submitted to the City Planning Commission for approval as to conformity with these stipulations. The DEIR fails to discuss or provide for analysis the site plan that was approved by the City Planning Commission pursuant to this provision, and the EIR must be revised to provide this information.

It is also important to note that under Planning Code section 174, Stipulations as to Character of Improvements become portions of the Planning Code, so only the Board of Supervisors can modify the Stipulations as to Character of Improvements that are recorded against this site. Section 174 provides that:

"Every condition, stipulation, special restriction and other limitation imposed by administrative actions pursuant to this Code, whether such actions are discretionary or ministerial, shall be complied with in the development and use of land and structures. All such conditions, stipulations, special restrictions and other limitations shall become requirements of this Code, and failure to comply with any such condition, stipulation, special restriction or other limitation shall constitute a violation of the provisions of this Code. Such conditions, stipulations, special restrictions and other limitations shall include but not be limited to the following:

(a) Conditions prescribed by the Zoning Administrator and the City Planning Commission, and by the Board of Permit Appeals and the Board of Supervisors on appeal, in actions on permits, licenses, conditional uses and variances, and in other actions pursuant to their authority under this Code;

(b) Stipulations upon which any reclassification of property prior to May 2, 1960, was made contingent by action of the City Planning Commission, where the property was developed as stipulated and the stipulations as to the character of improvements are more restrictive than the requirements of this Code that are otherwise applicable. Any such stipulations shall remain in full force and effect under this Code. (Planning Code section 174)

The DEIR inaccurately claims that a project objective would be to incorporate open space
in an amount equal to or greater than that required under the current zoning. DEIR 6.3. However the DEIR fails to acknowledge that this objective conflicts with the current zoning restrictions stated in Resolution 4109/Stipulation as to Character of Improvements require 100-foot landscaped set backs along the property’s boundary with Euclid Avenue and along Laurel Street up to its intersection with Mayfair Drive. The EIR must be revised to state the amount of open space required under the current zoning applicable to the site (including Resolution 4109) and recirculated for public comment.

In addition, the Resolution 4109/Stipulation as to Character of Improvements requires one parking space for each 500 square feet of gross floor area in the commercial buildings on the site. The developer’s proposed project/variant fail to comply with these provisions, and the DEIR fails to discuss this conflict.

4. The DEIR Inaccurately States the Characteristics and Impacts of Alternatives to the Proposed Project/Variant and Fails to Analyze Adequately a Reasonable Range of Alternatives.

The DEIR inaccurately compares alleged characteristics and impacts of the alternatives with those of the proposed project or project variant and inaccurately evaluates the comparative merits of the alternatives and the ability of each alternative to meet most of the basic project objectives. Due to these inaccuracies and the DEIR’s failure to analyze a reasonable range of alternatives, the DEIR fails to foster informed decision making and public participation.

Contrary to the impression created in the DEIR, there was no public scoping process that considered various site plans, building retention programs, building heights, views of the character-defining features, land use programs, or feedback from the Architectural Review Committee of the San Francisco Historic Preservation Commission prior to publication of the DEIR. DEIR 6.9. The Planning Department failed to inform the public or the Laurel Heights Improvement Association, which nominated the site for listing on the National Register, of the Architectural Review Committee hearing that considered a range of alternatives on March 21, 2018. The Planning Department went out of its way to exclude the public and LHIA from the formulation of alternatives that would be evaluated in the DEIR.

After the DEIR was published, LHIA and members of the public advocated for a Community Preservation Alternative at a December 5, 2018 hearing of the San Francisco Historic Preservation Commission. The San Francisco Historic Preservation Commission’s December 11, 2018 letter to the San Francisco Planning Department expressed interest in seeing the Community Preservation Alternative. (See Ex. 2 to LHIA’s transmittal of Treanor SOIS evaluation) Also, the terms of the approved nomination of the site control the nature of the character-defining features of the resource, but the DEIR inaccurately characterizes them as expert opinion.
The DEIR acknowledges that “alternatives with excavation and building construction programs scaled down from that of the proposed project or project variant and taking a shorter period of time to build would result in fewer overall occurrences of adverse construction noise impacts. Although a reduced development alternative would limit the ability to fully achieve some of the basic project objectives, it could reduce the duration of construction noise as well as the overall amount of development, and associated residential, employment, and parking rate increases that generate significant transportation impacts.” DEIR 6.9. However, the DEIR omits a reasonable explanation of the manner in which a reduced development alternative would limit the ability to fully achieve some of the basic project objectives, and in this respect presents an unsupported conclusion that is inadequate. A reduced development alternative could still achieve basic project objectives by providing a lesser amount of development on the site.

The DEIR claims that its analysis of alternatives is “qualitative relative to the identified impacts of the proposed project or project variant” but such a facile characterization does not justify the ambiguities and unsupported conclusions that are contained in the inadequate alternatives analysis. DEIR p. 6.10.

The DEIR claims that alterations that are not entirely in conformance with The Secretary of Interior’s Standards for the Treatment of Properties with Guidelines for Preserving, Rehabilitating, Restoring and Reconstructing Historic Buildings (Secretary’s Standards) may, or may not result in a significant impact under the “material impairment” significance standard of CEQA Guidelines Section 15064.5(b)(1). DEIR p.

However, Rehabilitation Standard 6 states that “deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and where possible, materials. DEIR p. 6.11. The DEIR states that if there are character-defining features identified in the preservation alternatives that would be retained, they would be repaired or replaced in conformance with Standard 6. Ibid. However, this claim is inaccurate because Alternative C would not replace the glass curtain walls with new windows that match the old in design, color, texture and materials.

**Alternative F: “Code Conforming” Alternative**

The DEIR inaccurately claims that its Code Conforming Alternative addresses neighborhood requests for an “all-residential” alternative. The neighborhood actually requested an alternative that would comply with the Existing Zoning, which includes Resolution 4109, which bans retail on the site. However the Planning Department contorted this request into an alternative that does not reflect the zoning approvals that exist for the site. Instead, the Planning Department conceived of a non-existing zoning alternative that proposes uses that the applicant could apply for but have not been granted. Since application for conditional uses and other
permissions has not yet been considered by the Planning Commission or Board of Supervisors, it cannot be determined whether the Planning Commission or Board of Supervisors would grant the exceptions or approvals requested in the Code Conforming Alternative.

The City unreasonably configured the so-called Code Conforming Alternative to avoid analyzing the alternative of constructing all new residential buildings in accordance with the RM-1 zoning that applies to the site along with Resolution 4109. For example, the DEIR acknowledges that under Planning Code section 304(d)(5), planned unit developments within residential districts may include commercial uses only to the extent that such uses are necessary to serve residents of the immediate vicinity, subject to limitations for neighborhood commercial cluster (NC-21) districts. DEIR p. 6.10. The DEIR inaccurately claims that the Code Conforming Alternative includes limited ground-floor commercial uses because of the existence of this section, but the Planning Commission has not considered whether commercial uses are necessary to serve residents of the immediate vicinity, and a plan sheet shows a large proposed retail space that could be used for non-local retail. The project site is now amply served by retail uses, as it is immediately adjacent to the two-block Laurel Village Shopping Center (which contains two independent grocery stores and a wide range of commercial stores), one block from the Sacramento Street commercial corridor which contains many restaurants, one block from a Trader Joe’s grocery store, and approximately one-two blocks from the City Center which includes a Target Store and other stores, and one-two blocks from the Geary Boulevard commercial corridor, and is within walking distance of the Clement Street commercial corridor. Thus, there is a reasonable possibility that, upon consideration of the facts, the Planning Commission would find that commercial uses on the project site are not necessary to serve residents of the immediate vicinity. Importantly, the DEIR lacks any land use or zoning studies discussing the types of commercial uses in the nearby established commercial centers that would support the DEIR’s conclusion that any new commercial use is necessary to serve residents of the immediate vicinity.

**Alternative A: No Project Alternative**

The DEIR is inaccurate in claiming that Alternative A: No Project Alternative would not achieve any of the project objectives. The site currently includes office uses, a childcare center and a café (which is considered a type of retail use) Census data states that the site is mixed use. (Ex. 1) Thus, Alternative A would meet the objective of having a mixed use development, although not to the same degree as the proposed project/variant.

**Alternative B: Full Preservation - Office Alternative**

Alternative B: Full Preservation - Office is unreasonably configured in the DEIR to include only 167 residential units and to construct a one-level vertical addition on the roof to expand the usable space for office uses. Given the City’s housing needs, a reasonable alternative
would be configured to reuse the existing office building to provide residential uses. Also, in Alternative B, the Plaza B and Walnut buildings are set back to retain brick perimeter wall along California Street, which could be changed to provide more space for residential uses. DEIR pp. 6.28. Alternative B is also unreasonably configured to eliminate the existing childcare center and fails to mention the existing café in the main building. Also, the Annex could be re-purposed and expanded vertically to accommodate residential use, instead of being kept in its existing state in Alternative B.

THE DEIR inaccurately states that pedestrians would not be able to walk through the site to Presidio, Masonic, or Euclid Avenues under Alternative B. In fact, there is an existing passageway through the main office building that leads to the Eckbo Terrace and exits onto Euclid/Masonic. If reasonably configured, Alternative B could include signage would explain that pedestrians would be allowed to use this north/south throughway. In addition, pedestrians can now walk through the site and exit through the Mayfair or Laurel gate and walk from those points to Euclid Avenue.

Alternative B would excavate for a two-level California Street parking garage DEIR p. 6.29, 49. With a construction program limited to the northern portion of the site, and a shorter, single-phase construction schedule, the number of temporary construction-related noise events that could affect off-site sensitive receptor locations would be reduced from those under the proposed project or project variant. However, construction activities would be similar, e.g., the use of excavators with hoe rams to fracture and remove bedrock as part of the excavation for the California Street garage. Therefore, the potential to generate substantial temporary and periodic noise increases of at least 10 dBA or greater increase over ambient noise levels at off-site locations would remain. The DEIR admitted that under Alternative B, off-site sensitive receptors along the west side of Laurel Street would be exposed to similar, but slightly lower, noise levels due to less construction along Laurel Street and the south side of the project site, and that off-site sensitive receptors along the east side of Presidio Avenue and along the south side of Euclid Avenue would not be as directly exposed to the temporary, construction-related noise increases because of the greater distance from, and the more limited nature of, the construction activities. The DEIR concluded that as a result of the proximity of construction activities to off-site sensitive receptors along California and Laurel Streets, the nature of the construction activities and the potential for encountering bedrock, construction noise impacts under Alternative B (although more limited in terms of the number of noise events) would be significant and would require implementation of Mitigation Measure M-NO-1. DEIR p. 6.49.

**Alternative C: Full Preservation - Residential Alternative**

Alternative C demolishes the Annex building and concludes that the character-defining features of the existing building are “mostly retained.” DEIR p. 6.65. Site and landscape features contributing to the corporate campus setting are mostly retained. Most prominent views of the
project site are retained with minimal change. *Ibid.*

The DEIR unreasonably configured Alternative C: Full Preservation - Residential Alternative to have 534 residential units and 44,306 square feet of ground-floor retail space. Alternative C would have 24 less residential units than the proposed project, but if reasonably configured would construct 24 residential units in some of the ground-floor space proposed for retail uses.

Alternative C is also unreasonably configured to have a new exit-only driveway onto Masonic Avenue near the intersection with Pine Street for the California Street Garage and the retained parking garage under the adaptively reused building (residential, retail, commercial, daycare, and car-share parking spaces). This exit near the intersection of Masonic with Pine Street would create a potential traffic hazard on a Major Arterial that serves substantial traffic in the P.M. peak hour. This Alternative unreasonably bars automobiles from exiting on Presidio Avenue, which is one of the principal means of egress from the existing underground garage, while Alternative C has three exits onto Laurel Street. DEIR p. 6.71. A reasonable configuration of Alternative C would allow automobile ingress and egress from all existing points of entry that are retained.

The DEIR inaccurately claims that under Alternative C, pedestrians would not be able to travel through the site to, or access the site from, Masonic and Euclid avenues. DEIR p. 6.73. As previously stated herein, there is an existing north/south passageway through the main building that leads from the northern entrance of the building, through the building, opens onto the Eckbo Terrace and leads to Masonic and Euclid avenues, which can be marked with signage as open to the public.

The DEIR states that under Alternative C, solid waste would be collected at the off-street refuse staging area adjacent to the off-street freight loading dock in the California Street Garage and compacted for offsite transport. DEIR 6.74. The DEIR’s meaning is unclear. Please clarify whether the proposed off-street refuse and staging area and the adjacent off-street freight loading dock would both be located inside the proposed garage.

As to construction duration, how much time would it take to construct the first phase of Alternative C described at DEIR p. 6.75 (consisting of demolition of the circular garage ramp structures and the northerly extension of the east wing of the existing office building and alterations to the existing office building)?

How much time would it take to construct the second phase of Alternative C described at DEIR p. 6.75 (consisting of demolition of the existing annex building and the surface parking lots on the north and west portions of the site, excavation and site preparation for construction of the California Street buildings and the Mayfair Building and associated garages)?
The DEIR p. 6.75 states that as with the proposed project or project variant excavation under Alternative C would extend to a depth of approximately 40 feet below ground surface and would encounter bedrock, and site disturbance would occur in an area of known soil and groundwater contaminants from historic uses. Under the proposed project, project variant and Alternative C, please describe which portions of the site would be excavated to a depth of approximately 40 feet below ground surface, which portions of the site would be occupied by underground levels, and state the number of levels of underground garage or other underground structure that would be constructed in each location. It appears from the DEIR that excavation to a depth of approximately 40 feet below ground surface that would encounter bedrock would occur in locations other than under the proposed Walnut building. Also, how long do you expect that it would take to remediate the known soil and groundwater contaminants from historic uses and explain what is known to date about the potential methods of remediation and provide all writings describing the potential methods and duration of remediation and measures that would be taken to protect the public from exposure.

In addition, what is the estimated cost of demolishing the northerly extension of the east wing of the existing office building, repairing and/or supporting the remaining structure in this location, and the estimated duration of that demolition? Also, what is the estimated cost of dividing the existing main building and its southern wing (including any reinforcement needed)? What is the estimated cost of strengthening the existing main building to be able to support additional stories? Note that this information is relevant to the feasibility of alternatives.

Alternative C is also unreasonably configured because it would have 210 fewer residential units than the project variant. A variant of Alternative C could have been developed that constructed residential units in some of the space that Alternative C proposes to use for retail uses.

Please explain why Alternative C would allegedly provide fewer activated neighborhood-friendly spaces along the adjacent streets than the proposed project or project variant. DEIR p. 6.75. Please explain how Alternative C would provide a high quality and varied architectural and landscape design, utilizing the site’s topography and other unique characteristics. DEIR p. 6.75. The information provided in the DEIR does not explain this statement. Please explain how Alternative C would construct some open spaces such as the plazas and Mayfair Walk that would be usable to project residents and the public, but not as many as the proposed project or project variant. DEIR p. 6.75. Please explain how Alternative C would partially meet Objective C by providing code-required open space and how each component of such space could be used for recreational purposes.

The DEIR fails to acknowledge at p. 6.76 that Alternative C would retain the views of prominent character-defining features of the property. Alternative C would retain public vistas from the landscaped green spaces along Euclid Avenue and Laurel Street to the integrated
window-walled building and to the Downtown and other areas of the City, which are also prominent character-defining features of the property. So are views of large trees and other landscaping visible from the public ways.

Please explain exactly what the EIR means by replacing the existing glass curtain wall system with “compatible residential window wall system,” how the new system would be different, and whether the system would retain the geometric patterns which the existing window walls have. DEIR p. 6.76. The DEIR only states that the replacement windows would have “small panes divided by a mullion and muntins.”

Also, please explain the nature of the materials proposed for the vertical addition in Alternative C that would appear visually subordinate to the historic portion of the building. DEIR, pp. 6.77-78. Please explain the nature of the contemporary design that would distinguish the proposed rooftop addition from the original building.

The DEIR states at p. 6.77 that under Alternative C, the rooftop mechanical penthouse would be removed. Please explain the location at which such equipment would be relocated including whether it would be on the exterior of the building and the nature of the equipment. DEIR p. 6.78 states that the existing mechanical penthouse would be replaced, and if replacement on the rooftop is intended, please explain the proposed location of the replacement and the location, height and materials proposed to be used in any proposed screening.

The DEIR inaccurately neglects to mention that under Alternative C, the existing green spaces and lawns used by the public that run along Laurel Street and the landscaped beds along Laurel Street would be retained in addition to such areas along Euclid Avenue, although the drawing on DEIR p. 6.72 shows that these areas would be retained except for the area at which the new proposed Mayfair Building would be constructed.

At page 6.77, the DEIR states that under Alternative C, the proposed addition would increase the height of the existing building (by approximately 12 feet for a total height of approximately 67 feet), but at page 6.78, it describes the addition as a “two-story, stepped vertical addition.” (Emphasis added) Please clarify this discrepancy and confirm that under Alternative C, the proposed addition would be one-story and state the amount of additional height that it would have.

The DEIR inaccurately claims that the best examples of the integration of the character-defining features of the site occur on the southern and eastern portions of the site, whereas elsewhere, it identifies the concrete pergola and landscaped beds along Laurel Street as character-defining features. DEIR p. 6.80. The DEIR fails to acknowledge that the landscaping along Laurel Street is also integrated with the main building.
Alternative C is unreasonably configured because the DEIR lacks any explanation or justification for the conclusion that Alternative C would provide retail parking at a higher rate per square footage of retail space than the proposed project and project variant, respectively. DEIR p. 6.82. The proposed project would provide 54,117 square feet of retail uses, but Alternative C would provide only 44,306 gsf of retail space. Please explain why Alternative C could not provide retail parking at the same rate per square footage of retail as the proposed project and project variant, respectively.

Also, the DEIR inaccurately claims at page 6.85 that pedestrians would not be able to travel through the site to Masonic and Euclid Avenues because the southern half of the north-south Walnut Walk would not be developed. As previously explained, there is an existing pathway that runs through the office building and opens onto the Eckbo Terrace and runs therefrom to Masonic and Euclid avenues through a gate. Signage could identify this passageway as a public throughway. Also, pedestrians can travel through the Walnut gate and through the site and exit onto Mayfair or Laurel streets. The same comments apply to bicycle access under Alternative C.

DEIR p. 6.97 states that all new construction would be subject to the “Historical Building codes.” Please explain exactly what codes are meant by this statement and please provide citations to all such applicable codes.

5. The DEIR is Inaccurate or Incomplete in Numerous Respects.

The DEIR states that centralized trash rooms “with combined chutes or bins for recyclable, compostable and trash would be located within each residential building on every floor. The combined chutes would terminate into separate recyclable, compostable, and trash bins using tri-waste sorters and would be held within trash collection rooms.” DEIR p. 2.78. Please state the amount of noise expected to be generated by the tri-waste sorters, the times of day during which such noise would be generated; also, please state whether such noise was included in the DEIR’s analysis of operational noise and describe the details of the analysis that took into account such noise. Please also describe in detail the amount of space that would be occupied by the proposed tri-waste sorters and the trash collection rooms in each proposed location in the proposed project.

The DEIR indicates that the Transportation Demand Program measures supplied for the proposed project/variant, subject to refinement during the planning review process for project entitlements, would include delivery supportive amenities. TDM Measure Delivery-1 states that an area for the receipt and temporary storage of package deliveries would be provided in the off-street loading areas or other locations on the project site. DEIR p. 2.79. Please describe in detail the potential other locations on the project site that could be provided for these delivery supportive amenities and how they would operate.
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The DEIR states that a proposed 4,000 square-foot open space called a corner plaza would be constructed near the intersection of Masonic and Euclid avenues and this open space would be activated by the proposed retail use in the adjacent Euclid Building, and the residential lobby and amenity spaces in the adjacent Masonic and Euclid buildings. DEIR p. 2.80. Please describe in detail the nature of the potential amenity spaces that could be placed in the adjacent Masonic and Euclid buildings.

THE DEIR claims that the proposed project would retain approximately 53 percent of the overall lot area (approximately 236,000 square feet, excluding green roofs) as open area with portions to be developed with a combination of common and private open space. DEIR p. 2.83. Please provide the calculation of this proposed open space, including without limitation the amount of open space that could be provided in each component of the open space and state whether each component of the open space would be paved or planted into soils that drain toward groundwater. In this calculation, please specify the location and square footage of such open space that would consist of paved pathways or other paved areas and state how each component of such proposed “open space” meets the requirements of the Planning Code as to usable open space. The DEIR indicates that the proposed Cypress Stairs and Walnut Walk (excluding the Walnut Street “extension,” roundabout and walkway between Center Building A and Center Building B) would constitute open space; please explain in detail why the walkway between Center Building A and Center Building B would not constitute open space, including without limitation under the San Francisco Planning Code. (DEIR pp. 2.83)

The DEIR states that access to the proposed Euclid Green would be developed at the corner of Laurel Street and Euclid Avenue. These spaces would be designed to be compliant with the Americans with Disabilities Act. DEIR pp. 2-76-2.77. The DEIR and plan sheets do not explain the changes proposed to the Euclid Green. The DEIR acknowledges that the existing green lawns at the corner of Euclid Avenue and Laurel Street (23,600 square feet) and along Presidio Avenue (10,700 square feet) are accessible to the general public. DEIR p. 2.9. Please describe in detail each and every change that the developer proposes to make to the existing green spaces that currently exist along Euclid Avenue and Laurel Street. The City’s Urban Design Team review notes state that “Euclid Park seems to show retaining walls and other interruptions. It seems strongest as a single zone of lawn.” (Ex. M, November 16, 2017 UDAT Notes) Please describe in detail what was meant by this statement and what document(s) the Planning Department reviewed before it made this comment. The DEIR and plan sheets submitted to the City do not show any such proposed modifications to the existing lawn and landscaped spaces along Euclid Avenue or Laurel Street.

In addition, if there is a possibility of any portion of the site being used for a community garden, please explain the proposed location and size of the proposed community garden and which existing site features would be changed to install it. If there is a possibility of any portion of the site being used for a farmer’s market at any time, please explain the proposed location and
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size of the proposed farmer’s market and the anticipated times of operation.

Conclusion

The DEIR must be revised to correct the inadequacies described herein, and the revised
EIR circulated for public comment.

Very truly yours,

Kathryn R. Devincenzi

ATTACHMENTS: Exhibits A-M
1. **Name of Property**
   - Historic name: Fireman's Fund Insurance Company Home Office
   - Other names/site number: University of California at San Francisco Laurel Heights Campus
   - Name of related multiple property listing: N/A

2. **Location**
   - Street & number: 3333 California Street
   - City or town: San Francisco 94118
   - State: CA
   - County: San Francisco
   - Not For Publication: 
   - Vicinity: 

3. **State/Federal Agency Certification**
   As the designated authority under the National Historic Preservation Act, as amended,
   I hereby certify that this nomination request for determination of eligibility meets
   the documentation standards for registering properties in the National Register of Historic
   Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.
   In my opinion, the property meets does not meet the National Register Criteria. I
   recommend that this property be considered significant at the following
   level(s) of significance:

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<th>statewide</th>
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   Applicable National Register Criteria:
   □ Area
   □ Building
   □ Consultative
   □ Commercial
   □ Institutional
   □ Residential
   □ Industrial
   □ Other

   Signature of certifying official/Title: __________________________ Date __________________________

   State or Federal agency/bureau or Tribal Government

   In my opinion, the property meets does not meet the National Register criteria.

   Signature of commenting official: __________________________ Date __________________________

   Title: __________________________

   State or Federal agency/bureau or Tribal Government
4. National Park Service Certification

I hereby certify that this property is:

- entered in the National Register
- determined eligible for the National Register
- determined not eligible for the National Register
- removed from the National Register
- other (explain:)

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private: 
- [x] Public - Local
- [] Public - State
- [] Public - Federal

Category of Property

(Check only one box.)

- [x] Building(s)
- [] District
- [] Site
- [] Structure
- [] Object
**Number of Resources within Property**

(Do not include previously listed resources in the count)

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Number of contributing resources previously listed in the National Register: 0

6. **Function or Use**

**Historic Functions**
(Enter categories from instructions.)

**COMMERC'E/TRADE Business**

**Current Functions**
(Enter categories from instructions.)

**EDUCATION Research Facility**
7. Description

Architectural Classification
(Enter categories from instructions.)
MODERN MOVEMENT International Style
MODERN MOVEMENT

Materials: (enter categories from instructions.)
Principal exterior materials of the property:
Foundation: concrete
Walls: glass
Walls: aluminum
Walls: brick
Walls: concrete
Roof: asphalt
Other: metal
Landscape walls: brick
Gates in landscape walls: metal
Sidewalks: exposed aggregate concrete
Terraces and patios: exposed aggregate concrete divided into panels by inlaid rows of brick
Circular tree beds: modular sections of concrete

Narrative Description
(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with a summary paragraph that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The Fireman’s Fund Insurance Company Home Office is a 10.2-acre property in a central, predominantly residential area of San Francisco called Laurel Heights. From the property there are views in various directions to distant parts of San Francisco. The property consists of two buildings and a landscape that were designed to function as a single entity. The main building, referred to in this nomination as the Office Building, is a large three- to seven-story building.
located in the center of the property. There is also a much smaller, one-story Service Building in the northwest corner of the property. The two buildings were designed to complement each other in character and materials. The Office Building is a glass walled building with an open character. The Service Building is a brick building with a closed character. The Office Building is an International Style building which despite its size is built into its sloping hillside site in such a way as to minimize its presence. Its four wings, each built for different functions, range from three floors to seven floors. It is characterized by its horizontality, its bands of windows separated by the thin edges of projecting concrete floors, and brick trim. The wings of the building frame outdoor spaces whose landscape design connects the outdoors with the indoors both functionally and conceptually. The landscape design includes outdoor spaces for use by employees, parking lots, circulation paths, and vegetation. The principal outdoor spaces are the Entrance Court, the Terrace, and small areas around the Auditorium.

Narrative Description

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The Fireman’s Fund Home Office property is located in a central area of the north half of the City of San Francisco near the intersection of two principal streets, California and Presidio. The property occupies almost all of a large irregular block bound by California Street on the north, (continuing clockwise) Presidio Avenue on the east, Masonic Avenue on the southeast, Euclid Avenue on the south, and Laurel Street (in straight and curved sections) on the west. Fireman’s Fund occupies about 10.2 acres—the entire block except for a small triangular parcel at the corner of California and Presidio. (See Map 1 and Map 4)

The site itself slopes down from about 300 feet in elevation in the southwest corner to about 225 feet in the northeast corner. It is part of a cluster of low hills associated with Lone Mountain whose several high points were developed as cemeteries in the nineteenth century. The Fireman’s Fund site was previously a portion of the Laurel Hill Cemetery, and was long recognized for its views. Today there are distant views from the property to the southeast and downtown, to the northwest and a partial view of the Golden Gate Bridge, and to the west into the Richmond District.

The property is surrounded on all sides by thoroughly developed parts of the City of San Francisco. The site itself is at a junction of several different historical developments. To the east and north, the streets are laid out in a modified extension of the original grid of the city. Across Presidio Avenue on the east the neighborhood is called the Western Addition, characterized by a mix of middle-class homes built in the nineteenth century, and by flats and apartments built in
the years after the earthquake and fire of 1906. To the north, Presidio Avenue is the dividing line between two of San Francisco’s wealthiest late-nineteenth- and early twentieth-century neighborhoods, Pacific Heights to the east and Presidio Heights to the west. To the west along California Street is Laurel Village, a post-World War II strip shopping center. To the west and south is Laurel Heights, a post-World War II residential development of houses and apartments. To the southeast across Masonic Avenue is Station 10 of the San Francisco Fire Department.

BUILDINGS

There are two buildings on the Fireman’s Fund property. The Office Building, which is by far the larger of the two and is sometimes referred to as the main building, is located in the center of the property and is surrounded by lawns, gardens, and landscaped parking lots. The Service Building, referred to as the Annex since 1985, is a relatively small building located at the northwest corner of the property. Although different in size and function, the two buildings were designed to relate to each other as part of the overall design of the property. The materials and character of the two buildings express these relationships which are simultaneously contrasting and complementary. The character of the Office Building is dominated by its extensive exterior use of glass for walls, which form long bands between the thin exposed edges of its reinforced concrete floors. Brick is used as a secondary material in the building, but also as a visual connector to features of the landscaped grounds and to the Service Building. The Office Building, clad in glass, provides views of the city for its occupants and presents a transparent character to the outside. The almost windowless Service Building encloses its machinery and utilitarian work space.

Office Building

The Office Building as it exists today is the product of two principal periods of construction. The original building was completed in 1957 with the design of its siting, plan, and structure intended to accommodate future expansion. Between 1963 and 1967, a major expansion was undertaken in three phases. Other than these, during the period of ownership of the property by Fireman’s Fund, there were many alterations made to the configuration of interior spaces, as was intended in a building with a flexible office plan. All of these changes were designed by the original architect or his successor firm and built by the original general contractor. (See Map 2)

Since Fireman’s Fund sold the building in 1983, there have been extensive changes to interiors but only two important changes to the exterior—a new main entry and a darkening of the windows.

Plan

Today, the 354,000 square foot office building occupies a footprint consisting of four rectangular wings. Three of these wings are at right angles to each other and to the principal surrounding
streets—to California Street, Presidio Avenue, and the grid plans of the Western Addition, Pacific Heights, and Presidio Heights. The fourth wing is at an angle to the others but is parallel to Euclid Avenue.

These four wings have been named in various ways but for the purposes of this nomination are named as follows. The Office Wing (north), parallel to California Street, and the Office Wing (east), parallel to Presidio Avenue, together described as the Office Wing, were designed to house the principal employee work areas and associated functions. With levels of parking partially below ground (referred to as sub-levels), the Office Wing (east) is sometimes called the Garage Wing. The Executive Wing, parallel to Euclid Avenue, was designed for executive offices (and sometimes has been called the Administrative Wing). The Cafeteria Wing, parallel to Laurel Street, which connected the Office Wing and the Executive Wing, was designed to house the cafeteria and other employee services.

Considerations in the arrangement of the four wings of the building included the relation to their functions, the topography of the site, views to and from the building, relationships to the surrounding neighborhoods, access to the site, relationships to outdoor spaces framed by the wings of the building, and parking.

The largest and tallest part of the building—the combination of the Office Wing (north) and the Office Wing (east)—is situated on the lowest elevation, an arrangement that minimizes its visual presence on the surrounding streets and from afar. The lowest part of the building, the Executive Wing, is on the highest ground, which is a way of being the least conspicuous in the most visible location. As much as feasible for a very large building, the Fireman’s Fund Home Office blends into its site and its largely residential setting. The horizontality of its design intentionally emphasizes its connection to its site.

The principal entrances to the building are on California Street and Laurel Street. From California Street, the Employee Entrance was designed primarily to provide access for workers in the Office Wing, and the Auditorium entrance was for workers and visitors to the Auditorium and nearby offices. From Laurel Street, the Executive and Visitor Entrance, near the north end of the Cafeteria Wing, was originally the principal entrance both for executives and visitors to the building. Secondary entrances along the east side of the Cafeteria Wing, provide access to the Terrace Garden from the Cafeteria and the employee’s lounge.

The Office Wing (east) and the Garage on which it sits altogether is seven stories in height. It consists of three sublevels for parking and four office floors above. The parking garage extends further to the north and west than the office floors but because of the topography and landscaping is not highly visible. The most visible feature of the garage is its pair of circular entrance and exit ramps north of the rest of the structure. On the south side of this wing is a rectangular auditorium.
that extends beyond the volume of the main structure. The north end of the office floors of this wing is raised above the top of the parking garage on concrete piers so that there is a covered driving and parking area. Inside, this wing was designed as open office space with scattered enclosed offices for departmental managers.

The Office Wing (north) is a four-story building. Both California Street entrances are in this wing, one leading back to the Auditorium and the other, which is generally on axis with the entrance gate on California Street. This entrance was altered in 1984-1985 with a remodeled interior lobby and a new entranceway structure on the outside (described below under alterations). Inside, this wing was designed with a central circulation and service core surrounded by generally open office areas on each floor. Scattered on the periphery of the open office areas were a few enclosed offices for departmental managers.

The Cafeteria Wing is a three-story building—the lower story is built into the hillside so that it is exposed only on the east side adjacent to the Terrace. Employee service functions are on the Terrace level where there is access to outdoor gardens and there are distant views to the east. The Executive and Visitor Entrance is on the second level adjacent to the Entrance Court on the west side.

The Executive Wing is a three-story building with its lower story partially built into the hillside. Inside, central corridors originally opened onto private offices for executives on each side. At the east end, offices at the junction with the Cafeteria Wing were originally for the president and the chairman of the Board of Directors of the company; nearby were board rooms, secretaries’ offices, and service spaces. Upstairs above the president’s office an original penthouse with a lounge, dining room, and outdoor deck was replaced by the 1963-4 addition.

Structure, Materials, and Mechanical Systems

At the most general level, the structure and materials of the building consist of concrete pile foundations, a mix of steel and reinforced concrete columns, concrete floors and roof, and exterior curtain walls of glass except for limited areas where walls are brick.

Because of the original 1957 plan of the Office Wing (north), special steel columns were designed for this section. The Office Wing was designed with a central reinforced concrete service core surrounded by open office space. To create an office space with a minimum of columns, the concrete roof spanned fifty-five feet from the core to the perimeter. Forty feet from the core were steel columns, beyond which the concrete roof was cantilevered. Ordinary steel columns could not practically be made to support these loads, so special columns were designed with steel channels fastened together as columns. This method produced slimmer columns than other approaches, minimizing their visual presence in the open office areas. When the Office

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Wing (east) was added in 1966–1967, this same structural system was employed to provide a similar interior arrangement.

To produce concrete floors with narrow cantilevered outer edges, which would enhance the appearance of the building as a glass box, floor structures are built of one-way concrete girders and joists. Beyond the line of the windows, the concrete floor structures serve as platforms for washing windows.

Between the concrete floor structures interior spaces are enclosed by continuous horizontal bands of windows. The windows themselves are in regular vertical rectangular units. Extruded aluminum frames hold large middle panels of clear glass above bottom panels of ceramic coated glass, originally blue in color. In alternate window units, there are two types of operable panels at the junction of the top and bottom panels.

Red brick laid in running bond is used in scattered locations for a mix of both functional and aesthetic reasons. It is used at the principal entrances on California and Laurel Streets to make their locations clear. It is used at the west end of the Executive Wing to present a more domestic face to the houses that are near-by on Laurel Street—this brick wall also blocks the afternoon sun from overheating the interior and prevents glare seen from the west. Brick is used for the auditorium extension on the south side of the Office Wing. And, brick is used at the east end of the building on the exposed level of the mostly underground parking garage to screen the parking area from view.

The principal structural features of the auditorium are grouted brick walls and two deep reinforced concrete roof beams. The walls are formed of brick inner and outer surfaces with rebar and grout in between. The angled brick bays of the walls and the plaster over some interior surfaces were used for acoustical reasons.

Architecture

The design of the building is associated with the International Style and the idea that form follows function. The simple structural concept is clearly evident in the appearance of the building. By virtue of its consistent design and use of materials, the building reads visually as a single structure. At the same time, the functions of its different wings are expressed in their size, context, and relationships to the gardens, lawns, and parking areas around the building and to the views to and from the building. The four-story Office Wing accommodates the largest number of workers, originally in open offices. From its open-office floors, there are wide views of the city of San Francisco. The smaller Executive Wing accommodates a relatively small number of

workers, originally in private offices. The smaller scale of this wing is oriented to the Entrance Court on the north and a wide lawn on the south.

Service Building

The Service Building, described on original 1955 plans as a Garage and Service Building, has had two substantial additions within the period of significance. Both were designed by the original architect and built by the original general contractor. The brick exterior of the additions matches that of the original building and that used on the Office Building.

As originally designed, the Service Building had an L-shaped footprint of two slightly overlapping rectangles enclosing 10,500 square feet. The larger rectangle was occupied as a garage and the smaller as a maintenance shop. As altered, the footprint is now an irregular cluster of attached rectangles enclosing 13,000 square feet for mechanical and maintenance functions.

The Service Building is a steel frame and reinforced concrete structure enclosed in brick. Its openings are limited to glass and aluminum doors, a few window openings, and ventilating louvers in the boiler room.

LANDSCAPE

Landscape Features Associated with the Mid-1950s Design

The landscape was an integral part of the original design for the new corporate headquarters commissioned by Fireman’s Fund in the mid-1950s. The San Francisco-based firm of Eckbo, Royston, and Williams (ERW) was the landscape architect for the original landscape design, completed in 1957, and its successor firm Eckbo, Dean, Austin, and Williams (EDAW) designed the landscape associated with the mid-1960s additions. The landscape setting around the modernist Office Building integrates functional needs (such as parking lots and internal circulation) with large areas of lawns and structured outdoor spaces (the Terrace, Entrance Court, and the Auditorium’s outdoor spaces). The landscape is designed to promote the integration between architecture and landscape and uses forms and materials that are characteristic of modernist designs from the mid-twentieth century. (See Map 2 and Map 3)

Brick Wall

A brick wall, which takes different forms, provides a continuous and unifying element around the edges of the site. It exists as a retaining wall along the perimeter of the property’s northeast, north, and west sides. Three gated entrances—one for the employees on California Street and the service and executive/visitor entrances on Laurel Street—are integrated into these sections of the wall. Each of these three entrances has a separate vehicular and pedestrian opening framed by brick pillars and secured by a double-leaf, metal rail gate when the property is closed. On the south side of the Executive/Visitor Gate, the perimeter wall is transformed into low retaining
walls that define a series of planting beds along the west end and south side of the Executive Wing. The wall continues along the outer edge of the Terrace garden, along the bank that parallels Masonic Avenue, and then reconnects to the southeast corner of the Office Wing (east). Here rectangular brick planting beds have been incorporated into the wall, creating a zig-zag alignment similar to that found in other locations (i.e., on the bank along Laurel Street in the vicinity of the Entrance Court, on the southwest side of the Terrace, and in the bench wall that frames the eastern side of the Terrace).

Parking Lots and Internal Circulation

Two parking lots occupy the land in front (north) of the Office Building. The East Parking Lot and the West Parking Lot sit on either side of the entry drive, which aligns with the Employee Gate and an employee entrance (E2) into the Office Building.

The entry drive from California Street branches near the front of the Office Building; it continues to the east to provide access into the East Parking Lot and the circular ramps to the Garage. The western branch provides access to the West Parking Lot, and exits at the Laurel Street Service Gate. A short service road connects this branch of the entry drive to the Entrance Court parking lot and provides access to a service area at the west end of the Office Wing.

Topography in Relationship to the Spatial Organization and Function of the Site

The site slopes downward from its southwest corner, at the intersection of Euclid and Laurel streets. Grading has modified the topography so that the main outdoor spaces are located at different levels of the Office Building, as appropriate to their functions. Although the East and West Parking Lots are at a slightly lower elevation than the Office Building, the design of the landscape links these directly to its first floor. The Terrace garden, framed by the Office and Cafeteria Wings and originally intended to provide employees an outdoor setting for lunch and breaks, provides a direct connection into the Cafeteria Wing. And the Entrance Court, which originally provided parking for the executives and visitors, is at the same grade as the Executive/Visitor Entrance.

Major Vegetation Features

Lawns create the setting for the Office Building along the west and south sides of the property (and create a compatible connection between the property and the surrounding residential neighborhood) and slope downward toward California and Masonic Streets, respectively.

Some of the large trees which were part of the Laurel Hill cemetery vegetation were saved and ERW incorporated these into planting islands in the East and West Parking Lots in their mid-1950s design. Two Monterey cypress trees on a low mound in the East Parking Lot and a blue gum eucalyptus and several Monterey cypress in the West Parking Lot are remnants of this design feature. Monterey cypress, which were planted at some point after the addition of the
Garage in the mid-1960s, occupy the land between the East Parking Lot and California Street. These trees, and the brick perimeter wall, buffer views of the parking lots from the street and lessen the apparent size of the Office Building.

Landscapeed banks along the west and southeast sides of the site provide a transition between different elevations of the land within the property and the surrounding streets. The presence of these landscapeed banks (planted mainly with grass, some larger shrubs, and several trees) help to reduce the need for tall retaining walls and also increase the amount of green space around the edges of the property.

**Entrance Court**

The Entrance Court on the west side of the Office Building— in the outdoor space between the Office, Cafeteria, and Executive Wings— provides parking and access to the building’s Executive/Visitor Entrance and was one of the two structured outdoor spaces in ERW’s mid-1950s design. A narrow, rectangular planting bed (10’ x 55’) at the center of the asphalt paving creates a U-shaped drive, which connects to the Executive/Visitor Gate on Laurel Street. Sidewalks (exposed aggregate concrete) and narrow planting beds (with Japanese maple trees, azaleas, rhododendron, New Zealand flax, and decorative rocks) line the sides of the Entrance Court’s parking lot.

**Terrace**

In ERW’s mid-1950s design, the principal structured outdoor space was the Terrace, which was intended as a place for employees to sit outside during lunch and at breaks. The Terrace is framed by the south side of the Office Wing and the east side of the Cafeteria Wing, where it is protected from the prevailing west wind and provides views to the east and south of San Francisco. This garden area has two levels. The lower level contains a biomorphic-shaped lawn and a paved patio, which wraps around the lawn’s north and east sides. Steps along the east side of the upper-level terrace connect down to the lower level of the garden. Both the terrace and patio are paved with exposed aggregate concrete which is divided into rectangular panels by inlaid rows of red brick aligned with the window frames of the building. A brick retaining wall, to the east of this wall, provides a visual boundary along the Terrace garden’s east side. Three raised, circular beds (one on the upper-level terrace, one at the western edge of the lawn, and one at the north end of the lawn) each contain a tree; the sides of these circular beds are constructed of modular sections of pre-cast concrete. (See Map 3)

The plan for the Terrace provides a classic modernist composition. The biomorphic-shaped lawn contrasts with the rectilinear pattern of the pavement and the geometric form of the three, circular tree beds, the zig-zag alignment of the wall along its eastern edge, and the curved arch of
hedge in the raised planting bed along its eastern edge. The triangular relationship between the three circular tree beds adds yet another level to the geometry of the composition.

Benches, which appear to have been custom-built for the mid-1950s design, are attached to the interior face of the wall along the Terrace's east side. The wooden boards for the seat and back are attached by metal bolts to a metal frame, which is attached to the wall; both the wood and metal are painted black. Benches of a similar design (three wood boards mounted on a bent metal frame) are mounted onto the patio at various places along its inner edge.

**Landscape Features Associated with the Mid-1960s Design**

EDAW, the successor firm to the ERW partnership which was dissolved in 1958, prepared the landscape design that accompanied the mid-1960s additions to the Office Building. Just as the mid-1960s architectural additions were intended to be compatible with the original Office Building’s design vocabulary, EDAW’s design was intended to compliment and reference the original, mid-1950s ERW design. The key parts of the mid-1960s landscape design included the addition of paved features around the east, south, and west sides of the new Auditorium—to create outdoor sitting areas and to facilitate pedestrian circulation—and rebuilding a portion of the brick perimeter wall along Masonic Avenue. These two outdoor sitting areas—one on the east side of the Auditorium and one on its west side—connect to entrances into the Auditorium. (See Map 3)

The Auditorium is located below and to the east of the Terrace. A ramp begins on the south side of the Terrace and leads down to the Auditorium. The ramp bisects the landscaped bank that extends from the Terrace down to Masonic Avenue. The ramp, a part of the original mid-1950s design, is paved in the same exposed aggregate concrete as the Terrace, but lacks the inlaid rows of brick.

The outdoor area on the Auditorium’s west side is paved with exposed aggregate concrete divided into panels by a double row of inlaid brick that references, but is not identical to, the pavement in the mid-1950s Terrace. Black metal benches are mounted along the eastern and western sides of the pavement. A raised circular tree bed (with concrete walls identical to the three circular tree beds at the Terrace) is located on its western side.

The outdoor area on the Auditorium’s east side is paved with concrete divided into rectangular panels by wood inserts. The east and south sides of this area are enclosed by rectangular brick planting beds which are incorporated into the Masonic Avenue brick perimeter wall. The arrangement of these beds creates a zig-zag alignment for the wall, which is similar to that found in other locations (i.e., the brick perimeter wall along Laurel Street below/west of the Entrance Court, in the retaining wall at the southwest corner of the Terrace, and along the bench wall that frames the east side of the Terrace).
The landscape along the east side of the property—which is at the same grade as Presidio Avenue—consists of a row of redwood trees planted across the eastern façade of the building, a level lawn between the building and street, and the Presidio Avenue Service Drive which provides access to the sub-level three of the Garage.

**CHRONOLOGY OF DEVELOPMENT**

**Overview**

The Fireman’s Fund Home Office was built in five principal phases. The first four phases were under the ownership of the Fireman’s Fund Insurance Company, and the buildings in these first four phases were designed by the same architect and structural engineer and were built by the same general contractor. The grounds were designed within these first four phases by the same landscape architectural firm and its successor firm. The fifth phase was carried out under a new owner—3333 Investors—who purchased the property from Fireman’s Fund.

In addition, there have been many interior alterations throughout the life of the building, many within the period of significance and many outside of the period of significance. These are addressed in a general way after the five phases of construction below.

**Buildings**

*Phase I: Original Construction 1955–1957*

The Fireman’s Fund Insurance Company bought the site of its future headquarters in March 1953 for $650,000 from the San Francisco Unified School District.

Among many stated reasons that Fireman’s Fund chose the site were access to public transportation, room on the site to expand, the cost of the site and the cost to build a low structure rather than a tall building downtown. An interview with the architect noted that the site “lent itself to a low-level building, which studies proved was preferable for efficient operation of the company’s business.”

In 1953–1954, in-depth preliminary studies of operations and work flow were undertaken by the architect, Edward B. Page, working with Nicholas Begovich, head of Management Services for Fireman’s Fund. In April 1954, Page showed plans of the building to the Laurel Heights Improvement Association which was pleased with “a most attractive building and landscaping.”

In mid-June 1955, Edward B. Page submitted applications for building permits for both the Office Building and the Service Building. Plans submitted with the applications were dated 1

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2 Robert George Higginbotham, “Fireman’s Fund Building,” Student project for Architecture 2N-4, University of California, 1958. Northern Regional Library Facility of the University of California.

3 Laurel Heights Improvement Association, Correspondence between Harry Thompson and Bernard Kernfeld, 18 April 1954. Archives of the Laurel Heights Improvement Association.
June 1955. For both buildings, the designers working with the architect were, the structural engineering firm of John J. Gould and H. J. Degenkolb; R. Rolleston West, mechanical engineer; Clyde E. Bentley, electrical engineer; Maurice Sands, interior decorator; and Eckbo, Royston, & Williams, landscape architects. The general contractor for the buildings was MacDonald, Young, & Nelson. The landscape contractor was Watkin & Sibbald.

According to an article in the *San Francisco Chronicle*, the company began moving into the Office Building on 17 June 1957. The dedication of the building on 9 July 1957 was attended by San Francisco Mayor George Christopher and many local business dignitaries. The final cost of the buildings was $4.5 million, including $80,000 for the Service Building, plus $600,000 for the furniture and $300,000 for the landscaping.

The company stressed that the buildings were designed both for efficient operation and to provide a pleasant working environment, recognizing that insurance companies were noted for high employee turnover and hoping that comfortable and attractive surroundings would help retain employees. Some of the means of establishing these conditions were providing good light and air, views, access to outdoor gardens, recreation facilities, a cafeteria, comfortable furniture, thoughtful choice of colors, and plentiful parking.

While there is no evidence of a master plan, the company and its designers anticipated the future need to expand. According to the general contractor at the time the building was first built, "The Building has been planned for an expansion factor of thirty percent. Future needs will be satisfied by adding a complete floor above the present floors or by adding a wing."

Guided by City Planning Commission Resolution 4109, the expansions, which occurred in several phases between 1963 and 1967, were made in a way that would not change the character of the main building or harm the attractive environment created by the landscaped grounds and the relationships between the landscaping and the buildings.

The Fireman’s Fund Home Office was the subject of wide popular and professional press coverage when it was first completed. In addition to numerous articles in the San Francisco press, *Business Week* ran an article on the company to coincide with the completion of the building. The principal west coast architectural periodical, the *Architect and Engineer*, ran a long cover story on the building. And, the prominent French journal, *Architecture d’aujourd'hui*, devoted two pages to the architecture and landscape design of the property in a special issue.

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4 Graeme K. MacDonald, “New Fireman’s Fund Building Incorporates Many Construction Innovations and Ideas,” *Architect and Engineer* 210, No. 3 (September 1957), 16.

5 The most complete San Francisco newspaper article was *San Francisco Chronicle*, “Fireman’s Fund Shows New Home,” 9 July 1957; *Business Week*, “Casualty Insurer Faces the Music: Fireman’s Fund, hardest hit by disasters of 1956, is pushing a comeback program that others may have to copy,” 27 July 1957, pp. 92-98.

6 MacDonald, 11-19.
on office buildings around the world. Fireman’s Fund was the only American building featured among forty-three buildings in sixteen countries on three continents.

**Phase II: One-story Addition 1963–1964**

On 15 November 1963, Fireman’s Fund applied for a building permit to add one story to a portion of the original building at a cost of $800,000. This would add a floor to the Executive Wing, the Cafeteria Wing, and a portion of the west end of the Office Wing (north) with a total of 27,000 square feet. Construction began on 2 March 1964 and was completed in December 1964. The addition matched the original building in its design, materials, and details visible on the exterior.

The architect for this addition was the same as for Phase I and the structural engineer was H.J. Degenkolb & Associates, the successor to the original firm following the death of John Gould. The mechanical engineer was K.T. Belotelkin & Associates and the electrical engineer was Charles M. Krieger & Associates.

**Phase III: Parking Garage, Auditorium, and Office Addition 1965**

In the first half of 1965, Fireman’s Fund initiated work on two related additions carried out under separate building permits, one for work that was much larger than the other. On 19 February 1965, the company applied for a permit for an addition on the east side of the Service Building and to build a new underground service tunnel between the Service Building and the main building. The addition was a rectangular block with a flat roof, the same size as the existing Service Building and clad in matching brick on the exterior.

The company applied for a second permit on 24 June 1965, for a large, partially underground, three-level addition whose primary purpose was a parking garage, but which also included more office space and an auditorium. The permit was issued on 24 August 1965 for work to cost $1,500,000. The footprint of this new 120,000 square foot building was irregular, but the main part of it could be enclosed by a rectangle parallel to Presidio Avenue and at a right angle to the existing California Wing of the Main Building. At the north end of this building were two cylindrical ramps for access to the parking levels from the roof at the level of the previous parking area. The garage provided parking for 271 vehicles. At the south end of the structure was the auditorium which had seating for 300 people. The auditorium was entered at the first sub-level of the structure, one level below the ground floor of the original office building.

This addition was of reinforced concrete construction. The exposed north end of the garage was undisguised concrete. The exposed east side of the first and second sub-levels of the structure

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7 V. Janson de Fischer, “Le Siege d’une Compagnie d’assurance, a San Francisco,” *Architecture d’aujourd’hui* 30, No. 82 (January 1959), 82-83.
was clad in brick with glass clerestories on the second sub-level and in the same aluminum frame and glass window wall as in the original building on the first sub-level. The auditorium was enclosed in brick.

The architect and engineers for this phase were all the same as in Phase II.

**Phase IV: Parking Garage Superstructure and Fourth Floor Additions 1966–1967**

On 14 February 1966, Fireman's Fund notified the Laurel Heights Improvement Association that it was seeking approval for the completion of the fourth floor addition from Phase II and the construction of a three-story office building on the roof of the parking garage built in Phase III. The permit for this work, to cost $2,000,000, was issued 24 March 1966 and the work was completed in 1967. These changes were in the same materials and details as the original so that the character of the 1957 building remained intact.

Another addition was made under this permit to the Service Building. This was small rectangular building to serve as a new boiler room. Like the previous addition, this was clad in the same brick as on the original.

The architect and engineers for this work were the same as in Phases II and III.

**Interior Alterations 1958–1982**

Building permits were issued for many interior alterations to the building during its ownership by Fireman's Fund. Until the last couple of years, most of these were small jobs involving office spaces, sprinklers, and service features. In 1968–1969 and in 1975–1976, office areas throughout the building were renovated. The flexibility of the large open office areas of the original design anticipated reorganizations and remodelings of these spaces.

Until 1968, the architect for all of this work was Edward B. Page. Beginning in 1968, the work was done by his successor firm of Page, Clowdsley, & Baleix. Until 1970, the general contractor for the work was always MacDonald, Young, & Nelson and its successor firm of MacDonald & Nelson. Beginning in 1971, the contractor for many interior alterations was Herrero Brothers.

**Overcrowding**

By 1970, the building was running out of space. A new three-story office building was proposed about a half block away on Masonic Avenue near Geary, but was never built. Subsequently, planning began for a large new office building and data center on Lucas Valley Road in Marin County for 800 "technical and clerical" employees and for the company's large IBM computers.
According to the San Francisco Chronicle, this move was necessary because, "Height limitations prevented adding to the existing building."

Beginning in 1977, the corporate owner of Fireman’s Fund since 1968, American Express, occupied space in the building and sometimes hired different contractors. By 1982, when portions of the building were leased to outside tenants, interior spaces were remodeled by different teams of designers and builders.

Landscape

The site was previously a portion of the Laurel Hill Cemetery, which closed in the late 1930s. Prior to construction of the Fireman’s Fund Home Office, debris from the cemetery was cleared, taking care to leave several large trees which were incorporated into the landscape design.

Phase I: 1955–1957

The firm of Eckbo, Royston, and Williams (ERW) prepared the landscape design and worked with the architects on the site plan that determined the location of the building and the arrangement of the parking, internal roads, and outdoor spaces. Garrett Eckbo’s description of the challenges of the design process for a building and site, found in his book Urban Landscape Design, provide insights into the resolution of the design for the Fireman’s Fund property.

[T]he site is a piece of real estate, variable in size, form, and topography, produced by land subdivision... Thus the landscape design problem is to achieve the best possible development of a space or series of spaces determined by the relationship between the building and the site boundaries. Within these, the specific demands of the program must be satisfied. Problems of orientation and climate control—sun, wind, heat, glare, reflection—must be resolved. Visual demands created by the form and height of the building and the size and position of glass areas must be satisfied. The exterior landscape, beyond the site

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9 Typically, one of the ERW partners would take the lead on a specific project and then oversee all phases of the work. The plans for the ERW design were not located during the research for this nomination, and the lead ERW partner for the Fireman’s Fund landscape design could not be determined. A caption for a photograph, in a 1969 article in the San Francisco Sunday Examiner and Chronicle (Adams 1969), attributed the design to Ed Williams. This attribution seems reasonable for several reasons. Logistically, the Fireman’s Fund project would have been handled by the San Francisco office under the direction of one of the two San Francisco-based partners—Ed Williams and Robert Royston; Garrett Eckbo operated out of their southern California office. Second, Eckbo attributed the Fireman’s Fund design to Eckbo, Dean, Austin, and Williams (EDAW), the successor firm to ERW, in his 1964 book Urban Landscape Design. In other places in this book, he attributed designs prepared by Royston while an ERW partner (Krusi Park [1954] and Mitchell Park [1956]) to Royston’s firm (Royston, Hanamoto, and Mayes) and would have done so with Fireman’s Fund if Royston had been the lead designer. Finally, the landscape design for the mid-1960s additions to the Fireman’s Fund office building were undertaken by EDAW, which supports the assumption that one of the partners who remained with EDAW being the designer for the original, mid-1950s plan.
boundaries, must be analyzed and included or excluded by judicious screening or framing elements. Finally yard spaces which do not relate to building or specific function must be developed in meaningful forms. All of this will be more difficult if the building has been conceived as a self-sufficient unit, and less difficult if the organization of building and site spaces is conceived as one coherent pattern at one time.\(^{10}\)

Eckbo considered the Fireman's Fund site to be an example of this approach for the design process between a building and its site and included a description, site plan, and nine photographs of Fireman's Fund as one of the five projects he used to illustrate the "Building and Site" chapter of the book.

The connections between the Fireman's Fund office building and its landscape were a critical part of the image that the company was promoting with its new headquarters. Descriptions of the property in contemporary articles emphasized the "park-like setting" for the building and parking, which together occupied less than half of the site's 10.2 acres. The description in the Architect and Engineer in April 1956, noted that "the structure, which will overlook San Francisco, has been designed to relate to its park-like setting."\(^{11}\) An extensive article on the new headquarters, in the Architect and Engineer in September 1957, explained that "The building itself occupies 1.74 acres, and there are 2.75 acres of off-street parking for more than 250 cars. On the rest of the land area, a truly superb job of landscaping has been done. This includes 110 varieties of trees, plants and ground cover that give the area surrounding the building a park-like aspect."\(^{12}\) Eckbo made a similar point ("... leaving the major portion of the site for gardens") in his description in Urban Landscape Design.\(^{13}\)

The size (10.2 acres), topography and location of the site (sloping downward from the southwest corner and with a panoramic vista of downtown), and the location of existing large trees influenced arrangement of the site features. Garrett Eckbo, describing the design process for the landscape, in Urban Landscape Design, wrote that "considerable care was taken in the arrangement of the building, parking areas, and levels [grading] to save all the existing trees."\(^{14}\) These mature trees, which were mainly in the large parking lots to the north of the Office Building, helped to frame the building in views from California Street and provided vegetation that was proportional to the three original stories of the building's north façade.

\(^{11}\) Fred W. Jones, "Ten Years of Building and Engineering Construction," Architect and Engineer, 205, No. 1 (April 1956), 12.
\(^{12}\) MacDonald, "New Fireman's Fund Building," 17.
\(^{13}\) Eckbo, Urban Landscape Design, 47.
\(^{14}\) Ibid.
The Office Building was conceived as a series of wings set at right angles to each other, which, in turn, divided the land next to the building into outdoor spaces designed to provide connections between the architecture and the landscape. Additionally, the horizontality of the architecture both in its long, low wings, and in the specific design features of the wings—the division of floors by continuous thin edges of concrete and the walls of the floors consisting of long repetitions of similar window units—helped to balance the massing of the Office Building with the surrounding landscape. The exterior glass walls provided views into the landscape of the outdoor spaces and at certain times of day reflected landscape features (trees, lawn, walls, patterned pavement, etc.), adding yet another level of integration between interior and exterior spaces.

The principal outdoor space—the Terrace—was set on the east side of the building, framed by the Office and Cafeteria Wings, where it was "protected from the prevailing west wind" and on a portion of the site that had been graded to provide "a good view of a large part of San Francisco." Here a biomorphic-shaped lawn was framed on its west, north, and east sides by a patio, whose exposed aggregate pavement was divided by rows of brick that aligned with the window frames of the building. Benches attached to the niches of the zig-zag of the seat wall, which enclosed the eastern side of the Terrace, provided places for employees "to relax in the sun during lunch or coffee breaks."

The Entrance Court on the west side of the Office Building—framed by the Office, Cafeteria, and Executive Wings—provided access to the Executive/Visitor Entrance into the building. A narrow, 80-foot-long, rectangular reflection pool at the center of the paving (asphalt divided by rows of red brick inset into the pavement) created a U-shaped drive. Arbor-covered sidewalks lined the outer edges of the pavement, with parallel parking next to the sidewalks.

A brick wall, which took several different forms, provided a continuous and unifying element around the edges of the site. It created a boundary wall along the property's northeast, north, and west sides, and the three gated entrances—one for the employees on California Street and the service and executive/visitor entrances on Laurel Street—were integrated into these sections of the wall. It was transformed into low retaining walls that defined a series of planting beds along the west end and south side of the Executive Wing, and continued—again as a boundary wall—along the outer edge of the Terrace and the parking lot to the east of the building. The brick in the various sections of this wall and in the pavement patterns of the Terrace and Entrance Court was the same as that used in the Office Building and Service Building and helped to integrate the architecture and landscape.

15 Ibid., 48.
16 Ibid., 49.
Lawns, the iconic symbol of the landscape in post-World II suburban design, created the setting for the Office Building along the west and south sides of the property and provided an appropriate interface with the surrounding residential neighborhood. In *Urban Landscape Design*, Eckbo noted that plant materials were chosen based on the existing trees on the site and the climatic conditions. Live oak and red-flowering eucalyptus were the primary species planted, with "secondary themes . . . carried by the Monterey cypress, olives, redwoods, and Bishop pines" that were planted.\(^{17}\) Shrubs and groundcovers were chosen to add color, fragrance, and "to provide interesting combinations of foliage, color, and texture, so that at all times of the year there will be something of special interest for the passerby to see."\(^{18}\)

**Phase II: 1963–1964**

There were no additions or major changes to the ERW landscape design during Phase II.

**Phases III and IV: 1965–1967**

EDAW, the successor firm to the ERW partnership which had been amicably dissolved in 1958, prepared the landscape design that accompanied the mid-1960s additions to the Office Building. Just as the architectural additions were intended to be compatible with original Office Building's design vocabulary, EDAW's design was intended to compliment and reference the original, mid-1950s ERW design. The portion of the parking lot that wrapped around northeast corner of the site and a portion of the original brick perimeter wall along the eastern edge of this lot were removed when the office wing extension, garage, and auditorium were built. The planting islands within the remaining portion of the east parking lot were rearranged to accommodate a new parking pattern. A service drive was added from Presidio Avenue to the ground floor of the Garage. The brick wall, along Masonic Avenue, was rebuilt to accommodate the additions to the building and new service drive. A row of redwood trees were planted across the new eastern façade of the newly extended office wing, and the level land between the building and the street was planted with grass. Paving was added around the east, south, and west sides of the new Auditorium to create outdoor sitting areas and to facilitate pedestrian circulation.

EDAW designed an entrance terrace on the west side of the Auditorium, paved with exposed aggregate concrete divided by rows of inlaid brick that referenced the paving found in the original, mid-1950s Terrace. The new concrete-paved landing on the east side of the Auditorium provided a second, but smaller, outdoor sitting area; this area was enclosed on its east side by rectangular brick planting beds which were incorporated into a new section of the brick wall. The brick in the new planting beds and the new wall section was similar to that of the original wall.

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\(^{17}\) Ibid., 47.

\(^{18}\) Ibid., 48.
3333 Investors

Phase V: Presidio Corporate Center 1984–1985

About 1983, Fireman’s Fund sold the property to a new owner called 3333 Investors. In 1984 and 1985, 3333 Investors took steps to transform the property into the Presidio Corporate Center, an office building open to leasing by multiple tenants. Apart from numerous relatively minor interior office alterations, this owner made two distinctive changes visible on the exterior of the building.

In the spring of 1984, the aluminum window frames throughout the building were painted a dark color and the glass in the windows including the blue bottom panels of each window unit was darkened. The tinting of these windows was said to have a fifteen year life expectancy.19

In permits dated 6 October 1984 and 8 January 1985, the original entrance lobby on California Street was remodeled and a new exterior entrance gateway structure was built. Apart from serving to mark the entrance and to represent a new owner and a new use, it is not clear that this structure had any function. The architect for the new entrance structure was CRS Sirrine of Houston in association with EPR of San Francisco.

University of California

In February 1985, 3333 Investors sold the property to the Regents of the University of California to be used as the Laurel Heights Campus of the University of California, San Francisco. Since it has owned the property, the university has made minor exterior alterations and extensive interior alterations. The principal exterior alterations have been a project begun in 1986 that added a loading dock on Presidio Avenue and another that added rooftop screens to hide added mechanical equipment.

During the ownership of the University of California, space in the building has been occupied by the California Department of Transportation as well as by the University of California, San Francisco.

In preparation for a move to the new Mission Bay Campus and elsewhere, in 2012 the university began investigating options for the site. On 13 March 2015, the university signed a ground lease with Laurel Heights Partners, a development firm with plans to make extensive changes to the site. In April 2018, Laurel Heights Partners stated that they recently became the fee owner of the property.

19 University of California, San Francisco, Office of the Chancellor with the assistance of Ira Fink Associates, University of California, San Francisco – Laurel Heights Site Development Plan: Draft Environmental Impact Report, ([Berkeley]: Regents of the University of California, 1986), 73.
INTEGRITY

For the period of significance 1957–1967, alterations to the property are addressed below for the buildings and the landscape separately, followed by an evaluation of integrity of the property as a whole.

Buildings

The two buildings of the Fireman’s Fund Home Office have a high degree of integrity. Although the original 1957 buildings were altered with major additions in 1963–1967, the changes were all within the period of significance and all were carried out by the same primary team of the architect, the engineer, and the general contractor.

After the period of significance additions and alterations to the buildings have been relatively minor in the context of the whole. Altogether, these changes, which are described herein, have had a limited effect on the character of the buildings.

The principal changes after the period of significance to the Office Building were the addition of two service entrances, a gateway in front of the Employees Entrance on California Street, the darkening of the glass walls, and the addition of rooftop screens to hide mechanical equipment. The most significant of these are the darkening of the windows and the addition of the entrance gateway.

The entrance gateway was built in 1984–1985. It is a two-story structure that frames the path of entry from the street and also the existing walkway along the front of the North Wing. The ground level of this structure is clad in the same brick that is used elsewhere in the building. The second level, which spans brick supports on both sides, is glazed. The use of glass here is compatible with the glass windows that dominate the exterior surface of the original building in the Fireman’s Fund era, but is different in its details and character. At present, the gateway is partially hidden by trees, lessening its impact.

Also in 1984–1985, the windows were darkened. This change involved tinting of the glass itself, the aluminum frames of the units of the windows, and the blue bottom panels of the window units. This change affects the character of the building as a whole but does not alter its essential features or design as a glass box open to its immediate landscape and to distant views.

Other alterations visible on the exterior are less important. A service entrance consisting of a roll-up door and loading area was added at either end of the Office Building, accessible from the service drive parallel to Laurel Street at the west end and from Presidio Avenue at the east end. The rooftop screens around mechanical equipment evoke the penthouses on the roofs of the Executive Wing and the Office Wing (north), which were removed in the additions of 1963–1967. They do not have a significant impact on the character of the building.

Section 7 page 24
Interior changes since the Fireman’s Fund era have altered the interior for new uses. As the headquarters of a national insurance company, the interior was designed to provide offices and support services for clerical workers, managers, executives, and others in a mix of open office areas, private offices, meeting rooms, public rooms, and rooms for office machines. For its current use by the University of California (for academic and administrative offices, office-based instruction, and social and behavioral research) open offices have been partitioned, old partitions have been removed or changed, and spaces have been created for specialized purposes. In 1987, a large MRI center was built on the ground floor of the California Street Wing. Along with these changes, for security reasons the building has been divided inside into sections that do not communicate and lobby areas have been remodeled as security checkpoints. These changes alter the visual relationship between the design of the building and its structure. These altered conditions are apparent to occupants and users of the building but cannot be seen from outside the building or by the general public.

The Service Building has been altered with three additions, each in the character of the original, each in the same brick as the original, and all within the period of significance.

Landscape
The landscape is an integral part of the design for the corporate headquarters commissioned by Fireman’s Fund in the 1950s and to the additions to this facility from the 1960s. The ERW/EDAW design retains a high degree of integrity and continues to create a landscape setting around the International Style Office Building. The landscape design continues to promote the integration between interior and exterior space on the site, and the original forms and materials of its key features, which were characteristic of modernist designs from the mid-twentieth century, remain in place.

The Terrace, which was designed as the “centerpiece” of the landscape, continues to integrate the architecture of the building with the site and with the broader setting (through views of San Francisco). The Terrace retains its characteristic biomorphic-shaped lawn surrounded by a paved terrace and patio, and there have been only minor alterations since the end of the period of significance. One tree (likely an oak) at the south end of the lawn has been cut down, and new benches and tables have been added. Some of the original shrubs and flowering plants—described by Eckbo in his book Urban Landscape Design—are no longer present; however, the locations of the plants and their general character (trees in circular beds and flowering shrubs and groundcovers in planting beds) remain.

The Entrance Court was altered both during and after the period of significance. Sometime during the period of significance, the reflecting pool at the center of the parking lot was removed and converted into a planting bed; a review of aerial photographs indicates that this alteration occurred between 1961 and 1968. Several other changes occurred after the end of the period of
significance. Between 1993 and 2001, the distinctive brick stripes in the parking lot pavement were paved over, and the arbors that covered the sidewalks on the north, east, and south sides of the parking lot were removed; the arbor on the west side was left in place. The exposed aggregate concrete paving for the sidewalks was also redone at this time. In the late 1990s, the configuration of the concrete pavement and the arrangement of the custom-built mid-1950s benches to the north of the parking lot were altered. However, the general design and function of the Entrance Court—as an outdoor connection between the Executive/Visitor Gate and the entrance to building on the west side of the Cafeteria Wing—are still evident, and the Entrance Court continues to contribute to the overall integrity of the landscape design.

The short service drive to the west of the Office Building was altered both during and after the period of significance. During the period of significance, the west side of the road was widened to provide additional parking; this change occurred between 1961 and 1968. After the period of significance, a portion of the east side was also widened for parking. However, the original alignment of this short road and its function within the overall landscape design remain. The service drive continues (1) to connect the entry drive and Entrance Court and (2) to provide access from a service area on the west side of the Office Building to the Laurel Street Service Gate. Additionally, the overall design of the internal circulation system (with the two parking lots in front of the Office Building and internal roads) remains intact.

A new feature was added in 2000–2001 (after the end of the period of significance) when a fenced outdoor child care/play area was built on the south side of the Office Building; this area had previously been planted with grass and was part of the large lawn along the south side of the property. As part of this change, a new pedestrian entrance was created for the Terrace’s southwest corner by removing a part of the brick retaining wall along the outer, southern side of the Terrace and adding a metal gate. A new sidewalk and pedestrian ramp were added to provide access between Euclid Street and this new entrance. However, the overall design of the Terrace was not altered by the addition of this play area. Additionally, enough of the lawn remains to convey the original landscape setting along the south side of the property.

Some of the materials associated with the vegetation features have been changed. Specifically, most of the original shrubs, groundcovers, and smaller plants have been replaced. Most of these changes to materials likely occurred incrementally, after the end of the period of significance, when plants reached the end of their lifespan, when certain species did not thrive in a specific location, or when the popularity of species changed. However, the major vegetation features retain their original locations and functions within the landscape design and continue to contribute to the historic character of the landscaped setting of the Fireman’s Fund property.

The key materials and workmanship of the landscape structures and site furnishings remain including the brick used in the walls throughout the landscape; the exposed aggregate concrete
for sidewalks; the exposed aggregate concrete divided into panels by rows of brick in the pavement at the Terrace and in the Auditorium’s west-side sitting area; the metal for the entrance gates; the custom-designed wood benches found in the Terrace and at the Entrance Court’s outdoor sitting area; and the circular tree beds constructed of modular sections of concrete found in the Terrace and in the Auditorium’s west-side sitting area.

**Combined Buildings and Landscape**

Together the buildings and landscape of the Fireman’s Fund Home Office constitute a single resource that possesses integrity as measured by the seven aspects of integrity, as follows:

1) **Location**: The property is in its original location. It has not been moved.

2) **Design**: The property retains the essential elements of its design and the relationship between the parts of the design. Alterations to the design since the period of significance are relatively minor. It retains integrity of design.

3) **Setting**: The setting of the property is the same in all major respects as at the time it was first built. It retains integrity of setting.

4) **Materials**: The materials used in the buildings and landscape during the period of significance are all present. The property retains integrity of materials.

5) **Workmanship**: Evidence of workmanship, both from craftsmanship (brick and landscape features) and industrial processes (glass manufacture, concrete finishing, extrusion of aluminum) are all present. The property retains integrity of workmanship.

6) **Feeling**: Because the property as a whole—its buildings and landscape—are little altered and have been well-maintained, it retains integrity of feeling from the period of significance.

7) **Association**: Apart from the lettering on the outside wall near two entrance gates with the name of the current occupant of the property, the property is almost indistinguishable from the time of its ownership by Fireman’s Fund Insurance Company. Thus it retains integrity of association.

**CHARACTER DEFINING FEATURES**

**Office Building**

Plan of the building with wings open along the sides to the immediate landscape and to views of the distant city

Horizontality of massing

Horizontal lines of projecting edges of concrete floors
Horizontal bands of nearly identical window units

Uninterrupted glass walls

Window units of aluminum and glass

Circular garage ramps

Exposed concrete piers over the Garage

Wrought iron deck railings that match gates in the landscape

Brick accents and trim

Service Building

Massing of rectangular volumes

Brick walls with a minimum of openings

Landscape

Terrace, as the "centerpiece" of the landscape, designed to integrate the architecture of the building with the site and with the broader setting (through views of San Francisco); key character-defining features include its biomorphic-shaped lawn surrounded by a paved terrace and patio (paved with exposed aggregate concrete divided into panels by rows of brick); brick retaining wall and large planting bed around the east and north sides of the paved patio, custom-designed wood benches, and three circular tree beds constructed of modular sections of concrete.

Entrance Court, providing a connection between the Executive/Visitors Gate on Laurel Street and an entrance to the building on the west side of the Cafeteria Wing; key character-defining features include a central paved parking lot surrounded on its north, east, and west sides by narrow planting beds; exposed aggregate sidewalks along the north, east, and west sides of the parking lot; and a low free-standing brick wall along its north side.

Auditorium's two outdoor sitting areas—one on the east side of the Auditorium and one on its west side—that connect to entrances into the Auditorium; key character-defining features for the area on the west side of the Auditorium include the pavement (exposed aggregate divided into panels by rows of bricks), circular tree bed constructed of modular sections of concrete; and metal benches; key character-defining features for the area on the east side of the Auditorium include the pavement (concrete divided into panels by wood inserted into expansion joints).
Brick wall (constructed of red brick set in running bond pattern similar in appearance to brick used in exterior of main building) that takes several forms and which forms a continuous and unifying element around the edges of the site.

Three gated entrances—one for the employees on California Street and the service and executive/visitor entrances on Laurel Street—that are integrated into the brick perimeter wall.

Internal Circulation System (entrance drive, service drive, East and West Parking lots)

Vegetation features that helps to integrate the character of the Fireman’s Fund site with that of the surrounding residential neighborhoods including (1) the large trees in and around the East and West Parking Lots, (2) the lawns on the west, south, and east sides of the property, and (3) the planted banks along Laurel and Masonic streets.
8. Statement of Significance

Applicable National Register Criteria
(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

- [x] A. Property is associated with events that have made a significant contribution to the broad patterns of our history.
- [ ] B. Property is associated with the lives of persons significant in our past.
- [x] C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction.
- [ ] D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations
(Mark “x” in all the boxes that apply.)

- [ ] A. Owned by a religious institution or used for religious purposes
- [ ] B. Removed from its original location
- [ ] C. A birthplace or grave
- [ ] D. A cemetery
- [ ] E. A reconstructed building, object, or structure
- [ ] F. A commemorative property
- [ ] G. Less than 50 years old or achieving significance within the past 50 years

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Areas of Significance
(Enter categories from instructions.)
ARCHITECTURE
LANDSCAPE ARCHITECTURE
COMMUNITY DEVELOPMENT
COMMERCE

Period of Significance
1957–1967

Significant Dates
1957
1964
1965
1967

Significant Person
(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder
Edward B. Page, Architect
John J. Gould & H.J. Degenkolb/Henry J. Degenkolb & Associates, Structural Engineer
Eckbo, Royston, & Williams (ERW)/Eckbo, Dean, Austin, & Williams (EDAW), Landscape Architects
The Fireman's Fund Insurance Company Home Office is eligible for the National Register under Criteria A and C at the local level. Under Criterion A, it is significant in the area of Commerce for its association with the San Francisco insurance industry, an important industry in the history of the city from the Gold Rush to the present. In particular, it represents the postwar boom in San Francisco's insurance industry when many companies built new office buildings. At that time, Fireman's Fund was one of the largest insurance companies in the United States. It was the only major insurance company headquartered in San Francisco. It was a leader among all insurance companies in San Francisco in its embrace of new ideas, symbolized by its move away from downtown to an outlying location. Under Criterion A, the Fireman's Fund Home Office is significant in the area of Community Planning and Development as one of the principal embodiments of the postwar decentralization and suburbanization of San Francisco. Fireman's Fund was the first major office building to be built outside of downtown in a suburban setting and it was the first whose design was fully adapted to the automobile. Under Criterion C, the Fireman's Fund Home Office is significant as the work of three masters, the architect Edward B. Page, the engineering firm of John J. Gould & H.J. Degenkolb/Henry J. Degenkolb & Associates, and the landscape architectural firm of Eckbo, Royston, & Williams (ERW)/Eckbo, Austin, Dean, and Williams (EDAW). As a modernist, through his experiences in Paris in 1930, Edward Page had direct links to the birth of modern architecture and to its development in the United States. The Fireman's Fund Home Office is his best known and most important work. The Fireman's Fund Home Office—with its innovative structural design that provided open floors with minimal columns and exterior walls of glass—represents the beginning of the reputation of the Gould and Degenkolb engineering firms as among the leading structural engineers in San Francisco in the post-World War II period. ERW/EDAW was recognized as one of the country's leading landscape architectural firms during the period of significance, and their designs and writings contributed to the popularization of the modernist landscape design vocabulary and to modernism as an approach to creating outdoor spaces that addressed contemporary needs within a broad range of settings. The Fireman's Fund Home Office represents an example of the firm's mastery of modern design within a corporate landscape context. Additionally, the Fireman's Fund Insurance Company Home Office, a single property including both architectural and landscape architectural elements which were designed to complement each other, is significant under Criterion C as an example of a corporate headquarters in San Francisco that reflects mid-twentieth-century modernist design principles. The period of significance is 1957 to 1967, covering the period from the year when the first phase of the buildings and landscape were completed (1957) to the year the final phase of construction was undertaken (1967) by Fireman's Fund. The Fireman's Fund company continued
on this site as a leading insurance company in San Francisco and nationally until it sold the property in 1983. Although there are numerous alterations, these alterations do not alter the essential character of the property and it retains a high level of integrity.

**Narrative Statement of Significance** (Provide at least one paragraph for each area of significance.)

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CRITERION A: COMMUNITY PLANNING AND DEVELOPMENT

For at least twenty-five years after World War II ended in 1945, there was an accelerated general movement of population and growth in the United States out of the central cities and into outlying areas. This regional decentralization and suburbanization took place in housing, retail, office, industrial, and institutional developments. In the San Francisco Bay Area, the two largest urban centers—San Francisco and Oakland—lost population as new housing and other...
developments boomed on agricultural land and sparsely settled areas of Marin, San Mateo, Santa Clara, Alameda, and Contra Costa Counties. While there were many reasons for this movement, a primary factor was the growing use of motor vehicles. In contrast to the densely concentrated older cities, these new suburban areas were spread out, a development facilitated by construction of bridges across the bay in the 1930s to 1950s and the beginning of the construction of freeways.

San Francisco itself experienced its own internal version of this movement. While the City and County of San Francisco shared the same boundaries and much of its expanse was occupied by traditionally dense urban development, there were substantial areas outside the core—but within the city boundaries—that had never been developed or, because of changing conditions, were newly available for development.

Little new industry entered San Francisco in these years, but every other major land use was expanded. The spectrum of new developments of this period did not simply replicate old patterns of development. Instead, they were shaped by the forces that drove suburbanization elsewhere. In addition to motor vehicles, which were used for private transportation, for hauling goods for business and industry, and in competition with streetcars and other forms of transit, cheap energy and plentiful water played a fundamental role. Also, social forces such as a growing middle class, and “white flight” from perceived overcrowding and changing population demographics in central cities were major factors.

Between 1945 and the late 1960s, years that included the construction of the Fireman’s Fund Home Office in Laurel Heights, many of the principal developments of the city itself were part of this movement. The developments of these years were different in fundamental ways from what had been built before. The cumulative effort of all these changes changed the character of the city as a whole. By the end of this period, San Francisco was not the dense pedestrian and streetcar city that grew up in the nineteenth and early twentieth centuries. It had become a mix of the earlier city and the “New City,” a term used by University of California scholar James Vance to describe these changes. The co-existence of these two types of urban development in one city introduced new benefits and new problems. The city could better accommodate changing social and economic conditions, but it was plagued with traffic congestion, lack of parking, decreased support for mass transit, air pollution, proliferation of one-way streets, and construction of freeways.

Fireman’s Fund was among several large and notable developments of San Francisco’s postwar New City. Three of these developments were built on adjacent properties in the southwest corner

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20 James Vance, Geography and Urban Evolution in the San Francisco Bay Area (Berkeley: University of California, Institute of Governmental Studies, 1964), 68.
of the city. Park Merced, a residential development by the Metropolitan Life Insurance Company of New York consisting of garden apartments and thirteen-story towers on almost 200 acres, was begun just before the war but mostly was built after it, opening in 1950. Stonestown, a complex that included a shopping mall, ten-story towers and garden apartments, and a medical office building on 67 acres, was built in 1949–1952. San Francisco State College (now University), although planned before the war, was built in 1949–1954 on 140 acres. Across town in the southeast corner of the city, Candlestick Park, a 44,000 seat professional sports stadium, was built in 1958–1960. Residential tracts in the central and western parts of the city with hundreds of new homes and housing units, like Lakeshore Park, Laurel Heights, Anza Vista Heights, Midtown Terrace, and Country Club Acres, filled up most of the last open land in San Francisco in the 1940s and 1950s. Also in this period, planning began by the San Francisco Redevelopment Agency for Diamond Heights, a 300-acre site in the center of the city for retail, housing, schools, and other neighborhood functions.

In addition to these large projects, smaller new developments of every kind throughout the city were also shaped by the same conditions. Strip shopping districts (like Laurel Village), new branch libraries, churches, small office buildings, motels, drive-in restaurants, and other types of development were built on in-fill sites and in new areas. A common feature of all of these was the accommodation of automobiles including on-site parking garages and the placement of new buildings with parking lots around them.

As San Francisco was affected by decentralization and suburbanization, both within its borders and in nearby counties, traditional patterns of development persisted as well. One of the strongest traditional patterns was the location of large office buildings downtown. Between 1946 and 1967, twenty-one large office buildings were built in San Francisco. Nineteen of these were medium or high rise buildings on restricted lots downtown.

Despite the strength of the downtown, two major office buildings were built in central areas far from the traditional core of the city. The Fireman’s Fund Insurance Company Home Office, originally a 194,000 square-foot building (equivalent to a twenty-story skyscraper on a downtown lot), was a sprawling low-rise building on a 10.2-acre site surrounded by landscaping and parking; it was built in a predominantly domestic-scale residential area. The Jack Tar Hotel and Office Building of 1960, including landscaped grounds, was built in a central location on Van Ness Avenue in a dense urban neighborhood of apartment buildings and multistory automobile dealerships; this large complex included an eight-story hotel and a twelve-story office building of 214,422 square feet.

While Fireman’s Fund and the Jack Tar were the only major office developments in this period to locate outside of the traditional downtown but still within the city of San Francisco, they were
Evaluation

The Fireman’s Fund Insurance Company Home Office is eligible for the National Register under Criterion A as one of the principal embodiments of the post World War II decentralization and suburbanization of San Francisco. Fireman’s Fund was the first major office building to be built outside of downtown in a suburban setting and it was the first whose design was fully adapted to the automobile.

CRITERION A: COMMERCE

Two conditions of San Francisco’s early history and growth, namely its reliance on maritime commerce and its frequent large and destructive fires, quickly gave rise to an insurance industry. This industry would play an important role in the local economy as an employer and as a source of investment money in the region. Because insurance companies had a significant presence in San Francisco from the beginning, the city became a center for the insurance industry on the west coast that has diminished since the 1980s but still continues to the present day.

The first of the two conditions was the isolation of San Francisco and its overwhelming dependence on maritime transportation. For the first twenty years of the American period, the most important means for the delivery of goods and people to California was by ship. While the completion of the transcontinental railroad in 1869 introduced another means of transport, San Francisco Bay remained a major world port until after World War II and still remains a significant port today. Ships owned by people and companies in other places came from all over the world to San Francisco. The owners of these ships and their cargos purchased insurance against loss from companies in the eastern United States and Europe. Very early in the period of American control of California, in 1849, insurance companies headquartered in distant places opened offices in San Francisco. In the next ten years, numerous companies from New York, London, Germany, and elsewhere opened San Francisco offices initially for the sale of marine insurance.

The second early condition that gave rise to the San Francisco insurance industry was an outcome of the rapid growth of the city, the haphazard construction of its buildings in flammable materials; these resulted in the destruction by fire six times in the 1850s of large parts of the city.

In response to both of these conditions insurance was provided at first only by distant companies and fire insurance was available only at exorbitant rates if it was available at all. High insurance rates were a primary factor in the improvement of building practices. Under the influence of insurance companies, building laws were enacted and continually strengthened and new buildings in the central commercial district were required to be built in fire-resistant materials.
Within a few years, local companies emerged in competition with outside companies primarily to sell two primary forms of insurance—marine insurance and fire insurance. Among more than thirty local insurance companies formed in San Francisco in the 1850s-1860s, Fireman’s Fund Insurance Company was formed in 1863. Many of these lasted only briefly before they were bought by rivals or went out of business. Fireman’s Fund was among the few San Francisco companies that became well-established and among these it was the only one left in business by 1895.21

Fireman’s Fund succeeded where other local companies failed for a number of reasons. Among these, the company quickly established branch agencies in distant places and sold insurance throughout the United States and abroad, it paid its claims in a number of high risk and high profile situations which gave it a reputation for honesty and reliability, it had wealthy owners who could provide enough capital to survive in more than one case, and it made key innovations on a number of occasions that proved to be influential within the industry.

When the company was founded by local businessmen in 1863, its initial plan was to pay volunteer fire companies ten percent of the company profits for a charity associated with the Fire Department, and came up with the name “Fireman’s Fund” for that reason. The idea of the company founders was that firemen would be more conscientious in putting out fires at buildings insured by Fireman’s Fund, Fireman’s Fund would prosper, and the charity would prosper. The idea didn’t work, but the company kept the name.

Within five years of its founding, the company had branch agencies all over California and in New York and Chicago. By the time of the disastrous Chicago fire of 1871, which wiped out much of the central business district, Fireman’s Fund covered many buildings there. The company might have gone under like many others did, but by collecting assessments from its stockholders, raised enough money to pay all claims and stay in business. With this action Fireman’s Fund became the leading locally based insurance company in San Francisco, a position that it never relinquished.

In 1867, the company built an imposing headquarters in a prestigious location at the southwest corner of California and Sansome Streets. Situated among the leading banks and financial institutions of San Francisco on the principal street of the financial district of that time, the location itself was a statement of the ambitions of the company for success.

For the rest of the nineteenth century, the company prospered while taking over other San Francisco insurance companies and expanding its operations. The company paid claims after big

fires in Boston and Virginia City, solidifying its reputation. By 1895, it had branch offices for its four regional departments around the country. At the end of the century, the company insured ships and enterprises associated with the high-risk environment of the Klondike Gold Rush in Alaska and Canada. By 1905, the company had regional department offices in Chicago, Boston, New York, Macon, Georgia, and London and had expanded internationally, with “general agents” in Hong Kong, Manila, Singapore, and Honolulu.

Fireman’s Fund was by far the leading local insurance company at the time of the 1906 earthquake and fire. Despite the loss of its building and all records, and claims far exceeding the assets of the company, it paid all claims by again assessing its stockholders and by paying in installments. Within six years, the company had fully recovered and increased its assets from about $3 million to $9 million.

The importance of the various insurance companies, both home-grown and out-of-town, in San Francisco after the 1906 disaster was reflected in their buildings. Because of the nature of their business and the nature of the disaster, the location, design, and construction of buildings for the San Francisco insurance industry were particularly important. Like the most prestigious banks, San Francisco insurance companies preferred to locate on California Street near Montgomery, and as close as possible to that intersection on nearby streets. Fireman’s Fund repaired and re-occupied its old building at the southwest corner of California and Sansome Streets; in 1915 the company completed a new building on the old site. The new building was in the form of a Roman temple. Located across California Street from another Roman temple, the oldest and most prestigious San Francisco bank, the Bank of California, the Fireman’s Fund Building asserted the wealth, stability, and historic roots of the Fireman’s Fund Insurance Company. The Liverpool & London & Globe Insurance Company, a British company in San Francisco since 1852, built a variation of a classical temple across California Street from Fireman’s Fund in the same block in 1912. Another British company, The Royal Globe Insurance Company which was also in San Francisco since the 1850s, built an eleven-story office building at the corner of Sansome and Pine Streets, a block south of Fireman’s Fund. Other insurance companies occupied other office buildings in this area.

As the insurance industry prospered, this area was strengthened as its center. In 1913, the Insurance Exchange, a centerpiece of the local insurance industry, opened a new eleven-story exchange and office building next door to Fireman’s Fund’s headquarters. Later, in 1924, Fireman’s Fund built a new eight-story office building next door at 233 Sansome Street, enlarged with another five stories in 1929. In 1927, the sixteen-story Insurance Center Building was built at the northeast corner of Pine and Sansome Streets. All of these insurance company buildings from the years after 1906 were designed by prominent architects of the time. Collectively they asserted the importance of the industry and its associations with San Francisco history and finance.
Fireman’s Fund’s leading place in the competitive world of San Francisco insurance was partly due to various innovations and early adoptions of business ideas which gained advantages over rivals. In the nineteenth century, Fireman’s Fund was a pioneer in the sale of insurance for grain, cotton, and other agricultural products. In the twentieth century, the company was early to sell automobile insurance. It made money with “war-risk” insurance during World War I. Among companies in San Francisco, it was early to enter new fields like life insurance and health and accident insurance. In the 1920s, Fireman’s Fund grew substantially and was known as “the Tiffany’ of the insurance world.”

The insurance industry throughout the country was fundamentally changed by a United States Supreme Court decision in 1943 that for the first time defined insurance as interstate commerce. This changed the structure of most insurance companies, including Fireman’s Fund. This reorganization coincided with the general postwar economic boom, which for some companies including Fireman’s Fund, was accompanied by large and rapid growth.

From 1946 to 1954, Fireman’s Fund’s income from the premiums of policy holders increased from $67 million to $191 million. The company benefitted from the introduction of a Special Home Owners policy in 1951 that was a prototype for the standard “all risk” home insurance that became universal within a few years. A historian of the company described 1954 as “one of the most interesting and successful years in the Company’s history” during which “an unusual number of aggressive steps [were] initiated...to expand operations and introduce new forms of insurance.” In that year the company bought the National Surety Corporation in “one of the largest transactions of its kind ever made.”

By the time of World War II, Fireman’s Fund was spread out among several buildings in downtown San Francisco. The growth of the postwar years resulted in even more employees and produced a great need to consolidate in one location. Thus, in the booming years after the war the company bought the site for its new headquarters in Laurel Heights in 1953 and built the building that was completed in 1957. A factor in the company’s interest in the site was its address on California Street. Although twenty-six blocks west of its traditionally prestigious downtown location, it still had a coveted California Street address.

This was a period of growth for San Francisco’s insurance industry in general. Between 1950 and 1960, seven major insurance companies built new office buildings in San Francisco: Home Insurance Company (1950), Pacific Mutual Life (1954), Equitable Life (1955), America Fore (1956), California Union Insurance (1957), John Hancock (1959), and Occidental Life (1960). All of these were tall buildings downtown and none were as large as Fireman’s Fund. Other

22 Ibid., 147.
23 Ibid., 163.
slightly later insurance company buildings were Hartford Insurance (1964), the Pacific Insurance Company (1971), and Aetna Life & Casualty Company (1969); the Hartford and Aetna buildings were about the same size as Fireman’s Fund after its expansions of the mid 1960s. The best-known and largest building of this period associated with the insurance industry was the Transamerica Pyramid, completed in 1971 two blocks from the heart of the traditional downtown center of San Francisco’s insurance industry for the Transamerica Corporation, a holding company for insurance companies and other kinds of financial businesses.

The opening of Fireman’s Fund’s new building was not accompanied by a slowing of the company’s growth. An important and newsworthy source of new business was in the category of inland marine insurance which “will insure any insurable interest against all perils anywhere in the world.” This covered motion pictures and their casts, rodeo performers, professional athletes, and other types of activity. Fireman’s Fund was second internationally to Lloyd’s of London in providing this type of insurance and was often in the news for this line of work.

In 1963, Fireman’s Fund combined with the American Insurance Company of Newark, New Jersey, with Fireman’s Fund becoming a holding company and changing its name to Fireman’s Fund American Insurance Companies. In 1964, a company advertisement stated that “Today, Fireman’s Fund American is the largest property and casualty insurance company headquartered in the West. It offers every basic line of insurance for both personal and commercial coverage… through more than 25,000 agents and brokers…” In this period, substantial additions to the Laurel Heights building were made. In 1968, Fireman’s Fund and American Express were combined, with American Express moving many employees to Laurel Heights.

**Evaluation**

The Fireman’s Fund Insurance Company Building is eligible for the National Register under Criterion A for its association with the growth and development of the San Francisco insurance industry, an important industry in the history of the city from the Gold Rush to the present. In particular, it represents the post World War II boom in San Francisco’s insurance industry when many companies built new office buildings. At that time, Fireman’s Fund was one of the largest insurance companies in the United States. It was the only major insurance company headquartered in San Francisco. It was a leader among all insurance companies in San Francisco in its embrace of new ideas, symbolized by its move away from downtown to an outlying location.

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24 Ibid., 186.
CRITERION C: DESIGNERS

The Fireman’s Fund Insurance Company Home Office was designed by a team under the leadership of the architect, Edward B. Page. The members of the design team including the architect, structural engineer, and landscape architect are presented below, followed by an evaluation.

Architect: Edward B. Page

Edward B. Page (1905–1994) was an architect who fit the description of many identified by Pierluigi Serraino in his book, NorCalMod: Icons of Northern California Modernism, as largely forgotten but important players in a vital period of architectural practice after World War II.26 Like many in that period, Page was trained in the Beaux-Arts method and exposed to traditional ideas about planning and style. But in his own work Page was a modernist. He is remembered today largely for his design of one building, the Fireman’s Fund Home Office in San Francisco, but in his day was well-recognized for his expertise and for the designs of a number of buildings.

Edward Bradford Page was born in Alameda, a member of the fourth generation of his family in the Bay Area. His great grandfather was a physician from Philadelphia who practiced medicine in Chile, acquired Rancho Cotati in Sonoma County in 1850, and designed a utopian plan for the town of Cotati. Edward Page was one of five brothers and the son of Charles R. Page who became president of the Fireman’s Fund Insurance Company in 1937 and served as Chairman of the Board of Directors from 1943 to 1962.

Edward Page studied engineering at the Sheffield Scientific School at Yale and upon graduation in 1928 started another undergraduate course of study in architecture at the Yale School of Fine Arts. He was critical of the program and was encouraged to take a leave of absence. He spent the year 1930 traveling and studying architecture in Europe. Living mostly in Paris, his inclinations toward architectural modernism were confirmed by a brief disillusioning experience working on a competition entry for the Grand Prix de Rome for Jean Labatut at the Ecole des Beaux Arts. He also studied at the Ecole Americaine at Fontainebleau.

Describing himself in later years, as recorded in an interview at the Environmental Design Archives of the University of California at Berkeley, he rejected the traditions of the Beaux Arts and learned as much as he could about modernism. He said that the most valuable part of his education at that time was in Paris cafes, particularly Les Deux Magots which was renowned as a center for artists, writers, and other cultural figures and had an “architects’ table”—“you sat there long enough and every architect in the world who came to Paris would come by.” In this way he

met prominent and experienced architects from all over, people who as a young student he would have had no opportunity to talk with otherwise. "We were all rebels," he said, "well into the Modern world of architecture, sneering at the Beaux Arts."\(^{27}\)

After a year he returned to Yale and, in 1932, received a degree in architecture. He returned to San Francisco at the worst part of the Depression. There was no work in architecture but he got a job as a laborer building the Bohemian Club, an experience that gave him a ground level view of construction and corresponded to one of the essential elements of an education at the Bauhaus.

From 1934 to 1936, Page worked as a junior draftsman for Arthur Brown, Jr., San Francisco's pre-eminent Beaux-Arts architect. In that job, he prepared full size details of pediments, cornices, and other decorative features used in the Department of Labor– Interstate Commerce Commission complex in Washington, D.C. Contrary to his expectations, he came to admire Brown and his work. Without giving up his Modernist ideals, he later modeled his own practice in part on the observation that Brown “did things with pride, never turned out anything second class,” and never let considerations of money affect the level of his efforts.\(^{28}\)

In 1936, Page moved across the hall on the eighth floor of 251 Kearny Street to the office of Bakewell & Weihe. John Bakewell, Jr. was a distinguished Beaux-Arts architect and had been Arthur Brown’s partner, and Ernest Weihe was also educated in Paris in the Beaux-Arts method. When business was slow in the office, Page was allowed to work there on his own projects and in 1937–1938 was a draftsman for the Golden Gate International Exposition (G.G.I.E.). Later in life he remembered his design for the Island Club (demolished) at the G.G.I.E. with particular pride. In that job he met John J. Gould and Henry J. Degenkolb with whom he formed a close friendship.\(^{29}\) Later, Gould and Degenkolb’s postwar firm would be the structural engineers for the Fireman’s Fund Home Office and Page and Degenkolb worked on several projects together in the course of their careers.

After receiving his architectural license in 1938, Page worked for himself and for others on small projects from 1939 to 1942. On one of these projects, for Lewis Hobart, another prominent Beaux-Arts architect, he worked on drawings for the floor of Grace Cathedral. From 1942–1947, he worked as the Chief of Architecture and Engineering for San Francisco architect Wilbur D. Peugh supervising wartime projects for U.S. Naval Operations.

\(^{27}\) Edward B. Page, Interview by Michael Corbett, 4 April 1980. Environmental Design Archives, University of California, Berkeley.

\(^{28}\) Ibid.

\(^{29}\) Loring Wylie, Telephone conversation with Michael Corbett, 1 February 2018; Bob Cosby, Telephone conversation with Michael Corbett, 3 February 2018.
In 1947, Page opened his own office in San Francisco. Many of his early projects were in association with others, including the Glen Crags Housing Project with Wilbur D. Peugh in 1951 and two schools with Cantin & Cantin in 1952. His design for the 1954 Mason B. Wells house in Belvedere won an Award of Merit from the Northern California Chapter of the American Institute of Architects.

As Serraino observed, many Modernist architects of the postwar generation in the Bay Area, did not seek publicity and, despite the quality and success of their work were not well recognized and have not been remembered. Edward Page’s approach to his practice fit this profile. He did not seek publicity, he intentionally kept his office small so he would have control over his own projects, and he obtained work largely through referrals. “I operated by selling trust,” he said, which was gained by “achieving competence” in dealing with client’s needs from listening and responding. 30

When Page was hired in 1954 to design the Fireman’s Fund Home Office, his father was Chairman of the Board of Directors. He insisted however, that he earned the job over many competitors through a series of small projects for the company. One lead to another over a period of time and when the big job came up, he had gained the trust and respect of company managers. On the Fireman’s Fund project, Page coordinated the contributions of all. He was described as “the master” by Loring Wylie, an engineer in the Degenkolb office who had a major role working on the additions of the 1960s. Wylie remembered Page’s deep involvement with and lead in solving issues with expansion joints as representative of his high level of competence and control. 31 On another technical matter, he designed an innovative system of dispersed lighting for Fireman’s Fund in an effort to provide better working conditions. 32

Following the success of the first phase of the Home Office in 1957, Page designed three subsequent additions in 1963–1967, and branch offices in Fresno, Riverside, San Jose, and Los Angeles. He also consulted on the designs of branches outside of California including those in New York, New Orleans, and Atlanta, where he advised primarily on matters related to the way the insurance business works. Apart from Fireman’s Fund, his later projects included his own residence in Sausalito, a garage at the San Francisco airport, and the Faculty Club at Stanford University. 33

30 Page, interview.
31 Wylie, telephone conversation.
32 Cosby, telephone conversation.
33 Page’s interests extended to history and preservation. With three others including the engineer John J. Gould, he founded the Fort Point Museum Association in 1959. The association initiated efforts to preserve Fort Point, now a part of the Golden Gate National Recreation Area.
In the work of Edward Page, the Fireman's Fund building was the high point of his career in several ways. It was his largest and best-known building. Its success led to work on at least seven other buildings for Fireman's Fund over the next fifteen years—Fireman's Fund would be the most important client in the history of the firm. Page’s success with Fireman's Fund also opened the door to work for other corporate clients.

The International Style design of the Fireman's Fund building represented Page’s personal experience of the formative period of modernism in Europe before the Bauhaus was closed by the Nazis and its leaders scattered to the United States and elsewhere. Modernism in America was initially shaped largely by immigrant architects from Europe and by Americans who studied in the United States with European immigrants like Walter Gropius, Mies van der Rohe, and Le Corbusier. Page was among a small number of Americans whose travels and encounters with modernist architects in Europe directly shaped his ideas about architecture. As his largest and best-known building, the Fireman's Fund building is the foremost example in Page’s work of this experience.

The core of Bauhaus teachings was about more than the appearance and style of buildings. It was also about the process of design, the relationship of architecture and engineering, the fundamental role of engineering in architecture, and the role of the architect as the master of a collaborative effort. The Fireman's Fund building represents these things in the work of Edward Page. Working with a team that included distinguished engineers, designers, and contractors, Page was recognized and admired as the master in charge whose vision and principles were realized under his leadership.

In 1968, Edward Page took on two partners, John U. Clowdsley, Jr. and John Baleix, long-time employees who had both been hired when the work on the Fireman’s Fund Home Office began. The firm of Page, Clowdsley & Baleix continued as the architects for all work on the Home Office, all of which was for interior remodelings, as long as Fireman's Fund owned the property. The principal work of the firm was for Fireman’s Fund and remodeling downtown office buildings.34

Engineers: John J. Gould & H. J. Degenkolb, Structural Engineers

The structural engineer for the original 1957 phase of the Fireman’s Fund Home Office was the firm of John J. Gould & H. J. Degenkolb. Henry J. Degenkolb had been an employee of Gould until he became a partner in 1956. Fireman’s Fund was the first big project of the new

34 John U. Clowdsley, Jr. (1926–2013), grew up in Stockton, the son of an architect. John Baleix (1928–2014) grew up in Oakland. Both studied architecture at the University of California at Berkeley. Both spent their entire careers with Edward B. Page and Page, Clowdsley & Baleix except for three months in 1959 when Baleix worked for Reid, Rockwell, Banwell & Tarics.

John J. Gould (1898–1961) was born in Switzerland and studied at the Engineering School in Zurich. He worked in Switzerland, Germany, France, the Middle East, and New York City before coming to San Francisco in 1925. From 1933 to 1935 he worked for the State Division of Architecture where he was involved with issues of seismic safety for schools. In 1935 he became the Chief Structural Engineer for the Golden Gate International Exposition. In 1940 he started his own firm. He was active in professional organizations and served as president of the Structural Engineers Association of Northern California. He had a particular interest in the effects of seismic forces on buildings and in designing safely in relation to those forces.

Henry J. Degenkolb (1913–1989) received a B.S. degree in civil engineering from the University of California in 1936. In 1937–1938 he worked for John J. Gould at the San Francisco Bay Exposition Company designing facilities for the Golden Gate International Exposition. During World War II he worked in various industries and in 1946 he was hired by John J. Gould as the firms’s chief engineer. Looking back on his career in 1986 he said, “John [Gould] ran the office—that is, the business, the contracts, the management—and I was the center of the back room. I ran the drafting and the design and everything like that.” From this, it appears that Degenkolb was the principal structural designer of the Fireman’s Fund Home Office in all its phases.

The Firm designed many of San Francisco’s major structures of the 1940s–1960s including Park Merced, the International Building, the Bank of California tower, expansion of the San Francisco airport, parking garages at St. Mary’s Square and the Civic Center, and many branches of the Bank of America and Pacific Telephone. The Firemans’ Fund Home Office was the first large project of the firm after Degenkolb became a partner. According to the National Academy of Engineering, Henry J. Degenkolb “was responsible for the structural design of some of the most distinctive structures in California.”

Henry J. Degenkolb was a man of enormous energy and accomplishment. He was an “earthquake chaser” who traveled to earthquake sites around the world to better understand the effects of seismic forces on buildings. He was active in many professional groups, especially those concerned with seismic issues and building codes. At the time of the completion of the Fireman’s  

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The Fireman's Fund building was the first major project of the firm of John J. Gould and H.J. Degenkolb, which later became Henry J. Degenkolb & Associate. The firm is noted for its innovative designs in a long-lived practice that has included many of San Francisco's major structures during the initial design and subsequent expansions of the Fireman's Fund building and continuing up to the present day. The Fireman's Fund building—with its innovative structural design that provided open floors with minimal columns and exterior walls of glass—was a successful debut for the partnership of John J. Gould and Henry J. Degenkolb and for Degenkolb's role as principal designer of the partnership and his subsequent practice after Gould's death. Fireman's Fund represents the beginning of the reputation of Gould and Degenkolb as among the leading structural engineers in San Francisco in the post-World War II period.

**Landscape Architects: Eckbo, Royston, and Williams (ERW)/Eckbo, Dean, Austin, and Williams (EDAW)**

In 1945, Garrett Eckbo, Robert Royston, and Ed Williams—three of the pioneers of modern landscape architecture—formed the partnership of Eckbo, Royston, and Williams (ERW). The firm was responsible for the original mid-1950s landscape design for the Fireman's Fund site, which embodied the characteristics of the modern movement in landscape architecture after World War II. The firm's projects (1945–1958) helped to expand the profession of landscape architecture beyond the scale of the individual residential garden and contributed to the popularization of the modernist landscape design vocabulary and to modernism as an approach to creating outdoor spaces that addressed contemporary needs. The American Society of Landscape Architects (ASLA), in a history that accompanied an award presented to EDAW (its successor firm), noted that ERW "established a compelling portfolio of modernist landscapes."37

The partnership soon became "one of the leading firms in the country, highly regarded for its advanced planning, innovative modern vocabulary, and its quality of execution,"38 and in 1950, ERW was awarded the Gold Medal in Landscape Architecture by the New York Architectural League.39

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ERW actively promoted its work and was regularly written about in popular magazines, professional journals, and newspapers of the era; examples include Sunset, House Beautiful, House & Garden, Architectural Review, Progressive Architecture, and Architectural Record. Additionally, ERW designs were regularly used to illustrate a recurring feature on modern residential landscape design that ran in the Los Angeles Times during the 1950s. The firm gained additional exposure in the early 1950s after Eckbo's book Landscape for Living, which was illustrated with examples of ERW's work, was published. The book defined "the modern discipline of landscape architecture for his professional peers and a broader readership" and placed these ideas within the context of the post-World War II society.

As was true of all landscape architectural practices during the early years after the war, ERW was heavily involved in creating residential gardens. By the early 1950s, ERW had "hundreds of completed gardens in four states," with more than 50 located in Marin County alone and others in virtually all of the developing suburban communities in the Bay Area. The firm was a pioneer in expanding the practice of landscape architecture into the scale of neighborhood and community design. The Standard Oil Rod and Gun Club in Richmond (1949) was Royston's (and the firm's) first major park commission. "The facility was an immediate success and attracted the attention of Bay Area planners representing several municipalities." Other park and playground projects soon followed, "many of which gained attention in the national media." The firm worked on numerous new housing projects in both northern and southern California. The 258-acre cooperative housing project of Ladera on the San Francisco peninsula featured an innovation design with "a linear park which tied together the residential clusters and separated automobile and pedestrian circulation." This was an early application of Royston's concept for the "landscape matrix," which was his term for the use of connective or continuous open space around which the balance of the design was oriented. The implementation of this concept into community planning was a major innovation within the profession.

In addition to Fireman's Fund, ERW worked on a range of public outdoor spaces in San Francisco in the post-World War II era including the Venetian Room Roof Garden at the

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44 Ibid.
45 Ibid.
46 Rainey and Miller, Robert Royston.
47 Rainey and Miller, Robert Royston.
Fairmont Hotel (1946), the entrance court to the Palace of the Legion of Honor (1950), Portsmouth Square (1954), and St. Mary’s Park (1957). St. Mary’s was one of the earliest large-scale rooftop gardens in the city and sat atop a parking garage in the Chinatown neighborhood. ERW was the landscape architect for Stonestown, a retail, residential, and office complex in the suburban western part of San Francisco (built between 1949 and 1952).

In 1946, Eckbo moved to Los Angeles and opened a second office. This move “expanded the firm’s opportunities and gave each partner more breathing space.”48 Royston and Williams, both of whom lived in Marin County, remained in the San Francisco office. Although each partner typically took the lead on a specific project and then oversaw all phases of the work, the designs were generally a combination of individual and collaborative input. Williams, describing the partners working methods in a 1952 profile in the Marin Independent, stated that “although we work as individuals—there is a complete exchange of ideas.”49 Another profile of the firm, in the September 1946 issue of the Architect and Engineer, explained that the three met as needed in Paso Robles, which was the halfway point between their two offices, “to continue and extend the original ideal of their association which is based upon the premise that three minds are better than one if the best each one has to offer is brought to the fore.”50

In their history of this pioneering firm in the book Invisible Gardens: The Search for Modernism in the American Landscape, Peter Walker and Melanie Simo noted that “although each [partner] was unquestionably capable of running his own firm...the three achieved greater strength and flexibility in partnership. Eckbo, the preeminent theorist and reformer, not only led the firm intellectually but also had a broad vision of the potentialities of the field—perhaps broader than any other practitioner at the beginning of the postwar era in the United States. Royston, a gifted designer with a fascination for formal exploration, remained deeply committed to the social purposes of his built work, particularly the private gardens, neighborhood parks, and playgrounds.”51 Williams was “an open space enthusiast who, long before the environmental movement, saw the importance of managing urban growth and conserving natural environments.”52

In 1958, the ERW partnership was amicably dissolved. Robert Royston formed a new firm with Asa Hanamoto and David Mayes, two associates at ERW. Eckbo and Williams along with Francis Dean, who had become an ERW partner in 1953, formed Eckbo, Dean, and Williams.

48 Walker and Simo, 132.
50 Architect and Engineer, “Landscape Architecture A Professional Adventure in Use of Outdoor Space,” (September 1946), 11.
51 Walker and Simo, 118.
With the addition of Don Austin, in 1964, the partnership became Eckbo, Dean, Austin, and Williams (EDAW). The firm officially became known as EDAW in 1973.

During the 1960s, landscape architectural firms became involved in planning and analysis for entire regions not just individual communities. EDAW, “guided by a progressive vision of the leadership role of landscape architecture,” 53 took on these larger scale projects and was at the forefront of this expansion of the profession. The firm prepared California’s first state-wide open space study and followed this with a similar plan for the State of Hawaii. 54 During this period, EDAW began to work on international projects, and as a result of this work, EDAW is recognized as having made a significant contribution to opening the door for western design and planning firms to work in Asia. As it expanded the scale and complexity of its work, EDAW added new professional skills to its capabilities and became recognized for its environmental resources planning and management and its visual analysis capabilities. 55

By the 1990s, EDAW had grown into a 400-person firm with sixteen offices, including ones in London, Sydney, and Hong Kong that accommodated the needs of its growing international presence. Its expertise ranged from “urban planning and urban regeneration to environmental management and resort design.” 56 Examples of three projects that illustrate the scope of the firm’s work include a plan for the restoration of the Everglades, Washington, D. C.’s Monumental Core Framework Plan, and the Jinji Lake Waterfront, a masterplan for a new 600,000-person community, in Suzhou, China. 57

In 2005, EDAW, was acquired by AECOM Technology Corporation, “an expanding family of companies offering integrated services in engineering, transportation, planning and environmental expertise.” 58 The firm continued to operate as a distinct entity, as EDAW AECOM, until 2009. At that time, the EDAW name was retired as AECOM fully merged the identities of all its subsidiary firms under the AECOM logo. 59 In recognition of the firm’s contributions to the profession of landscape architecture ASLA awarded EDAW the Landscape Architecture Firm Award in 2009. 60

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55 Sweet, 6-9 and 220; ASLA, EDAW: Firm History.
56 Sweet, 9.
57 Sweet, 6-9 and 220; ASLA, EDAW: Firm History; The Cultural Landscape Foundation. EDAW.
58 Sweet, 9.
60 Sweet, 9; ASLA, EDAW: Firm History.
Garrett Eckbo

Garrett Eckbo (1910–2000) was born in New York but moved with his family to Alameda, California in 1912, where he spent the remainder of his childhood. He studied landscape architecture at the University of California, Berkeley and graduated in 1935. After a one year stint designing residential landscapes for a nursery business in Los Angeles, Eckbo placed first in a nationwide design competition and received a scholarship to Harvard’s Graduate School of Design; he graduated with a Masters in Landscape Architecture in 1938. While at Harvard, Eckbo chafed at the restrictive Beaux Arts education that dominated the landscape design department. He found more in common with the idea that “architecture and design had a social role and could help improve the quality of life,” which was being put forth by Bauhaus founder Walter Gropius and architect/designer Marcel Breuer, both of whom came to Harvard after fleeing Nazi Germany. It was during this period that Eckbo began his life-long practice of writing about his ideas and pushing to expand the boundaries of the landscape architecture profession. In 1938–39, he published, with Harvard classmates Dan Kiley and James Rose, three articles in Pencil Points (a leading architectural journal) that described their modernist design ideals and laid out how society, ecology, and landscape architecture were interrelated; these essays became known as the “Harvard Revolution” and helped to usher in the modern era of landscape design.

Eckbo directly influenced several generations of practitioners through his teaching—first at the University of Southern California (1946–58) and then at the University of California, Berkeley (1963–1969) where he was chair of the Department of Landscape Architecture—and through his writing. His book Landscape for Living, first published in 1950 and illustrated with examples of work by ERW, defined “the modern discipline of landscape architecture for his professional peers and a broader readership” and put these ideas into the context of the post-World War II society. Eckbo went on to write additional books, each of which continued the themes of his first book within different contexts. He devoted the last ten years of his life to “theoretical study and publication.” His last book, People in a Landscape, was published in 1998 and continued reoccurring themes of his professional life that landscape design can be an agent of societal change and that “landscapes can link society and nature.”

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61 Sweet, 6.
63 The Cultural Landscape Foundation, Garrett Eckbo.
64 Treib and Imbert, 185.
In his numerous residential designs of the 1950s, Eckbo developed a “contemporary vocabulary drawn from the arts of painting and sculpture” that resulted in “spaces and forms that viewers read immediately as modern.”67 A sampling of his other major design contributions—which illustrate the breadth of his work—include his collaboration (1939–1942) with architects Vernon DeMars and Burton Cairns and landscape architect Francis Violich in applying modernist ideas to the design of approximately 50 migrant worker’s camps for the Farm Security Administration; the widely-publicized ALCOA Forecast Garden (1952–1966) where Eckbo demonstrated the multiple uses for aluminum in the landscape; the Fulton Mall (completed in 1964) which redesigned Fresno’s central business district into a pedestrian mall in an effort to retain its viability as a regional retail center; and the Union Bank Square in Los Angeles (1968), a three-acre plaza next to the 40-story Union Bank headquarters where the design’s “biomorphic and organic forms recall paintings by Joan Miro.”68

In their book Garrett Eckbo: Modern Landscapes for Living, that accompanied an exhibition on his life, work, and influences on the profession at the University Art Museum in Berkeley in the late 1990s, Marc Treib and Dorothy Imbert wrote that Eckbo “played a central role in the formation and practice of modern landscape architecture”69 and is considered “... one of the most influential landscape architects of this century, fitting design to the needs and desires of contemporary life. His contribution [was] distinct for addressing in equal measure society, the natural landscape, art, and technique.”70 He was awarded the American Society of Landscape Architects (ASLA) Medal (1975), the highest honor bestowed on an individual by the society. In 1998, he became the first person to be named a Distinguished Alumnus at the University of California, Berkeley’s College of Environmental Design.

Robert Royston

A California native, Royston (1918–2008) was raised on his family’s walnut ranch in the Santa Clara Valley and received his degree in landscape architecture from the University of California, Berkeley in 1940. After serving in the United States Navy during World War II, Royston returned to the Bay Area and joined Eckbo and Williams to form ERW in 1945. In 1958, Royston separated from ERW and formed Royston, Hanamoto, and Mayes (RHM). The Royston firm had a number of different partnership structures and names through the years before becoming Royston, Hanamoto, Alley, and Abey (RHAA) in 1979. RHAA continues to exist today and maintains offices in San Francisco and Mill Valley.

67 Treib and Imbert, 94-95.
69 Treib and Imbert, inside cover.
70 Treib and Imbert, viii.
Royston played a major role in the development of the post-World War II landscape in the Bay Area, and, as noted in a profile in the San Francisco Chronicle in 2006, “it's hard to spend a day in the Bay Area without seeing a landscape designed by the firm.”

Royston’s firm designed the landscapes associated with civic buildings, numerous education campuses and planned communities, and over sixty parks. His early suburban park projects—undertaken between 1946 and 1965—are considered among the most important achievements of his career. In their book Modern Public Parks: Robert Royston and the Suburban Park, Reuben Rainey and J. C. Miller made the following assessment of this contribution: “During this twenty year period Royston and his professional partners created a series of suburban parks of varying scale that pioneered new directions in American park design. These projects were innovative in their spatial organization, design details, and materials, creatively reshaping American park design traditions to meet the unprecedented needs of postwar suburban expansions. They attracted national attention in design periodicals and earned a number of design awards from the American Society of Landscape Architects.”

By the time he retired in 1998, Royston was widely recognized as one of the pioneers in modern landscape architecture. He influenced the profession through his design innovations in the 1950s and 1960s, the collaborative work of his firm, and his impact on future landscape architects as an educator at his alma mater and other institutions. Royston was awarded numerous awards during his career including ASLA Fellow (1975), the AIA Medal (1978), and the ASLA Medal (1989), the highest honor awarded by the organization. In 2000, he was named a Distinguished Alumnus at the University of California, Berkeley’s College of Environmental Design.

Ed Williams

Ed Williams (1914–1984) was born in Pittsburg, Pennsylvania in 1914 but moved with his family to Berkeley in 1929. He was a classmate and friend of Eckbo’s at UC Berkeley and graduated with his degree in landscape architecture 1935. The range of his work, cited in a profile of ERW in the Architect and Engineer in 1946, highlighted both William’s interests and the expanding breadth of the profession of landscape architecture; the article stated that he had designed parks and playgrounds, had worked on preparing a post war program of public works for San Mateo County that “served as a model for other counties and communities,” and had experience in zoning, transit surveys, master planning, subdivision design, private gardens, and

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71 Dave Weinstein, “Painting an Abstract Landscape . . .,” San Francisco Chronicle, 2 December 2006.
73 Rainey and Miller, Modern Public Parks, ix.
74 The Cultural Landscape Foundation, Robert Royston.
estates. During World War II, he became the head of the mechanical engineering section at Western Pipe and Steel. 75

In 1940, he and Eckbo founded their first partnership. Williams went on to be a founding partner in the two important twentieth century landscape architecture firms—ERW and EDAW—that evolved from this initial partnership. Williams remained in the EDAW partnership through the rest of his career. In a profile on the ERW in Invisible Gardens: The Search for Modernism in the American Landscape, Peter Walker and Melanie Simo noted that Williams was a “skillful designer” who had “placed second in the national competition that sent Eckbo to Harvard.” 76 However his real impacts on the profession were in his work in environmental planning and his management abilities that nurtured the growth of EDAW from a small firm to a large corporation with offices around the globe. Walker and Simo noted that “as the firm grew, Williams assumed more responsibilities in management and planning. For his partners and younger associates, he remained a stabilizing influence—a rock of integrity in a fluid, changing world.” 77 In the 1960s, Williams became the partner in charge of EDAW’s large-scale planning efforts and was at the forefront of expanding the profession into environmental planning. He directed EDAW’s efforts for California’s first state-wide open space study in the mid-1960s and a similar plan for the State of Hawaii. 78 Williams was made a Fellow of ASLA for his designs and for his service to the profession. 79

Evaluation

The Fireman’s Fund Insurance Company Home Office is significant under Criterion C as the work of three masters, the architect Edward B. Page, the engineering firm of John J. Gould & H.J. Degenkolb/Henry J. Degenkolb & Associates, and the landscape architectural firm of Eckbo, Royston, & Williams (ERW)/Eckbo, Austin, Dean, and Williams (EDAW).

Edward B. Page was a member of the postwar generation of architects in the Bay Area who introduced modernism on a large scale to the area. He was also a direct link through his experience as a young man, to the architectural ferment over modernism in Europe. The Fireman’s Fund Insurance Company Home Office was his largest and best-known project and is the best representative of his career and work.

John J. Gould & H.J. Degenkolb/Henry J. Degenkolb & Associates and its successor Degenkolb Engineers has been one of the leading structural engineering firms in California from its

76 Walker and Simo, 133.
77 Walker and Simo, 133.
78 EDAW, Open Spaces, back cover.
79 ASLA, EDAW: Firm History; ASLA, Fellows Data Base.
founding to the present day. The Fireman’s Fund building—with its innovative structural design that provided open floors with minimal columns and exterior walls of glass—represents the beginning of the reputation of Gould and Degenkolb as among the leading structural engineers in San Francisco in the post-World War II period.

ERW was established in 1945 by three of the pioneers of modern landscape architecture—Garrett Eckbo, Robert Royston, and Ed Williams. ERW was responsible for the original mid-1950s landscape design for the Fireman’s Fund site, and its successor firm EDAW designed the landscape features associated with the mid-1960s additions. During the period of significance, ERW/EDAW was recognized as one of the country’s leading landscape architectural firms. Their designs and writings contributed to the popularization of the modernist landscape design vocabulary and to modernism as an approach to creating outdoor spaces that addressed contemporary needs within a broad range of settings. The Fireman’s Fund site is significant as an example of the firm’s mastery of modern design within the corporate landscape context.

CRITERION C: ARCHITECTURE/LANDSCAPE ARCHITECTURE

The Fireman’s Fund Insurance Company Home Office is a single property that has significant components of architecture and landscape architecture, each of which has a specific context. These contexts are presented below followed by an evaluation of the property as a whole.

Modern Architecture

The design of the Fireman’s Fund Home Office Building drew on the main stream of the history of Modern Architecture, beginning with its European origins: the Bauhaus and the International Style. At the same time, it was influenced by the forces that translated European modernism for the United States.

The Bauhaus, founded by Walter Gropius in 1919, was a school of the arts that sought to heal the division that many saw between the arts and craftsmanship, a division that was an outgrowth of capitalism and the industrialization of western society. The school taught a great variety of crafts and building construction along with theory of art. All of these things could be brought together in architecture, unofficially the first among equals. Unlike the Arts and Crafts Movement, the Bauhaus taught that good design, which was the product of this education, should be applied to mass production and that this was necessary in a modern highly technological society. The mass production of well-designed products including building parts and buildings was an important means of addressing the need for housing and other social issues. The creation of beautiful and useful products in a technological society required collaborative efforts that combined art, craftsmanship, and engineering.

As an emblem of its ideals, in 1926 the Bauhaus moved from Weimar to a new building in Dessau. The building was a composition of rectangular wings, all but one of them two to four...
stories in height, at right angles to each other. Each wing was functionally differentiated from the others and they were arranged so that they framed outdoor spaces. In this way the building and its outdoor spaces functioned together as one. The building was a modern structure of reinforced concrete with steel sash windows. No ornament was applied to the building apart from the lettering of its name.

The idea of the International Style was based in large part on the example of the Bauhaus and the work of its teachers and students. The style was named in a 1932 book, _The International Style_ by Henry-Russell Hitchcock and Philip Johnson, who wrote it as a follow-up to an exhibition they curated at the Museum of Modern Art in New York. In 1964, Hitchcock said that the term, "defines a type of architectural design which came into existence in the early 1920s, developed at the hands of a few leaders to classic expression by 1930, and from that time on found wider and wider acceptance throughout the world." Its three principal elements, he said, were "[1] a new conception of architecture as volume rather than as mass, . . . [2] regularity rather than axial symmetry . . . as the chief means of ordering design," and [3] a proscription against "arbitrary applied decoration." 80 The idea was not that the International Style was a single style but that it was a way of responding to technology that should be the same in any country and that it represented a viable way of addressing the needs for housing and other social problems.

Politics in Germany closed the Bauhaus in 1933 and many of its leaders came to the United States. Walter Gropius went to Harvard, Mies van der Rohe, the head of the Bauhaus at the time it closed, went to the Illinois Institute of Technology, and others went to various parts of the country. Other European modern architects not connected to the Bauhaus—Richard Neutra, Rudolph Schindler, Erich Mendelsohn, and Serge Chermayeff—went to California. These architects and Americans who were influenced by their work brought the International Style to the United States. Before World War II, the number of International Style buildings in the United States was extremely limited.

After World War II as it took hold in the United States, the International Style was embraced in varying degrees for different types of buildings and clients, perhaps most of all for corporate office buildings. In the process of its popularization, the designers and builders of the style omitted the social goals that were part of its original rationale. The style came to represent the values of modern corporations including faith in technology and solving problems based on reason and science. The design of International Style buildings depended on physical features like new technologies and materials. It also depended on a deep understanding of the purpose of buildings and on research on how they are to be used.

In San Francisco, the best-known early examples of the International Style were a few houses designed by Richard Neutra in the 1930s. After the war, Erich Mendelsohn designed the Maimonides Health Center in 1950. The office of Skidmore, Owings, & Merrill opened in San Francisco in 1945 and designed International Style buildings like Mount Zion Hospital in 1950, the Greyhound Maintenance Facility (now California College of the Arts) in 1951, and the Naval Post Graduate School in Monterey in 1954.

The most concentrated area of new corporate office buildings was in downtown San Francisco where the principal builder of these buildings was the insurance industry. Most but not all of these buildings were in the International Style. Of fifteen corporate office buildings downtown built between 1946 and 1965, thirteen were in some version of the International Style, one was in the Moderne Style, and one was based on Independence Hall in Philadelphia, an eighteenth-century Georgian Style brick building. Nine of the fifteen buildings including the Georgian Style building were for the insurance industry.

Modern Architecture had to do with more than the look of buildings. It had to do with the process of the design of buildings, with the adoption of new technologies and materials, and with the relationship of buildings to their surroundings, both their immediate surroundings and their greater surroundings—with their own site and with the city. It also had to do with the expression of the relationship between structure and technology, represented by Louis Sullivan’s statement that “form follows function.”

The architect of the Fireman’s Fund Home Office Building, Edward Page, absorbed ideas about modernism from architectural journals, conversations with architects from many countries in Paris cafes, travel around Europe in 1930 to see early buildings of the Modern Movement, and from fellow architects of his generation. His experience, and that of the architectural profession in the United States in general during World War II reinforced many elements of the Modern Movement—the role of engineers, the use of new technologies and materials, designing without ornament, an economy of means, and the primacy of function as a generator of design.

According to Serraino, writing about San Francisco’s modern architects in the 1940s–1960s, “Each took a stance on what being modern meant, and each practiced accordingly.” Edward Page’s approach to modernism put a premium on technology and sophisticated accommodation of function. Among the best-known figures of Modern Architecture, Page admired Eero Saarinen above all others because “he was the only one who understood that sixty percent of a modern

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building was mechanical equipment, electrical, and air-conditioning.” Frank Lloyd Wright, Mies van der Rohe, and Le Corbusier did not understand this, he said.82

While there is no known evidence of any direct connection, the Fireman’s Fund Home Office echoes the design of several of the most influential International Style buildings. Its basic organizational concept is like that of the Bauhaus itself, an arrangement of low-rise perpendicular wings with separate functions and with the wings framing outdoor areas that function with the building. Like the famous property of Philip Johnson, one of the authors of The International Style, with its Glass House and its Brick House that were completed in 1949, one of the buildings of the Fireman’s Fund Home Office is glass and the other is brick. Like the General Motors Technical Center in Warrren, Michigan, designed by Eero Saarinen and built 1953–1955, the Fireman’s Fund Home Office represents a radical departure from most contemporary corporate offices as a low-rise building on landscaped grounds in a suburban location.

Modernism in the Landscape

American landscape design during the late nineteenth and early twentieth centuries was based on ideals of the Ecole des Beaux-Arts. Books, such as An Introduction to the Study of Landscape Design by Henry Hubbard and Theodora Kimball (first published in 1917), codified an appropriate spatial organization, style, and features for various types of landscapes and emphasized that the designer’s skill or creative input should be focused on how to adapt these standards or patterns to a particular site. Until the latter part of the Great Depression, all university landscape architecture programs in the country taught within this Beaux-Arts framework, and landscape designers absorbed this viewpoint during their training and put it into practice when they graduated. They typically selected or adapted structures, planting arrangements, and details, such as site furnishings, from multiple eras and European traditions to create a formal organization of landscape space with an eclectic mix of historical references.83

By the late 1930s, a Modernist sensibility to landscape design had just begun to evolve. In 1938, Harvard professor and designer Christopher Tunnard published Gardens in the Modern Landscape in which he asserted that “the old values and the old forms . . . could no longer satisfy contemporary artistic and planning needs.”84 He believed that the right style for the twentieth century was no style at all but rather a new conception of planning the human environment.85 Tunnard was reacting against the lack of connection between landscape design within the

82 Page, interview.
85 Christopher Tunnard, “Modern Gardens for Modern Houses . . .,” Landscape Architecture 32 (January 1942).
predominant Beaux Arts tradition and the realities of modern life. Through his writing and teaching at Harvard, Tunnard championed a modern landscape commensurate in its conceptual and aesthetic authority to the best of modern architecture.  

Modernism in the landscape first appeared in residential garden design, and during the 1940s, California designer Thomas Church became one of the leading interpreters of modernist tenets within this setting. The importance of California to the development of the modern landscape design movement continued after World War II. The explosion of residential landscape commissions that accompanied the postwar suburban housing boom provided landscape architects with increased opportunities to apply the tenets of modernism to gardens. Sunset Magazine, headquartered in Menlo Park, played a major role in popularizing a version of modernism suited to the California climate and lifestyle through its ongoing articles that showed the general public what a modern garden (and house) could look like and how it could function. Dianne Harris, in her article “Writing a Modern Landscape: Thomas Church as Author,” noted that historians and theoreticians have recognized the essential role played by the popular press in publicizing modern design and in helping to promote a new way of seeing “that became essential to the formation of Modernism in design.” Modern design became an accepted expression of California’s “age of abundance,” historian Kevin Starr’s characterization of the state’s post World War II economic boom.  

Garrett Eckbo, one of the principal theorists of modern landscape design, wrote that the “modernist approach to landscape architecture was concerned with the relationship of the landscape to modern architecture and the relationship within the site between space, materials, and people.” Modernism in landscape architecture reflected a concern for the specific site or space rather than an adherence to established patterns based on historical forms, which emphasized the Beaux-Arts principles of balance, symmetry, proportionality, and axiality. Designers rejected the axis and symmetry and instead used geometric and biomorphic forms for arrangements of hardscape, circulation, and planting which together often created abstract spatial compositions. In the residential designs where modernism was first expressed, there was a strong functional and visual relationship between interior and exterior space, as expressed in buildings featuring large expanses of windows, courtyards being framed by the buildings, and patios that

87 Treib, 53.
90 Walker and Simo, 7.
extended living spaces into the outdoors. Additionally, the same materials used for buildings were often used in the landscape’s structures (such as walls or arbors) and paving. Rather than merely being a decorative element, plants were used to define outdoor space. The lawn became a symbol of the landscape in post-World II suburban communities and was used in small and large settings—individual homes, parks, commercial and educational campuses, and civic spaces—as an organizing element of space.91

Modern landscapes were intended for people to use and were adapted to the real lives and needs of the times. For example given the supremacy of the automobile in the post-World War II suburban environment, parking lots were incorporated as a conscious part of designs. The expanding post-World War II economy provided landscape architects with a multitude of opportunities to adapt the modernist vocabulary for gardens to the new parks, educational and commercial campuses, and civic spaces being developed in the post war economic boom. This expansion in the profession of landscape architecture was led by a new generation of landscape architects, which included at its forefront Garrett Eckbo, Robert Royston, and Ed Williams—the three partners in the firm responsible for the landscape design of the Fireman’s Fund site.

Landscape of the Corporate Headquarters

A new type of cultural landscape, created by a synthesis of modernist buildings and landscape design, developed during the post-World War II era as corporate headquarters moved out of the central city. Louise A. Mozingo, professor of landscape architecture at the University of California, Berkeley and the author of several articles and a book on this development, has noted that corporations moved out of the urban core for a number of reasons. First and foremost, the larger sites available in the suburbs allowed corporations to construct new buildings that fit their current management structure and operational needs. “Efficient office organization now required flexible, expandable offices with movable partitions rather than fixed walls. The dense, constricted downtown became untenable.”92

By the early 1950s, insurance companies had spearheaded this exodus from the central business district to the peripheral residential areas of the city or to suburban sites. An article in Business Week in 1951, quoted by Mozingo in her article “The Corporate Estate in the USA, 1954–1964,” noted that there were not enough downtown spaces “in the right places” to meet companies’ needs for expansion. The management of these insurance companies believed that it was hard to “hire first class personnel” to work in downtowns that were viewed as undesirable environments. (“Management thinks workers will be happier looking at trees instead of grimy buildings and

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listening to birds instead of honking taxis.”93) The integration of the architecture and landscape typically featured a low-rise, centrally-sited, modernist building(s), an entry drive and large parking lots which were a reflection of the domination of the automobile as the preferred means of transportation for employees and visitors, and an enveloping landscape setting or “green surround” which was often designed to resemble an idealized suburban space.94 The buildings and parking lots occupied only a fraction of a site’s acreage and the landscaped lawns and outdoor spaces contributed to the “seamlessness between the interior and exterior space, which was a common goal of the modernist architectural aesthetic.”95 Mozingo noted that corporations “considered the designed landscape essential to the functioning of their management facilities.”96 This new type of corporate headquarters—with its modernist architecture and landscape—became a part of the effort to “reconceive the white-collar workplace, retain targeted employee groups, and signal eminent corporate standing,”97 and resulted in what became an “identifiable place, creating a tangible symbol of the corporate persona.”98

During the 1950s, landscape architects incorporated these new corporate headquarters in their practices. They became partners—with architects—in the creation of these new corporate environments and developed designs that established connections between the building, the site, and the surrounding landscape.99 The site planning, automobile approaches, different hierarchies of entrances, parking lots, and lawns used to create an interface between the building and the surrounding landscape, and the outdoor spaces of the post-World War II corporate landscapes all exemplified the functionalism of mid-20th century modernism.100

The development and design of the Fireman’s Fund Home Office, located on a 10-acre site on California Street outside of the traditional urban core of the city, was an example of this new corporate environment in San Francisco that exhibited all of these characteristics. An article in the San Francisco Chronicle, published to coincide with the official dedication on 9 July 1957, noted that architect Edward B. Page designed the Fireman’s Fund building “from inside out” to meet the specific nature of the insurance company’s work flow within and between departments. The article emphasized the building’s modern sensibility as expressed through the design and materials of the architecture, the company’s concern for the working environment, and an

94 Ibid., 34.
95 Ibid., 44.
96 Ibid., 28.
97 Mozingo, “Campus, Estate, and Park.” 266.
identification with a suburban—rather than urban—landscape setting. This article noted that the new headquarters was “designed to provide efficient business operation and a maximum of light, air, and good morale.”

The article described the contemporary nature of the building (its “glass, steel, and aluminum structure; the “ceiling to floor windows that permit sweeping vistas of the city’s skyline”; a “feeling of spaciousness”) while noting a range of amenities that acknowledged the needs of the employees including ample parking, a large cafeteria, and “lounges, reading rooms, guest rooms, and a sheltered outdoor terrace”—all of which were set within “extensive lawns and gardens.” Fireman’s Fund came to be recognized as a local expression of the modern suburban corporate headquarters. It appeared in a 1969 article in the San Francisco Sunday Examiner-Chronicle that provided local examples of corporate plazas and landscapes that contributed to the common good while creating an identifiable image for the company. This article noted that “whereas insurance companies suffer chronically from a high rate of employee turnover, that problem has been minimal since Fireman’s Fund’s 1200 workers began enjoying the company park.”

Evaluation

The Fireman’s Fund Insurance Company Home Office, a single property including both architectural and landscape elements which were designed to complement each other, is significant under National Register Criterion C as an example of a corporate headquarters in San Francisco which reflects mid-twentieth-century modernist design principles. The property is a synthesis of International Style buildings and mid-twentieth century modernist landscape features which reflect key characteristics of a post-World War II suburban corporate headquarters. As an example of the International Style, the building itself expresses the use of new technologies and materials, designing without ornament, an economy of means, a focus on function, an orientation to the landscape, and a process of design that resulted in a characteristic expression in glass and concrete. Key characteristics of a post-World War II suburban corporate headquarters are expressed in the design’s centrally-sited modernist building within a park-like setting that accommodates the automobile as the primary form of transportation and through the arrangement of the office building’s low-rise perpendicular wings which frame outdoor spaces designed to function with the building. The design expresses mid-twentieth century modernist landscape forms and materials including the combination of geometric and biomorphic forms in the design of the Terrace, the use of brick and concrete materials in landscape structures and paving to promote the integration between architecture and landscape, and the presence of a

102 Ibid.
103 An article (6 February 1964) by San Francisco News-Call Bulletin columnist Guy Wright described Fireman’s Fund as a “refreshing example” of the type of corporate headquarters that the city should be promoting.
broad lawn—an iconic feature in suburban corporate landscapes during the post-World War II era—along the west side and south sides of the property.

BACKGROUND HISTORY OF THE PROPERTY

Laurel Hill Cemetery

The Fireman’s Fund Insurance Company Home Office is located on the southeast corner of the site of the Laurel Hill Cemetery. The entire cemetery was in a multi-block area bound by Parker Avenue, California Street, Presidio Avenue, and a diagonal line from a point on Presidio Avenue between Sutter and Post Streets to a point near the intersection of Parker and Euclid Avenues.

Laurel Hill Cemetery was begun in 1854 as Lone Mountain Cemetery, one of four cemeteries established in the 1850s and 1860s in central San Francisco as Yerba Buena Cemetery and others further downtown filled up. The name was changed to Laurel Hill Cemetery in 1867. It was referred to as the “Pioneer Cemetery” and was the most prestigious San Francisco burial place for several decades. The design of the cemetery followed the example of parklike cemeteries first built in the eastern United States in the 1830s-1840s with winding paths and landscaped grounds.

Among notable people buried there were Andrew Hallidie, inventor of the cable car; Charles Crocker, one of the Big Four builders of the transcontinental railroad; William Ralston and William Sharon of the Bank of California; and eleven U.S. senators. In addition to these and many other prominent people, there were 107 people in the Japanese Cemetery and an unknown number in the Serbian Cemetery. Altogether there were about 47,000 burials in Laurel Hill Cemetery.

A long effort to move all cemeteries out of San Francisco included banning of future burials in the city beginning 1 August 1901; a law requiring removal of cemeteries from San Francisco that was signed 17 January 1914; an eviction order from the City of San Francisco in November 1937; and removal of burials beginning 26 February 1940.

Laurel Heights

The cemetery land was purchased from the cemetery association by a real estate developer, Heyman Brothers, who announced in April 1941 plans to develop “an exclusive $10,000,000 home district, including some 600 residential sites, as well as a million dollar business district” on the site. The original intention was to offer five acres to the city for a park or playground. The residential neighborhood would be called Mayfair Terrace and the business district would be

105 Michael Svanevik and Shirley Burgett, City of Souls: San Francisco’s Necropolis at Colma (San Francisco: Custom and Limited Editions, 1995), 43.
called Mayfair Village. Development of the property was delayed by World War II. When work resumed in 1947-1948, the residential area was called Laurel Heights and the business district was called Laurel Village. According to the builder, 75% of the home lots were developed by October 1949.\(^{107}\) By April 1951, a citizen’s group called the Laurel Heights Improvement Association had been formed to address neighborhood issues.

**San Francisco Unified School District Proposed Site of Lowell High School**

Around the time of the end of the war, on 27 June 1945, when the cemetery was gone and the revived development of the neighborhood was imminent, the San Francisco Board of Education initiated action to purchase a portion of the Heyman Brothers property as the site for a new Lowell High School campus. On 28 June 1946, the school district bought about twelve acres, about one fifth of the total area of the cemetery, in the northeast corner of the property for $194,690. The site of the school property was shown on a November 1947 map called “Map of Resubdivision of a Part of Laurel Heights, San Francisco, Calif.” By mid-1950, however, the Board of Education had selected another site for Lowell High School and announced its intention to sell the Laurel Heights property.

The school district offered the site to the San Francisco Department of Parks and Recreation as it was required to do, but preferred to sell it at the highest price possible, with the understanding that it could get $450,000 for residential development and $650,000 for commercial development. Zoned for residential use, prolonged and complicated negotiations were necessary to win approval from the City Planning Commission for a rezoning of the site for commercial use.

Taking an active role in the controversy, the Laurel Heights Improvement Association expressed concern that commercial use of the property would diminish property values and the quality of the neighborhood. Referring to the official map that was a reference for those who purchased residential lots, and the designation of the “Future Location of Lowell High School” on the map, the association stated to the City Planning Commission: “Purchasers had every right to believe that in the construction of this school the architecture would be of modern and attractive design, with proper setback lines, well landscaped grounds, open recreation fields, and off-street parking.”\(^{108}\) On 21 June 1951, the City Planning Commission granted the request of San

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\(^{107}\) *San Francisco Chronicle*, “Hansen Homes....,” 22 October 1949.

During a two-year period reports and rumors in the press, in newspapers, and in public
documents and meetings indicated that interested parties in the property included unnamed
potential builders of a tall office building, the federal government, and Fireman's Fund Insurance
Company. In October 1952, San Francisco's Director of Property "asked for a speedy rezoning
to escape Federal condemnation of the land."10 Also during this period, the city took
approximately two acres from the southeast corner of the twelve-acre property for streets and a
fire station.

Ultimately, after presentation of the drawings of an unnamed architect to interested neighbors, an
agreement was reached for rezoning of the property for commercial use. This agreement, City
Planning Commission Resolution No. 4109 of 13 November 1952, included six stipulations for
any development of the site. These are, briefly: 1) that only professional, institutional, or office
buildings and associated service buildings were allowed; 2) the total floor area of buildings was
limited; 3) off-street parking was required in relation to the number of employees and visitors; 4)
setbacks were required on the west and south except for minor service buildings; 5) any
development for residential use was subject to planning guidelines; and 6) there must be
"appropriate and reasonable landscaping of the required open spaces." Because of this rezoning
agreement, all development plans for the property have had to be approved by the City Planning
Commission to insure compliance with these requirements.11

109 San Francisco Department of Planning, Letter from Paul Oppermann, Director of Planning to Mr. Eugene J.
Riordan, Director of Property, 25 June 1951.
111 San Francisco, County Recorder, "Stipulation as to Character of Improvements on that portion of Lot 1A, Block
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Fireman's Fund Insurance Company
Name of Property


Fireman's Fund Insurance Company

Name of Property

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San Francisco, Department of Building Inspection. Application No. 327468 of Fireman’s Fund Insurance Company, owner, For Permit to Erect addition to office building. Filed 24 March 1966; permit issued [illegible].

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Stone, N.C. “Fireman’s Fund Building Has Unique Acoustics.” Architect and Engineer 210, No. 3 (September 1957): 11–19.


Name of Property


Wylie, Loring (Senior Principal Degenkolb Engineers). Telephone conversation with Michael Corbett, 1 February 2018.

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Previous documentation on file (NPS):

___ preliminary determination of individual listing (36 CFR 67) has been requested

___ previously listed in the National Register

___ previously determined eligible by the National Register

___ designated a National Historic Landmark

___ recorded by Historic American Buildings Survey #

___ recorded by Historic American Engineering Record #

___ recorded by Historic American Landscape Survey #

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Primary location of additional data:

- State Historic Preservation Office
- Other State agency
- Federal agency
- Local government
- University
- Other

Name of repository: ____________________________

Historic Resources Survey Number (if assigned): ________________

10. Geographical Data

Acreage of Property: 10.2

Use either the UTM system or latitude/longitude coordinates

Latitude/Longitude Coordinates (decimal degrees)
Datum if other than WGS84: ______________________
(enter coordinates to 6 decimal places)
1. Latitude: ________ Longitude: ________
2. Latitude: ________ Longitude: ________
3. Latitude: ________ Longitude: ________
4. Latitude: ________ Longitude: ________

Or

UTM References
Datum (indicated on USGS map):

[ ] NAD 1927 or [ ] NAD 1983
Fireman's Fund Insurance Company
Name of Property

1. Zone: _______ Easting: _______ Northing: _______
2. Zone: _______ Easting: _______ Northing: _______
3. Zone: _______ Easting: _______ Northing: _______
4. Zone: _______ Easting: _______ Northing: _______

Verbal Boundary Description (Describe the boundaries of the property.)

The Fireman’s Fund Insurance Company Home Office occupies Block 1032 Lot 3 as shown on the Assessor’s Parcel Map (Map 4 and Map 5). The property occupies most of its block, a total of approximately 447,361 square feet or 10.2 acres. Its irregular shape can be described, clockwise, by California Street on the north, the boundary with an adjacent property (Block 1032 Lot 2) measuring 232.859 feet in length, Presidio Avenue, Masonic Avenue, Euclid Avenue, and Laurel Street.

Boundary Justification (Explain why the boundaries were selected.)

The property includes the entire parcel that was purchased by Fireman’s Fund Insurance Company in 1953, all of which was developed by the company for its use.

11. Form Prepared By

name/title: Michael R. Corbett, Architectural Historian and Denise Bradley, Landscape Historian for
organization: Laurel Heights Improvement Association of San Francisco, Inc.
street & number: 2161 Shattuck Avenue #203
city or town: Berkeley state: California zip code: 94704
e-mail mcorbett@lmi.net
telephone: 510-548-4123
date: 19 April 2018
Additional Documentation

Submit the following items with the completed form:

- **Maps:** A USGS map or equivalent (7.5 or 15 minute series) indicating the property's location.

- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.

- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

**ATTACHMENTS**

Map 1 Location Map
Map 2 Sketch Map
Map 3 Sketch Map Detail
Map 4 Assessor’s Parcel Map
Map 5 Property Boundary Coordinates
Map 6 Photo Key
Figure 1 Perspective drawing of Fireman’s Fund Home Office
Figure 2 Site Plan showing features ca. 1957–1963
Figure 3 Photo of Terrace taken ca. 1957–1963, view east
Figure 4 Photo of Terrace taken ca. 1957–1963, view southwest
Figure 5 Photo of Entrance Court taken ca. 1957–1963, view west
Figure 6 Photo of Entrance Court taken ca. 1957–1963, view east
Figure 7 Photo of landscape along the south side of Office Building
Figure 8 Aerial view of Fireman’s Fund property in 1961
Figure 9 Aerial view of Fireman’s Fund property in 1969

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn’t need to be labeled on every photograph.
Fireman’s Fund Insurance Company

Photo Log

Name of Property: Fireman’s Fund Insurance Company
City or Vicinity: San Francisco
County: San Francisco
State: CA
Photographer: Michael R. Corbett and Denise Bradley
Date Photographed: 28 November 2017, 19 December 2017, and 2 February 2018

Description of Photograph(s) and number, include description of view indicating direction of camera:

1 of 36. Office Building (Executive Wing) and Landscape Setting, camera facing northeast.
2 of 36. Office Building (Executive Wing) and Landscape Setting, camera facing north.
3 of 36. Office Building (Cafeteria Wing) and Terrace, camera facing north.
4 of 36. Office Building (Office Wing) and Terrace, camera facing north.
5 of 36. Office Building (Office Wing) and Terrace, camera facing northeast.
6 of 36. Terrace, camera facing west.
7 of 36. Office Building (Executive Wing) and landscape along Masonic Avenue, camera facing northwest.
8 of 36. Office Building (Auditorium) and landscape along Masonic Avenue, camera facing northwest.
9 of 36. Auditorium (outdoor area on west side), camera facing north.
10 of 36. Auditorium (outdoor area on east side), camera facing southwest.
11 of 36. Office Building (Office Wing East) and landscape along Presidio Avenue, camera facing west.
12 of 36. Office Building (Office Wing East/Garage), camera facing southwest.
13 of 36. Office Building (Office Wing East), camera facing east.
14 of 36. Office Building (Office Wing East/Garage), camera facing northeast.
17 of 36. Office Building (Office Wing North and Entry Structure), camera facing east.
19 of 36. Office Building (Office Wing North), camera facing east.
20 of 36. Entrance Court, camera facing southeast.
21 of 36. Office Building (Cafeteria Wing), camera facing northeast.
22 of 36. Office Building (Executive/Visitor’s Entrance), camera facing east.
23 of 36. Entrance Court (Outdoor Sitting Area), camera facing southwest.
24 of 36. Entrance Court (Arbor at west end), camera facing northwest.
25 of 36. Service Building, camera facing west.
26 of 36. West Parking Lot, camera facing northeast.
27 of 36. Employee Gate on California Street, camera facing south.
28 of 36. Brick wall and landscape setting from California Street, camera facing southeast.
29 of 36. Service Building and brick wall from Laurel Street, camera facing northeast.
Fireman’s Fund Insurance Company

San Francisco, CA

County and State

30 of 36. Brick wall along Laurel Street, camera facing southeast.
31 of 36. Laurel Street Service Gate, camera facing east.
32 of 36. Brick wall and landscape along Laurel Street, camera facing south.
33 of 36. Executive/Visitor Gate, camera facing east.
34 of 36. Office Building (Executive Wing), camera facing east.
35 of 36. Office Building (Executive Wing detail), camera facing east.
36 of 36. Office Building (typical window detail), camera facing north.

Paperwork Reduction Act Statement: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 460 et seq.).

Estimated Burden Statement: Public reporting burden for this form is estimated to average 100 hours per response including time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Office of Planning and Performance Management, U.S. Dept. of the Interior, 1849 C. Street, NW, Washington, DC.
Map 3. Sketch Map, Detail. Source: Google Earth, photo taken April 2016, annotated by Denise Bradley and Michael Corbett
Map 4. Assessor’s Parcel Map showing Fireman’s Fund property in Block 1032, Lot 3. Source: City and County of San Francisco Assessor
Map 5. Property Boundary Coordinates. Source: Google Earth, photo taken September 2017, annotated by Denise Bradley and Michael Corbett
Map 6. Photo Key. Source: Google Earth, photo taken April 2016, annotated by Denise Bradley and Michael Corbett
Figure 1. Perspective drawing of Fireman’s Fund Home Office, view east. Source: Architect and Engineer, cover, September 1957
Figure 2. Site Plan showing features ca. 1957–1963. Source: Garrett Eckbo, *Urban Landscape Design*, 1964
Figure 3. Photo of Terrace taken ca. 1957–1963; view east. Source: Garrett Eckbo, *Urban Landscape Design*, 1964
Figure 4. Photo of Terrace taken ca. 1957–1963; view southwest toward Cafeteria Wing of Office Building. Source: Garrett Eckbo, *Urban Landscape Design*, 1964; annotated by Denise Bradley and Michael Corbett

TERRACE LANDSCAPE FEATURES
T1-Biomorphic-Shaped Lawn
T2-Upper Level of Pavement
T3-Lower Level of Pavement
T4-Circular Planters for Specimen Tree
T5-Wall with Attached Benches frames the east side of Terrace
T6-Arch of Hedge adds to framing on east side of Terrace
T7-Ramp to lower level of site
Figure 5. Photo of Entrance Court taken ca. 1957–1963; view to west with parking lot (left) and paved outdoor sitting area (right). Source: Garrett Eckbo, *Urban Landscape Design*, 1964
Figure 6. Photo of Entrance Court taken ca. 1957–1963; view east of arbor covered sidewalk and foundation planting adjacent to Executive Wing. Source: Garrett Eckbo, *Urban Landscape Design*, 1964
Figure 7. Photo of landscape along the south side of Office Building (Executive Wing) taken ca. 1957–1963. Source: Garrett Eckbo, *Urban Landscape Design*, 1964
Figure 8. Aerial view of Fireman's Fund property in 1961 after completion of Phase I. Source: Pacific Aerial Surveys, annotated by Denise Bradley and Michael Corbett
Figure 9. Aerial view of Fireman's Fund property in 1969 after completion of Phases II, III, and IV. Source: Pacific Aerial Surveys, annotated by Denise Bradley and Michael Corbett
3333 California Street, Mixed-use Project

Devincenzi Comments on Draft Environmental Impact Report

Planning Department Case No: 2015-014028ENV

Exhibits to General Comments Part 2, Exhibits B-M
EXHIBIT C
EXHIBIT D
Date: February 28, 2016

Ms. Mary Woods
Planner - North West Quadrant
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103-2414

RE: 3333 California St. Development

Dear Ms. Woods:

I am writing regarding the development of the 3333 California Street development, currently the UCSF Laurel Heights Campus (the “Site”). It is my understanding that the San Francisco Planning Department is working with the developer of the Site regarding the initial project plans for the proposed development. The owner of the fee interest and the developer of the Site are limited in their joint ability to develop the Site because the owner of the Site does not have free and clear title; rather the general public holds a permanent recreational interest in all of the open space at the Site. Therefore, any development plans at the Site may not impinge upon this open space.

The general public holds a permanent right of recreational use on all of the open space at 3333 California and such rights were obtained by implied dedication. Dedication is a common law principle that enables a private landowner to donate his land for public use. Implied dedication is also a common law principle and is established when the public uses private land for a long period of time, which period of time is five (5) years in California. In 1972, the California legislature enacted Civil Code Section 1009 to modify the common law doctrine of implied dedication and to limit the ability of the public to secure permanent adverse rights in private property. Here, however, the existing open space at the Site was well established and well used as a park by the general public long before the completion of the construction of the full footprint of the improvements at the Site in 1966. Therefore, the general public has permanent recreational rights to the open space at the Site; the rights were obtained by implied dedication prior to the enactment of Cal. Civil Code Sec. 1009 in 1972.

Even if the general public had not secured permanent rights to recreational use through implied dedication prior to 1972, the public and countless individuals have acquired a prescriptive easement over the recreational open space. The recreational use has been continuous, uninterrupted for decades, open and notorious and hostile (in this context, hostile means without permission). Every day, individuals and their dogs use the green space along Laurel, Euclid and along the back of the Site at Presidio. Individuals ignore the brick wall along Laurel and regularly use the green space behind the wall as a park for people and for their dogs. The use of the Site has not been permissive. For example, the owner of the Site has not posted permission to pass signs in accordance with Cal. Civil Code Sec. 1008. If such signs ever were posted, they have not been reposted at least once per year. Although it is counterintuitive, an owner typically posts such signs to protect against the public securing adverse rights. One might assume the owner of the Site has not posted such signs, as the owner is aware of the pre-existing and permanent recreational rights the general public has secured to the open space. Because the
public’s rights to the open space were secured decades ago through implied dedication, it is not necessary for the general public to rely upon its prescriptive easement rights outlined in this paragraph; rather it is another means to the same end.

It is important that the Planning Department understand these legal issues as any project plan (or any future project description in an Environmental Impact Report (“EIR”) for the Site) cannot include development of the open land over which the public has a secured permanent rights of recreational use. It would not be a concession by the owner/developer to leave the open space undeveloped and allow public recreational use as the general public holds permanent recreational rights to this space. It is important to note that even the open space behind the walls that has been used as park space is also included in this dedication to the public. According to well-established case law, a wall or fence is not effective in preventing the development of adverse property rights if individuals go around the wall, as is the case here.

In sum, the open space at the Site cannot be developed as the public secured such rights through implied dedication prior to 1972 (or, alternatively, by prescriptive easement). In reviewing the development plans for the Site, the City cannot decide to allow development of any of the open space as the recreational rights to the space are held by the public at large. Any project description in the future EIR for the Site that contemplates development of any of the open space would be an inadequate project description and would eviscerate any lower impact alternative presented in the EIR. One only need to look to the seminal land use case decided by the California Supreme Court regarding this very Site¹ to see that an EIR will not be upheld if the project alternatives are legally inadequate. It would be misleading to the public to suggest that a lesser impact alternative is one that allows the public to use the space to which it already has permanent recreational use rights.

In sum, please be advised of the public’s permanent recreational rights to all of the existing open space at the Site and please ensure that a copy of this letter is placed in the project file.

Sincerely,

Meg Fitzgerald

Margaret N. Fitzgerald

With copies to:
Mark Farrell, Supervisor
Dan Safir, Prado Group
Kathy DiVicenzi, Laurel Heights Improvement Association
Robert Charles Friese, Esq.

¹ Laurel Heights Improvement Association of San Francisco, Inc. v. The Regents of the University of California, 47 Cal. 3d 376 (1988).
3333 CALSF
COMMUNITY MEETING

MASONIC · EUCLID · LAUREL · MAYFAIR
San Francisco 2004 and 2009
Housing Element
Volume I: Draft EIR (Section I to Section V.G)

PLANNING DEPARTMENT
CASE NO. 2007.1275E

STATE CLEARINGHOUSE NO. 2008102033

<table>
<thead>
<tr>
<th>Draft EIR Publication Date</th>
<th>June 30, 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Draft EIR Public Hearing Date</td>
<td>August 5, 2010</td>
</tr>
<tr>
<td>Draft EIR Public Comment Period</td>
<td>June 30, 2010 – August 16, 2010</td>
</tr>
</tbody>
</table>

Written comments should be sent to:
Environmental Review Officer | 1650 Mission Street, Suite 400 | San Francisco, CA 94103
Figure V.C-1
Street Areas Important to the Perception of the City

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties.

Impact Evaluation

As discussed previously, the 2004 Housing Element and 2009 Housing Elements would not change the land use objectives and policies in the City’s area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the RHNA. Therefore, the rezoning of land uses is not required. To meet the City’s share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. The 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

Impact AE-1: The proposed Housing Elements would not have a substantial adverse effect on a scenic vista. (Less than Significant)

New residential housing could result in an impact related to scenic vistas if it would be developed in a manner that obstructs views from a scenic vista from a public area or introduces a visual element that would dominate or upset the quality of a view. The proposed Housing Elements do not change the allowable development in the City. However, the Housing Elements may promote increased density (as described below) which could result in greater bulk and mass of buildings thereby potentially affecting scenic vistas.

As shown in Figure V.C-2, important vistas are primarily viewed from public parks or open space, which would not be at risk for conversion to housing uses. New housing could also encroach into a scenic vista and alter the appearance of the vista. As discussed previously, Telegraph Hill, Russian Hill, Pacific Heights, Buena Vista, and Dolores Heights are areas with outstanding visual features that are unique to
Generally, allowable height and bulks, as established in the San Francisco Planning Code are intended to reflect the City’s topography and take advantage of the City’s scenic vistas. However, individual development projects could have the potential to affect scenic vistas; this issue is appropriately considered in the project-specific environmental review of proposed new development. Additionally, in some circumstances, modified controls such as increased height limits could result in reductions to building bulk and preservation of views that might otherwise be blocked by a more massive structure. For example, the EIRs for Transbay Terminal\textsuperscript{8} and Rincon Hill\textsuperscript{9} areas identified this relative difference in the effect of building heights and massing and the respective EIRs for these projects appropriately evaluated increases in building heights. However, it is possible that changes in density standards and encouraging development to maximum allowable heights could indirectly result in taller and bulkier buildings that may potentially affect a scenic vista.

The following 2004 Housing Element policies could counteract the 2004 Housing Element’s potential to result in an adverse effect on a scenic vista by preserving existing housing, which would reduce the need for new construction, and the potential for the construction of taller or bulkier buildings. Additionally, policies that promote the preservation of housing within the existing neighborhood scale could be expected to reduce the potential for new development that could affect a scenic vista.

<table>
<thead>
<tr>
<th>Impact</th>
<th>2004 Housing Element</th>
<th>Corresponding 1990 Residence Element Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retain existing housing, which could reduce demand for construction of new housing, potentially avoiding adverse impacts on scenic vistas.</td>
<td>Policy 2.1: Discourage the demolition of sound existing housing.</td>
<td>3.1: Discourage the demolition of sound existing housing.</td>
</tr>
<tr>
<td></td>
<td>Policy 2.4: Retain sound existing housing in commercial and industrial areas.</td>
<td>3.6: Restrict the conversion of housing in commercial and industrial areas.</td>
</tr>
<tr>
<td>Retain existing neighborhood scale</td>
<td>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</td>
<td>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character.</td>
</tr>
</tbody>
</table>

\textsuperscript{8} As discussed in Section 5.15 (Visual and Aesthetics) of the Transbay Terminal/Caltrain Downtown Extension/Redevelopment Project Final EIS/EIR, March 2004.

\textsuperscript{9} As discussed in Section III.B (Visual Quality) of the Rincon Hill Plan Final EIR, Certified May 5, 2005.
Impact AE-2: The proposed Housing Elements would not substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and other features of the built or natural environment which contribute to a scenic public setting. (Less than Significant)

New construction could result in impacts related to damaging scenic resources if new housing would directly affect environmental features, such as topographic features, landscaping, or a built landmark that contributes to a scenic public setting. Figure V.K-1 in section V.K (Recreation) depicts San Francisco’s open spaces. These open spaces contain the majority of the City’s natural scenic resources. As shown in this map, much of San Francisco’s larger tracts of open spaces are located on the west side of the City, with some larger open spaces also located along the southern edges of the City. San Francisco’s landmark buildings are shown on Figure V.E-1 in section V.E (Cultural and Paleontological Resources). The majority of San Francisco’s landmarks are confined to the northeastern portion of the City. The following addresses the potential for the 2004 and 2009 Housing Element policies to substantially damage scenic resources.

2004 Housing Element Analysis

The 2004 Housing Element includes policies that promote development of vacant and/or underutilized lands (2004 Housing Element Implementation Measure 4.1.4) to a similar degree as the 1990 Residence Element (Policy 1.1). Additionally, as discussed under Impact V.AE-1, the 2004 Housing Element promotes increased residential density more so when compared to the 1990 Residence Element policies. Promoting increased residential densities in tandem with the development or redevelopment of vacant and underutilized lands could result in potential impacts related to scenic resources. For example, new development that could occur on vacant or undeveloped parcels or redevelopment of underutilized parcels could affect existing natural features that would have otherwise remained without the emphasis to develop/redevelop a particular site. Although some 2004 Housing Element policies could increase the potential for development of underutilized and/or vacant lands that may potentially contain scenic resources, 2004 Housing Element Policies 2.1 and 2.4 could reduce the potential for this impact by promoting housing retention and discouraging demolition. Discouraging demolition of existing structures and retaining existing housing units would help ensure that redevelopment of sites would not result in substantial changes to the overall building footprint, thereby reducing the potential to affect any existing scenic resources. Regardless, development of sites with scenic resources could occur, however any impacts to scenic resources under such circumstances would be development specific and appropriately addressed during the environmental analysis prepared for the specific project.

New development would be required to comply with the previously discussed regulations, including the Residential Design Guidelines, Section 311 of the San Francisco Planning Code and the Urban Design Element of the San Francisco General Plan. Additionally, street trees (and other trees including Landmark trees) that may be considered a scenic resource are protected under the City’s tree ordinance (as described above), and therefore the 2004 Housing Element policies would not be anticipated to substantially affect the City’s street trees. Furthermore, the majority of the City’s scenic resources are confined to open spaces designated as public land and under the jurisdiction of the Recreation and Parks Department and other state and federal agencies and therefore are not expected to be converted to residential uses. Therefore, the 2004 Housing Element would not directly or indirectly damage scenic resources, and the
2004 Housing Element would have a less than significant impact with respect to substantially damaging scenic resources.

2009 Housing Element Analysis

As discussed under Impact AE-1, the 1990 Residence Element promotes increased density on a broader, citywide, scale to a greater extent than the 2009 Housing Element. Some policies in the 2009 Housing Element could promote density for affordable housing projects and as a strategy to be pursued during community planning processes. The 2009 Housing Element also promotes development of underused and surplus public lands (Implementation Measure 4). As discussed in the analysis for the 2004 Housing Element policies that promote increased residential densities in tandem with the redevelopment of underutilized lands could result in potential impacts related to scenic resources by increasing the development potential of the site, thereby incentivizing the redevelopment of underused sites. Nonetheless, the 2009 Housing Element, when compared to the 1990 Residence Element, does not aggressively promote density more so than the 1990 Residence Element. When taken as a whole, the 2009 Housing Element would promote density to a lesser extent than the 1990 Residence Element, which could potentially result less development incentive for underused sites. Regardless, development of sites with scenic resources could occur, however any impacts to scenic resources under such circumstances would be development specific and appropriately addressed during the environmental analysis prepared for the specific project. New development would be required to comply with the previously discussed regulations, including the Residential Design Guidelines, Section 311 of the San Francisco Planning Code, the Urban Design Element of the San Francisco General Plan, and the City’s tree protection ordinance.

Furthermore, 2009 Housing Element Policies 2.2 through 2.5 and Implementation Measure 37 could reduce this impact for similar reasons as discussed above under the 2004 Housing Element analysis. In addition, 2009 Housing Element Policy 11.6 preserves landmark buildings, some of which could be considered a scenic resource of the built environment. Additionally, the majority of the City’s scenic resources are confined to open spaces designated as public land and under the jurisdiction of the Recreation and Parks Department and other state and federal agencies and therefore are not expected to be converted to residential uses. Also, as discussed above, the policies noted would not directly result in new residential development and would, thus, not directly or indirectly damage scenic resources. Therefore, the 2009 Housing Element would not directly or indirectly damage scenic resources, and the 2009 Housing Element would have a less than significant impact with respect to substantially damaging scenic resources.

Impact AE-3: The proposed Housing Elements would not substantially degrade the existing visual character or quality of the site and its surroundings. (Less than Significant)

New construction could result in impacts related to visual character if new housing would be developed with greater densities or heights than surrounding land uses or introduce incompatible uses in such a way as to substantially degrade the character or quality of the site. The existing visual characteristics throughout the City, similar to the land uses, are varied and reflect the change in the development patterns, land uses, and architectural styles in the City. Telegraph Hill, Russian Hill, Pacific Heights,
character because the 2009 Housing Element would not change allowable land uses or increase allowable building height and bulk. Similarly, as the 2009 Housing Element would not result in changes to the physical land use controls or to allowable uses, the 2009 Housing Element would not be expected to result in substantial changes to the City’s existing visual character. Additionally, the following 2009 Housing Element policy would further consider neighborhood character when developing new housing, thereby reducing the potential for new development to degrade the existing visual character.

<table>
<thead>
<tr>
<th>Impact</th>
<th>2009 Housing Element</th>
<th>Corresponding 1990 Residence Element Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respect existing neighborhood character.</td>
<td>Policy 11.1: Promote the construction and rehabilitation of well-designed housing that emphasizes beauty, flexibility, and innovative design, and respects existing neighborhood character.</td>
<td>Policy 12.4: Promote construction of well designed housing that conserves existing neighborhood character.</td>
</tr>
</tbody>
</table>

As shown above, the differences between 2009 Housing Element Policy 11.1 and 1990 Residence Element Policy 12.4 are not significant and would not represent a shift in policy. 1990 Residence Element Policy 12.4 provides guidelines for development that are intended to preserve neighborhood character. The 2009 Housing Element recognizes the diversity in architectural styles throughout the City. 2009 Housing Element Policy 11.1 would ensure that future development would be consistent with existing neighborhood character. Moreover, as with the 2004 Housing Element, there would be no direct or indirect substantial adverse change to visual character attributable to the 2009 Housing Element policies.

Overall, the 2009 Housing Element would promote measures that would increase the housing supply in a manner that does not present conflicts with existing visual character. Development associated with new residential units would be required to comply with the previously discussed regulations and requirements. Therefore, the 2009 Housing Element would have a *less than significant* impact with respect to degradation of existing visual character.

**Impact AE-4:** *The proposed Housing Elements would not create a new source of substantial light or glare which would adversely affect day or nighttime views in the area or which would substantially impact other people or properties. (Less than Significant)*

Implementation of the 2004 Housing Element and 2009 Housing Element could result in impacts related to light and glare if new housing would introduce new sources of light or glare that are unusual for an urban area. New housing could introduce new sources of light and glare if reflective glass or if bright, decorative or security lighting is used. However, for infill development that would replace open parking lots or yards, softer lighting that generates less glare than the present security lighting would typically be used. Additionally, residential exterior lighting tends to be focused on specific areas, rather than lighting a wide area such as a surface parking lot or undeveloped parcels. City Resolution 9212 prohibits the use of highly reflective or mirrored glass in new construction. New development would be required to comply...
EXHIBIT G
Zoning Referral for Health Permit

1. Business Information

- Name of Business: THE VIEW CAFE
- Total Gross Square Feet (GSF) of Area (includes storage and bathroom areas): 1183 assignable square feet
- Outdoor Seating Area: Yes

1a. Change of Use (depending on the zoning of the property, neighborhood notification may be required):
   - Yes
   - No

1b. Change of Ownership?
   - Yes
   - No

1c. Is the establishment vacant?
   - Yes
   - No

1d. Do you propose to alter the interior or exterior of the establishment?
   - Yes
   - No

1e. Is the business a Formula Retail Chain with 12 or more locations within the U.S.?
   - Yes
   - No

2. Type of Operation

   - Restaurant
   - Limited Restaurant
   - General / Specialty Grocery

   ☑ Other: COFFEE SHOP

2a. Accessory Use (Business within another business)?
   - Yes
   - No

2b. Days / Hours of Operation: Monday - Friday, From 7am - 4:30 pm

3. Applicant’s Affidavit

   - Name: SAKPRAVETH KIM
   - Mailing Address: ST. STE 232 SAN FRANCISCO, CA 94118
   - Phone: (415) 602-7765

   1. I am the owner or authorized agent of the owner of this property.
   2. The information presented on this application is true and correct to the best of my knowledge.
   3. Additional information or applications may be required in order to render this application complete.

   Applicant’s Signature: Date: Nov 21, 2014

PLEASE SUBMIT THIS FORM TO

Department of Public Health, Environmental Health
1390 Market Street, Suite 210
San Francisco CA 94102
(415) 252-3800
Restaurant 790.01: A retail eating and/or drinking use which serves prepared, ready-to-eat cooked foods to customers for consumption on or off the premises and which has seating. It may have a Take-Out Food 790.122 as a minor and incidental use. It may provide on-site alcohol sales for drinking on the premises (ABC Types 41, 47, 49, 59, or 75); however, if it does it is required to operate as a Bona Fide Eating Place 790.142. It is not required to operate within an enclosed building per Section 703.2(b)(1) so long as it is also a Mobile Food Facility 790.234. Any outdoor seating and/or dining area is subject to regulation as an Outdoor Activity Area.

Limited Restaurant 790.90: A retail eating and/or drinking use which serves ready-to-eat foods and/or drinks to customers for consumption on or off the premises, that may or may not have seating. It may provide off-site beer and/or wine sales for consumption off the premises with an ABC Type 20 license within the accessory use limits of Section 703.2(b)(1)(C)(vi).

Bar 790.22: A retail use which provides on-site alcoholic beverage sales for drinking on the premises. ABC License Types include: 42, 48, or 61 (no minors permitted on premises) and 42 or 60 (minors permitted on premises).

General Grocery 790.102(a): A retail food establishment that offers a diverse variety of unrelated, non-complementary food and non-food commodities. May provide beer, wine, and/or liquor sales for consumption off the premises with ABC Type 20 or 21 within the accessory use limits of Section 703.2(b)(1)(C)(vi). May prepare minor amounts or no food on-site for immediate consumption.

Specialty Grocery 790.102(b): A retail food establishment that offers specialty food products, such as baked goods, pasta, cheese, confections, coffee, meat, seafood, produce, artisanal goods and other specialty food products, and may also offer additional complementary food and non-food commodities. May provide beer, wine, and/or liquor sales for consumption off the premises with ABC Type 20 or 21 within the accessory use limits of Section 703.2(b)(1)(C)(vi). May prepare minor amounts or no food on-site for immediate consumption.

Other may include: Massage Establishment 790.150, Tobacco Paraphernalia Establishment 790.122, Medical Cannabis Dispensary 790.141, Service, Personal 790.116, Take-out Food 790.122

For more information regarding types of establishments, zoning, and Planning Code questions, you may go on-line to www.sfplanning.org or contact the Planning Information Center (PIC) for more information:

Planning Information Center (PIC)
1660 Mission Street, First Floor
San Francisco CA 94103-2479
TEL: 415.558.6377

Planning staff are available by phone and at the PIC counter. No appointment is necessary.
June 25, 1986

TO: Supervisor John Molinari
FROM: Dean L. Macris
RE: UCSF-Laurel Heights
3333 California Street (at Presidio)
(formerly Fireman's Fund office building)

As a result of recent inquiries about the proposed UCSF-Laurel Heights campus, we have compiled the following background information about the property. Because the University of California is not subject to local zoning regulations, no permits have been filed with the City for the proposed use. Nevertheless, the University has prepared a draft EIR, which we have reviewed. A copy of our comments on the EIR is attached for your information.

Project Description

Two buildings were constructed in three phases (1955-1966) on the 10-acre site as corporate headquarters of Fireman's Fund Insurance Company, which occupied the building through 1982. The building was purchased in 1982 by Presidio Corporate Center and renovation was begun for use as an office building. It was subsequently purchased by the Regents of University of California in February 1985. Current development on the site is as follows:

- 354,000 square feet of gross building area in main building
- 13,000 square feet of gross building area in annex building
- 97,500 square feet of parking area (549 spaces)

Building Use

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Fireman's Fund</td>
<td>UCSF School of Pharmacy</td>
<td>UCSF School of Pharmacy</td>
</tr>
<tr>
<td>1260 employees</td>
<td>400 persons</td>
<td>(CalTrans will vacate when lease expires)</td>
</tr>
<tr>
<td>CalTrans, approximately 840 persons</td>
<td></td>
<td></td>
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<tr>
<td>Private lessees 20 persons</td>
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<tr>
<td>1260 persons</td>
<td>860 persons</td>
<td>3333 California St.</td>
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3333 California St.
Zoning History

1921 Original zoning was "First Residential". Site was formerly a portion of the Laurel Hill Cemetery.

1952 Zoning changed to "Commercial" in order to permit development of Fireman's Fund Corporate Headquarters. CPC Resolution 4109 approves zoning change and establishes conditions for use of property (copy attached). Conditions include:

1. Use limited to professional, institutional, or office buildings.
2. Aggregate gross floor area limited to total area of property (approximately 435,600 square feet).
3. Parking to be 1 space for each 500 square feet of gross floor area.
4. No buildings within 100 feet of Euclid Avenue or Laurel Street and Mayfair Drive.
5. Conditions for residential development if such should occur in future.
6. Landscaping requirements.

1960 Zoning changed to "R-4" (as part of citywide rezoning program), which permits office/educational use as "transitional". Prior stipulations of Resolution 4109 continue to apply.

1978 Zoning changed to "RM-1" (as part of citywide rezoning program), which does not permit office/institutional uses.

However, because use was established in conformity with zoning at time of development, status becomes Non-Conforming Use (NCU) with a 50 year termination date (Section 185(b)). Use also qualifies as a Limited Commercial Use (LCU) (Section 186(a-2)) which allows continuation without termination date. Prior stipulations of Resolution 4109 continue to apply.

Compliance provisions permit continuation as office use or conversion to institutional or hospital use without termination date.

Extent of Local Control

The University of California is not subject to local zoning review.

If local zoning did apply, building permit applications for remodeling or conversions to institutional use would not require conditional use or other special use review by Department of City Planning. However, City Planning Commission could elect to review building permit applications and establish conditions for approval under powers of Discretionary Review.

Attachments

0019m
EXHIBIT K
February 22, 1981

Mr. John Cloudsley, Jr.
Page, Cloudsley & Baleix
400 Montgomery Street
San Francisco, CA

RE: Fireman's Fund Office Site,
3333 California Street
Lot 3 in Assessor's Block 1032;
Use of Existing Property by
more than one firm.

Dear Mr. Cloudsley:

This is to confirm the above-described property is considered
a nonconforming use under the City Planning Code. Provisions of the
Code applicable to nonconforming uses and this RM-1 zoned site will
permit the property to be converted from its present use by a single
firm to use by more than one firm. The total floor area in commercial
use may not be expanded, however.

Sincerely,

Robert W. Passmore
Assistant Director of Planning-Implementation
(Zoning Administrator)

RWP/jf
March 5, 2015

J. Gregg Miller, Jr.
Coblentz Patch Duffy & Bass LLP
One Ferry Building, Suite 200
San Francisco CA 94111-4213

Dear Mr. Miller:

This letter is in response to your request for a Letter of Determination regarding the property at 3333 California Street. This parcel is located in the RM-1 (Residential, Mixed, Low-Density) District and a 40-X Height and Bulk District. The request includes two main components: (1) confirmation of the current office use and its continuation as a legal, non-conforming use, not subject to Planning Code Section 321 with respect to the Office Development Annual Limit Program; and (2) confirmation that certain deferred maintenance work, property upgrades, and tenant improvements would not be considered an intensification or expansion of the legal, nonconforming office use, pursuant to Planning Code Section 186.

In your letter, dated February 10, 2015, you stated that there are two existing buildings at the site: a “main building” and an “annex building.” The main building contains approximately 348,800 gross square feet of office use, and the annex building contains approximately 14,000 gross square feet of office use. The site also contains 541 off-street parking spaces, of which 212 are located in the main building’s three levels of below-grade parking. The remaining 329 parking spaces are located in surface lots.

The site was part of the Laurel Hill Cemetery from the mid-1850s until the early 1940s. The San Francisco Unified School District (SFUSD) owned the property until the early 1950s. The Fireman’s Fund Insurance Company (Fireman’s) purchased the property from SFUSD in April, 1953. It then developed the site in phases between 1955 and 1966 as its corporate headquarters. Fireman’s occupied the site from 1957 to 1982 (when it relocated to Novato, California). The property was then sold to a private party in 1982, during which time it underwent office renovations and was occupied with office tenants. In January, 1985, the Regents of the University of California (UC Regents) purchased the property subject to then-existing office leases. UC Regents has occupied and used the site for office uses and ancillary uses since 1985.

www.sfplanning.org
March 5, 2015
Letter of Determination
3333 California Street

In your February 10, 2015 letter, you indicated that, currently, the Prado Group, Inc./SKS Partner LLC and the UC Regents have entered into an exclusive negotiating agreement with respect to the future of the property. With that in mind, you are seeking a determination with respect to the current uses, the continuation of those uses, change in tenancy, and associated maintenance work and upgrades. The upgrades may include: replacing the HVAC systems, upgrading the mechanical, electrical and plumbing systems, replacing the glazing system, and improving the landscaping and hardscape.

The site is currently zoned RM-1. Under the RM-1 zoning, office uses are generally not permitted. However, Section 186 of the Planning Code allows for the continuation of legal, non-conforming uses, despite limitations on the duration of such non-conforming uses set forth in Section 185 of the Planning Code. Because the two existing buildings were lawfully constructed and occupied as offices prior to the enactment of the RM-1 zoning in 1978, they have legal, non-conforming use status under Section 186 and, therefore, are not subject to the limitations set forth in Section 185.

Your letter also referenced past letters of determination by the Zoning Administrator in 1981 and 1983, which discussed issues related to multi-tenancy and continuation of the nonconforming office use. In the February 22, 1981 letter, the Zoning Administrator stated that the “...property is considered a nonconforming use...and this RM-1 zoned site will permit the property to be converted from its present use by a single firm to use by more than one firm.” In the August 4, 1983 letter, the Zoning Administrator confirmed the continuation of the nonconforming business office use allowing “…business office use of the property at all levels, without expansion, and with activities, signs and hours limited by Section 186(b) of the Code. There is no termination date for continued business office use within these controls.”

With regard to Section 321 of the Planning Code, the Office Development Annual Limit Program and associated development impact fees would not apply to the property since they were enacted after the existing office uses were lawfully established in 1957.

With respect to maintenance work, upgrades, and tenant improvements, Section 181 of the Planning Code allows certain maintenance and repair work, and minor alterations to be made to nonconforming uses, as long as such work continues to be consistent with the applicable restrictions of Section 181.

Determination
Based on City records of the property’s continued occupancy as office spaces, and current zoning provisions, it is my determination that the existing office use may continue indefinitely as a legal, nonconforming use, and that the maintenance work, property upgrades and tenant improvements constitute permissible alterations under Section 181 of the Planning Code. In the event that the nonconforming use is abandoned or discontinued for three years or more, Section 183 of the Planning Code shall apply.

APPEAL: If you believe this determination represents an error in interpretation of the Planning Code or abuse in discretion by the Zoning Administrator, an appeal may be filed with the Board of Appeals within 15 days of the date of this letter. For information regarding the appeals process, please contact the Board of Appeals located at 1650 Mission Street, Room 304, San Francisco, or call (415) 575-6880.

SAN FRANCISCO
PLANNING DEPARTMENT
Letter of Determination

March 5, 2015

J. Gregg Miller, Jr.
One Ferry Building, Suite 200
San Francisco, CA 94111-4213

Sincerely,

Corey A. Teague
Acting Zoning Administrator

cc: Property Owner at: Regents of the University of California, 3333 California Street, Suite 102, San Francisco, CA 94118
    Neighborhood Groups
    Mary Woods, Planner
EXHIBIT M
The sloped site occupies a transition zone between several neighborhoods and proposes partial retention and adaptive re-use of an existing non-complying building with respect to height, and non-conforming office use. The site is in an RM-1 / 40-X district. The project is organized around a plaza, a hill top green space, and several public accessible ways. The site is bounded by five street frontages: California, Presidio, Masonic, Euclid, and Laurel.

Site Design and Open Space

Walnut extension

UDAT recommend continued effort to reinforce the sense of Walnut as a street rather than a garage access lane. The width of the parking entrances should be no greater than a single lane (12'). Garage doors should be brought close to the face of buildings rather than deeply recessed. Sidewalks should span driveways on Walnut Street. Driveways on Walnut should have curb aprons as opposed to the curb returns shown, allowing for a contiguous public sidewalk into the site.

UDAT recommends the pick-up and drop-off area at the southeastern end of Walnut extension be designed to act and feel primarily as a pedestrian plaza. Consider amenities and design treatments that enhance that use.

Euclid Park seems to show retaining walls and other interruptions. It seems strongest as a single zone of lawn.

Parking

The current proposal shows 558 dwelling units with 885 parking spaces, which translates to 1.6 parking spaces per dwelling unit. The quantity of parking proposed will likely trigger several measures to offset automobile usage through the Transportation Demand Management program (TDM) which is designed to incentivize transit and active transportation modes like walking and biking and depress demand for single occupancy vehicle use by residents of and visitors to the site. Since the project site is within quarter mile (5 minute walk) of numerous transit lines several of which fall on the Muni Rapid network, SDAT strongly encourages the project sponsor to reduce the off-street parking ratio within the project.
Masonic Parking Entrance: Design so as to minimize the cavernous gap in the street wall: explore angling entrance perpendicular to Masonic and reducing the width of the throat. Explore maximizing the slope of the ramp to allow a door and roof covering to come closer to the street.

Laurel parking Entrance:
To diminish the scale of the garage entrance, please consider dividing into two doors 10’ wide and setback slightly (2’-3’) from face of building wall.

Architecture

California Building east (office Bldg):
Though proposed as an office building, this should be compatible with the overall context, which is dependent on detailing and materiality that provides a neighborhood sense of scale and character.

California and Laurel (Plaza ‘A’ Building):
While the use of balconies is encouraged to support an active interface between buildings and public realm, the open, continuous wrap-around balconies appear to remove too much building frontage from the street wall, do not reinforce a sense of individual use, and tend to overemphasize the horizontality of the buildings. Balance the transparency of the balconies to vertically modulate the building façade, and balance the openness with more solid guardrail.

Laurel Townhomes:
The ground floor frontage reads as mostly garage doors. Explore alternative means for aggregating or minimizing the single car parking function to better express the townhouses with landscaped front yards and entries with porches.

Mayfair Building Elevation:
Please explore materials and detailing compatible with the block face. Minimize the use of metal panels and open balconies.

Bridge: Consider how the bridge across the north-south walnut lane should be invitational and frame and the space at an appropriate scale for pedestrians. There is an opportunity to design this as a visible public serving amenity / celebratory focal element.

As the design of individual buildings continues to develop, please provide larger scale drawings and details.
These preliminary comments are submitted as to the Initial Study but are not required by June 8, 2018, because the Planning Department has confirmed that the City will not issue a negative declaration after the public comment period on the Initial Study and the City will prepare an Environmental Impact Report (EIR) under the California Environmental Quality Act, Public Resources Code sections 21000 et seq. (CEQA) as to this proposed project. The EIR on the project has not yet been released, and under applicable law, comments on the potentially significant environmental impacts and other analyses required by CEQA are not due until the end of the public review period on the draft EIR or hearing held by the decisionmaker on the proposed project. Ex. A, e-mails dated March 22 and 28, 2018 with Planning Department.

Also, the Initial Study ("IS") does not provide the complete CEQA analyses of significant impacts on traffic, air quality, noise and historical resources, and those analyses may contain information pertinent to the IS’s evaluations of impacts the City proposes to treat as not significant under CEQA. Based on the additional information provided in the Draft EIR, comments as to significant impacts and nonsignificant impacts may be provided after the Draft EIR is released.

In addition, pertinent information is missing from the Initial Study, and complete copies of all the reference materials cited in the Initial Study were not provided as of June 4, 2018. Further, the Initial Study is incomplete, inaccurate and/or inadequate to support determinations that certain impacts of the proposed project would not be significant. Under CEQA Guidelines section 15063(d)(3), an Initial Study must include sufficient information to support its conclusions, but the IS does not include such sufficient information.

**Governing Principles**

It is important to recognize that a significant effect on the environment is defined in CEQA as a substantial or potentially substantial adverse change in the environment. Public Resources Code
sections 21068, 21100(d). 14 California Code of Regulations ("CCR") section 15382 defines a "significant effect on the environment" as "a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance." Under 14 CCR section 15064(a)(1), if there is substantial evidence in light of the whole record before an agency that a project may have a significant effect on the environment, the agency must prepare a draft EIR.

In preparing an EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project irrespective of whether an established threshold of significance has been met with respect to any given effect. Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th 1099, 1106-07.

As used in this submission, "project" will mean the proposed project as well as the proposed project variant, unless otherwise indicated.

1. The Proposed Project Would Have a Significant Adverse Impact on Geology and Soils.

Under Appendix G of the CEQA Guidelines and the Initial Study (p. 205) a project would have a significant impact on the environment if it would:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
   i. Seismic-related ground failure, including liquefaction
   ii. Landslides
b. Result in substantial soil erosion or loss of topsoil, or
c. Be located on a geologic unit or soil that is unstable, or would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse. Ex. B, 14 California Code of Regulations ("CFR") section 15000 et seq. ("CEQA Guidelines"), Appendix G.

Also, under the Initial Study (p. 205) a project would have a potentially significant impact on geology and soils if it would:

d. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature.

Under the standards identified in the San Francisco 2004 and 2009 Housing Element EIR ("Housing Element EIR"), a project would normally have a significant effect if it would:
“Change substantially the topography or any unique geologic or physical features of the site.” Ex. C, San Francisco 2004 and 2009 Housing Element EIR (“Housing Element EIR”), p. V.O-25.

In addition, according to the EIR for the Pier 70 Mixed-Use District Project, a project would have a significant impact if it would “substantially change the topography or any unique geologic or physical features of the site.” Ex. D, excerpt of EIR for Pier 70 Mixed-Use District Project, p. 4.N.32. “Unique geologic or physical features” include those which “embody distinctive characteristics of any regional or local geologic principles.” Ibid.

A. The Proposed Project Would Result in Substantial Soil Erosion or Loss of Topsoil.

Construction of the proposed project or project variant would require earthwork activities across the entire project site. According to the Initial Study, the depths of excavation would range from 7 to 40 feet below the existing grade, with a total of approximately 241,300 net cubic yards of excavated soils generated during the approximately 7 to 15-year construction period. Only approximately 3,700 cubic yards of excavated soils would be reused on the project site as fill. IS p. 207. Evidence of the method used to calculate the amounts of excavated soils was not included in the IS and must be provided in the Draft EIR to afford an opportunity for public comment on the accuracy of the calculation and severity of resulting impacts.

Many areas to be excavated are now covered by topsoil and extensively planted with grasses, shrubs, and various vegetation. The project’s geotechnical consultant Langan Treadwell Rollo recommended that “all areas to receive improvements should be stripped of vegetation and organic topsoil.” (LTR p. 14)

As explained in the EIR for the 2009 Housing Element:

“New construction could result in impacts related to soil erosion and the loss of topsoil if new housing.... would result in grading activities, or if new development would require much more extensive grading. This exposure could result in erosion or loss of topsoil. The 2004 and 2009 Housing Element policies that promote increased density could result in heavier buildings on soil types or in proximity to slopes that are susceptible to erosion. Heavier buildings would require stronger and deeper foundations, involving more excavation than lighter buildings. Ex. C, San Francisco 2004 and 2009 Housing Element EIR, p. V.O-46.

As evidenced by the Langan Treadwell Rollo report and the Initial Study, substantial amounts of existing topsoil would be removed to construct underground parking garages in the Masonic Building, Mayfair Building, Plaza A and B Buildings and Walnut Building and new multi-unit
The Initial Study fails to analyze the impact of project excavation and construction on the substantial loss of topsoil and erroneously bases its determination that the impact would not be significant on operational conditions existing after the topsoil has been excavated. The Initial Study states that at buildout, the project site would be more intensely developed and landscaped with limited to no open areas susceptible to erosion or loss of topsoil. IS. p. 211. Since substantial existing topsoil will have been lost as a result of construction of the project, it is irrelevant to the loss of existing topsoil from construction and excavation that later operation on the paved and built areas would not expose the minimal topsoil that may be reused or replaced to erosion or loss. Ibid. An EIR must analyze the changes which the project would have to the existing environment.

The EIR must analyze the substantial loss of existing topsoil as a significant impact of the proposed project and analyze alternatives and mitigation measures that would avoid or reduce the impact.

**B. The Proposed Project Would Substantially Alter the Existing Topography and Unique Geologic or Physical Features of the Site.**

The proposed project would have a significant impact because it would directly or indirectly destroy substantial portions of Laurel Hill, which is a unique geological or physical feature and embodies distinctive characteristics of local geologic principles. As explained in the Laurel Heights Improvement Association’s nomination of the site for listing on the National Register of Historic Places, which was granted by the State of California Historic Resource Commission on May 17, 2018:

“the site is part of a cluster of low hills associated with Lone Mountain whose several high points were developed as cemeteries in the nineteenth century. The Fireman’s Fund site was previously a portion of the Laurel Hill Cemetery, and was long recognized for its views. Today there are distant views from the property to the southeast and downtown, to the northwest and a partial view of the Golden Gate Bridge, and to the west into the Richmond District.” (Ex. E, excerpts from Nomination of Laurel Heights Improvement Association for listing of Fireman’s Fund Insurance Company Home Office in the National Register of Historic Places, p. 6) [Note that the copy of the nomination included in the City’s reference materials was a draft version; although the final version of the nomination was provided to the San Francisco Planning Department, that Department has not included the final version of the nomination in the reference materials provided with
The plaque previously placed on the site to commemorate the former site of Laurel Hill Cemetery 1854-1946, California Historical Landmark #760, recognized the site as “the most revered of San Francisco’s hills.” (Ex. F, excerpts from State Office of Historic Preservation file on California Historical Landmark #760) The remarks of Gardiner Johnson of the California Historical Society recognized that when the new cemetery grounds were located on Laurel Hill:

“From the summit of this beautifully-shaped hill it was then possible to obtain one of the finest and most extensive views of both land and water.” (Id. p. 1-2)

The existing Terrace on the 3333 California Street site, “as the ‘centerpiece’ of the landscape, designed to integrate the architecture of the building with the site and with the broader setting (through views of San Francisco)” currently exists on the site and overlooks views of San Francisco. (Ex. E, Nomination p. 28)

The proposed project would have a significant impact on the environment because it would result in excavation of substantial portions of Laurel Hill and alter existing slopes, including the areas known for its views of the City. (See Ex. G, photographs of areas of Laurel Hill proposed for excavation)

The Initial Study recognizes that the topography exhibits a generally southwest-to-northeast downslope, with a grade change of approximately 65 feet. (IS p. 206) On the south and east portions of the site, bedrock is relatively shallow, at 7 to 17 feet below ground surface. IS p. 206.

The Masonic Building would be a four- to six-story, 40 foot-tall building. Due to the site’s slope, the Masonic Building’s first level would be a partially below-grade parking garage with a residential lobby at the northeast corner of the floor adjacent to the proposed garage entry. IS pp. 41-43. The Euclid Building would be a four- to six-story, 40-foot-tall building. Due to the site’s slope, the Euclid Building would have a partially below-grade floor. IS pp. 44-45.

Construction of the Masonic and Euclid Buildings would excavate the existing slope of Laurel Hill along Masonic and Euclid. As a result of the proposed excavation and construction, the existing slopes of Laurel Hill along Masonic and Euclid would be substantially altered and their distinctive characteristics of providing views of San Francisco substantially degraded by the structures erected in these slopes. On the south and east portions of the site, bedrock is relatively shallow, at 7 to 17 feet below ground surface. IS p. 206. The excavations on the south and central portions of the project site would encounter bedrock. IS p. 207. The Mayfair building on Laurel Street would also have a below-grade garage with access from Laurel Street. IS p. 47.

The EIR must analyze the substantial alteration of the south, east and western slopes of Laurel
City and County of San Francisco
June 8, 2018
Page 6

Hill as a result of construction of the Euclid, Masonic and Mayfair buildings and underground garages as a significant impact and analyze alternatives and mitigation measures that would avoid or reduce the impact.

C. The Proposed Project Would Expose People or Structures to Potential Substantial Adverse Effects Including the Risk of Loss, and/or Would Be Located on a Geologic Unit or Soil That is Unstable or Would Become Unstable as a Result of the Project and Potentially Result in On-Site or Off-Site Landslide, Lateral Spreading, Subsidence, Liquefaction or Collapse.

The Langan Treadwell Rollo Preliminary Geotechnical Investigation dated 3 December 2014 (Ex. H “LTR”) constitutes expert evidence supported by fact that all of the aforementioned potentially significant impacts could occur as a result of the proposed project. The Initial Study violates the requirements of CEQA because it fails to analyze these impacts a significant impacts and fails to require binding and enforceable mitigation measures to reduce or avoid these significant effects as a condition of approval of the project.

The Revised Environmental Evaluation explains that massive excavation would occur on the project site for below-grade parking garages, the basement levels of buildings and site terracing, as the project would excavate approximately 61 percent of the surface of the site (274,000/446,479 square feet) at depths of 7 to 40 feet. Revised Environmental Evaluation p. 28. The Initial Study estimates that 241,300 net cubic yards of soils would be excavated (which is 2,171,700 square feet of soils). IS p. 207. Approximately 288,300 cubic yards of demolition debris and excavated soils would be removed from the project site, and approximately 3700 cubic yards of soil would be reused on the project site as fill. IS p. 78.

LTR advises that adverse effects could occur onsite that could result in damage from the following conditions that could result from project activities:

- the presence of fill and loose sand will affect foundation support and excavation support (p. 9).
- the new building to be constructed adjacent to the parking garage may impose surcharge on the basement wall of the parking garage; to avoid surcharging the wall, the western perimeter wall of the new building may need to be supported on drilled piers that gain support in the bedrock below the elevation of the bottom of the parking garage. (LTR, p. 10).
- the proposed single basement will require an excavation of approximately 12 feet below the ground surface; the primary considerations related to the selection of the shoring system are the presence of fill and loose to medium-dense sand and the potential settlement of adjacent structures and improvements caused by movement of temporary shoring (LTR, p. 10).
- to retain the excavation sides for the multi-level basements, a retaining system with tiebacks may have been used; therefore, tiebacks may be encountered during basement excavation for new structure located east of the parking garage (LTR, p. 10).

- drilling of shafts for the soldier piles will likely require casing and/or use of drilling mud (slurry) to prevent caving; to prevent settlement of adjacent improvements, soldier piles should not be installed by driving or vibratory methods; a monitoring program should be established to evaluate the effects of the construction on the adjacent buildings and surrounding ground (LTR, p. 10-11).

- sand with low fines content was encountered within the zone of excavation; to reduce caving, lagging boards should be placed with every foot of excavation to limit caving; voids that result from caving soil behind wood lagging should be grouted before proceeding to the next row of lagging (LTR, p. 11).

- the bottom of the excavation should be above the groundwater level; during drilling of the soldier-pile holes, groundwater or perched water may be encountered; to keep the holes from caving, casing and/or drilling slurry may be needed; alternatively, the soldier piles may be installed using auger-case method (LTR, p. 11).

- generally, soldier piles can be installed under the City’s sidewalk provided that the top 3 feet of the soldier piles are removed after the permanent basement wall is cast; if tiebacks are needed, it has been our experience that using hollow-stem augers to install tiebacks in sand will result in loss of ground; therefore, tiebacks, if required, should be installed using smoothcased method (such as a Klemm rig) to reduce loss of ground (LTR, p. 11).

- the soil at subgrade should consist of stiff to very stiff clay, medium dense sand, and bedrock; therefore, the slabs may be supported on grade; if weak soil is present at subgrade level, the weak soil should be removed and replaced as engineered fill (LTR, p. 11).

- the near surface soil was determined to be moderately corrosive; the corrosive soil will adversely affect below grade improvements, such as foundations and utilities; recommendations for protection of buried structures presented in Appendix D are that all steel, iron, etc, should be properly protected against corrosion depending upon the critical nature of the structure; all buried metallic pressure piping should be protected against corrosion (LTR, p. 11).

- if the site grading is scheduled for the rainy season, the near-surface soil may be too wet to achieve adequate compaction during site preparation and fill placement and may deflect significantly under the weight of construction equipment; for these conditions, moisture conditioning of the material and the use of lightweight equipment may be required to lower the soil to a moisture level that will promote proper compaction; methods of moisture conditioning
include mixing and turning (aerating) the soil to naturally dry the soil and lower the moisture content to an acceptable level; aeration typically requires at least a few days of warm, dry weather to effectively dry the material (LTR, p. 12).

- if localized soft or wet areas are encountered, it may be necessary to over-excavate to a depth of 18 to 24 inches, place a layer of stabilizing geo-synthetic, and backfill with granular material to stabilize the subgrade and bridge the soft material (LTR, p. 12)

- bedrock encountered in the borings consists of serpentinite and sandstone; serpentinite contains naturally occurring asbestos; therefore a Site Mitigation Plan may be needed to be prepared prior to construction; bedrock handling and disposal should be performed in accordance with the Site Mitigation Plan. (LTR, p. 12)

- inclinations of temporary slopes should not exceed those specified in local, state or federal safety regulations; at a minimum the requirements of the current OSHA Health and Safety Standards for Excavations (29 CFR Part 1926) should be followed; temporary slopes less than 10 feet high should be inclined no steeper than 1.5: 1 (horizontal to vertical); in addition, all vehicles and other surcharge loads should be kept at least 10 feet away from the tops of temporary slopes (LTR, p. 13).

- all areas to receive improvements should be stripped of vegetation and organic topsoil; voids resulting from the demolition activities should be properly backfilled with lean concrete or engineered fill as described in the LTR recommendations (LTR, p. 14).

- prior to placement of any engineered fill, the onsite soil exposed by stripping should be scarified to a depth of at least 12 inches, moisture-conditioned to at least three percent above optimum moisture content, and compacted to at least 95 and 90 percent relative compaction for sand and clay, respectively; the soil subgrade should be kept moist until it is covered by select fill (LTR, p. 14).

- if soft areas are encountered during site preparation and grading, the soft material should be removed and replaced with engineered fill; if the soft material is deeper than 24 inches, LTR recommends over-excavating to a depth of 18 to 24 inches, placing a geotextile fabric at the bottom of the excavation, and backfilling with granular material (LTR, p. 14).

- fill should consist of onsite or imported soil that is non-corrosive, free of organic matter or other deleterious material, contains no rocks or lumps larger than four inches in greatest dimension, has a liquid limit of less than 25 and a plasticity index lower than 8, and is approved by the geotechnical engineer (LTR, p. 14).

- fill should be placed in horizontal lifts not exceeding eight inches before compacted,
moisture-conditioned to above optimum moisture content, and compacted to at least 90 percent relative compaction; fill thicker than five feet and or consisting of clean sand or gravel should be compacted to at least 95 percent relative compaction (LTR, p. 14).

- LTR should be provided with samples of proposed fill at least three days before use at the site; the grading contractor should provide analytical test results or other suitable environmental documentation indicating the imported fill is free of hazardous materials at least three days before use at the site; a bulk sample of approved fill should be provided to LTR at least three working days before use at the site so a compaction curve can be prepared (LTR, p. 14-15)

- where necessary, trench excavations should be shored and braced to prevent cave-ins and or in accordance with safety regulations; if trenches extend below the groundwater level, it will be necessary to temporarily dewater them to allow for placement of the pipe and or conduits and backfill (LTR, p. 15).

- if fill with less than 10 percent fines is used, the entire depth of the fill should be compacted to at least 95 percent relative compaction; jetting of trench backfill should not be permitted; special care should be taken when backfilling utility trenches in pavement areas; poor compaction may cause excessive settlements resulting in damage to the pavement section (LTR, p. 15).

- to reduce the potential for water to become trapped in trenches beneath the building or pavements, which trapped water can cause heaving of soils beneath slabs and softening of subgrade soil beneath pavements, an impermeable plug consisting of either native clay or lean concrete, at least five feet in length, should be installed where the trenches enter the building or cross planter areas and pass below asphalt or concrete pavements (LTR, p. 15).

- to reduce the potential for differential movement and cracking, exterior concrete slabs should be underlain by at least 4 inches of Class 2 aggregate base, and the upper 12 inches of the soil subgrade should be compacted to at least 95 and 90 percent relative compaction for sand and clay, respectively (LTR, p. 15).

- the foundation subgrade should be free of standing water, debris, and disturbed materials prior to placing concrete; if fill, soft, or loose soil is present at the foundation subgrade, it should be removed to expose competent material and be replaced by lean concrete (LTR, p. 17).

- to avoid surcharging the basement wall of the parking garage, the western perimeter wall of the new building may need to be supported on drilled piers that gain support in the bedrock below the elevation of the parking garage (LTR, p. 17).
- Drilled piers should be installed by a qualified contractor with demonstrated experience in this type of foundation; loose material may potentially cave during drilling, thus casing and/or drilling fluid may be required (LTR, p. 18).

- Where space does not permit a sloped excavation, shoring will be required, and a cantilever soldier pile and lagging shoring system is the most appropriate for the depth of the excavation planned and types of soil present; penetration of soldier piles should be sufficient to provide lateral stability (LTR, p. 18).

- A soldier pile and lagging system is relatively flexible, and movement should be anticipated; if the shoring system is properly designed and installed, movements at the top of the shoring should not exceed one inch (LTR, p. 19).

- Because the site is in a seismically active region, the wall design should be checked for seismic condition; seismic design parameters recommended for areas in the northwest portion of the site where bedrock is relatively deep or in the eastern and southern portions of the site where bedrock is relatively shallow, should be followed (LTR, p. 21-22).

Significantly, LTR concludes by recommending in-person observation of various operations to check that the contractor's work conforms to the geotechnical aspects of the plans and specifications:

"Prior to construction, we should review the project plans and specifications to check their conformance to the intent of our recommendations. During construction, we should observe excavation, temporary shoring and foundation installation, subgrade preparation and compaction of backfill. These observations will allow us to compare the actual with the anticipated subsurface conditions and check that the contractor's work conforms to the geotechnical aspects of the plans and specifications. Actual subsurface conditions may vary. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that described in this report, Langan Treadwell Rollo should be notified to make supplemental recommendations, as necessary." (LTR, p. 22)

This recommendation is evidence that the existence of various Building Code provisions, the preparation of plans by a qualified geotechnical engineer, and the review of construction plans by the Department of Building Inspection cannot be relied upon as providing adequate or effective mitigation for the hazards described above, given the reality that the project proponent and/or contractor will focus on minimizing costs of construction and the fact that regulatory standards are subject to interpretation. LTR did not rely upon an expectation of regulatory compliance as mitigation for these potentially significant adverse effects of the project. Rather, LTR
recommended that on-site monitoring of various excavation and construction activities by a licensed geotechnical professional would be required to mitigate the potential adverse impacts of this project. While LTR recommended that such on-site monitoring be performed, the project does not incorporate it as an enforceable, binding mitigation measure imposed as a condition of approval of the project.

In addition, the Initial Study recognizes that in the event of an earthquake that exhibits strong to very strong seismic ground shaking, “considerable damage could occur to buildings on the project site, potentially injuring building occupants and neighbors.” IS p. 209.

In order to reduce the severity of the aforementioned significant impacts, the following mitigation measures should be imposed in the EIR as conditions of approval of the project:

“MITIGATION MEASURE. Prior to construction, Langton Treadwell Rollo (or an equivalently qualified geotechnical professional licensed in the State of California, herein “LTR”)) should review the project plans and specifications to check their conformance to the intent of LTR’s recommendations in its Preliminary Geotechnical Investigation, 3333 California Street dated December 3, 2014. At all times during construction, LTR should observe excavation, temporary shoring and foundation installation, subgrade preparation and compaction of backfill. These observations will allow LTR to compare the actual with the anticipated subsurface conditions and check that the contractor’s work conforms to the geotechnical aspects of the plans and specifications...Actual subsurface conditions may vary. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that described in this report, LTR should be notified to make supplemental recommendations, as necessary.”

MITIGATION MEASURE. Since bedrock encountered in the borings consists of serpentinite and sandstone and serpentinite contains naturally occurring asbestos, a Site Mitigation Plan to reduce or eliminate any exposures of workers or nearby residents to asbestos will be prepared prior to excavation by a qualified, licensed professional and reviewed by LTR prior to excavation; such Site Mitigation Plan will be included in the Draft EIR and will be released for public comment; bedrock handling and disposal must be performed in accordance with the Site Mitigation Plan.

MITIGATION MEASURE. Since up to 15 feet of loose to medium dense sand was encountered above the water table, and loose and medium dense sand may densify during an earthquake (IS p. 210), most of the soil susceptible to seismic densification must be removed during excavation; at the conclusion of excavation, LTR will perform any necessary or advisable investigation of the site and verify in writing that most of the soil subject to seismic densification has been removed from the site.
MITIGATION MEASURE. Project sponsor will be required to maintain a water truck on site during all excavation, demolition, filling and other activities that could cause dust and will wet down dust sufficiently to prevent its blowing onto residences across the street from the site on Laurel, Euclid, Presidio and California streets.

Residents are very concerned that the 7-10 year proposed duration of construction would be too impactful for this residential area, especially since there would be substantial excavation from 7 to 40 feet below grade to accommodate underground garages and foundations. Residents recently learned of this proposed duration, and the developers stated that they would seek a development agreement that would permit them to construct the project over a 15 year period so that “if conditions do not exist to build out the entire project, we can phase construction in order to align with market conditions and financing availability.” (See Ex. I, October 12, 2017 email from Dan Safier) Since the Initial Study indicates that the developers would seek the right to apply for additional zoning changes after a certain period, the developers could seek approval for increases in the project from the Board of Supervisors, so the project could become more impactful. *Ibid.* The EIR must address all phases of the project, including foreseeable future expansion that could increase impacts of the project.

2. The Proposed Project Would Have a Potentially Significant Impact on Biological Resources and Would Conflict With Local Policies or Ordinances Protecting Biological Resources.

The proposed project would have a significant adverse impact on the environment because it would remove 185 onsite trees to allow for demolition, excavation and site preparation, including 19 onsite Significant Trees (i.e. trees within 10 feet of the public right-of-way that meet specific height, trunk, diameter, and canopy width requirements) and 15 protected street trees along California Street, and adequate mitigation is not included as a condition of approval of the proposed project. (IS p. 69)

The Initial Study failed to evaluate impacts of the proposed project against the applicable significance standards. Both CEQA Appendix G and the Housing Element EIR acknowledge that a proposed project would normally have a significant effect on the environment if it would:

“Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.” (Ex. B, excerpts from CEQA Appendix G; and Ex. C, excerpts from Housing Element EIR, p. V.N-29.

The Initial Study fails to analyze whether the proposed project would conflict with any local policies and only analyzes select provisions of one local ordinance, the San Francisco Urban Forestry Ordinance (SFUFO), which it misinterprets.

The Initial Study fails to analyze the proposed project’s conflict with the stated purposes of the San Francisco Urban Forestry Ordinance, article 16, sections 801 et seq., of the San Francisco Public Works Code (“SF UFO”) to “realize the optimum public benefits of trees on the City’s streets and public places, abatement of air and noise pollution, enhancement of the visual environment and others;” to integrate street planting and maintenance with other urban elements and amenities, including but not limited to utilities, and enhancement of views and solar access; to recognize that “the removal of important trees should be addressed through appropriate public participation and dialogue, including the California Environmental Quality Act (Public Resources Code Sections 21000 et seq.)”, to “recognize that green spaces are vital to San Francisco’s quality of life as they provide a range of environmental benefits, protect public safety, and limit conflicts with infrastructure.” SF UFO section 801.

Under SF UFO section 807, removal of significant trees “shall be subject to the the applicable rules and procedures for removal set forth in Sections 806, 810, or 810A” of the SF UFO. Also, protection of such trees during construction shall be required in accordance with Section 808(c) of the SF UFO.

Under SF UFO section 810A (b), removal of a significant tree(s) on privately-owned property shall be subject to the rules and procedures governing permits for removal of street trees as set forth in Section 806(b). Under those rules, the Department must give all Interested San
Francisco organizations and, to the extent practical, all owners and occupants of properties that are on or across the from the block face where the affected Tree is located, 30 days notice of the proposed removal and also post a notice on the affected Tree 30 days before the proposed removal. SF UFO section 806 (a) (2). If during that notice period, any person files with the Department written objections to the Removal, the Director shall hold a hearing to consider public testimony concerning the proposed Tree Removal. Under SF UFO section 806(a)(3)(A), seven days notice must be given of the hearing date in the manner provided in SF UFO section 806(a)(3)(A). Under SFO section 806(a)(3)(C), the Director’s decision is appealable to the Board of Appeals.

Also under SF UFO section 810A, as “part of the Director’s determination to authorize removal of a significant tree, the Director shall consider the following factors related to the tree:

1. Size, age, and species;
2. Visual and aesthetic characteristics, including the tree’s form and whether it is a prominent landscape feature or part of a streetscape;
3. Cultural or historic characteristics, including whether the tree has significant ethnic appreciation or historical association or whether the tree was part of a historic planting program that defines neighborhood character;
4. Ecological characteristics, including whether the tree provides important wildlife habitat, is part of a group of interdependent trees, provides erosion control, or acts as a wind or sound barrier;
5. Locational characteristics, including whether the tree is in a high traffic area or low tree density area, or provides shade or other public benefits;
6. Whether the tree constitutes a hazard tree as set forth in Section 802(o); and
7. Whether the tree has been maintained as set forth in Section 802(1).”

The standards for new street trees require, among other things, that the new street trees “be of a species suitable for the site conditions,” and the Director may “waive or modify the number of and/or standards for Street Trees” if other pre-existing surface, sub-surface, or above-grade features render installation of the required Street Tree(s) in the required fashion impossible, impractical, and/or unsafe.” SF UFO section 806 (d). For each required street tree that the Director waives, the applicant shall pay an in-lieu fee or provide alternative landscaping, including sidewalk landscaping.

Thus, decision to remove a tree is a discretionary one which is to be made with consideration of the policies and factors stated in the SF UFO. The Initial Study and Arborist Report (p. 4) prepared by SBCA Tree Consulting, amended 10-19-15, erroneously portray the decision to remove significant trees as automatically granted whenever they would be in the way of construction as long as some kind of replacement trees would be provided.

However, some of the onsite significant trees are prominent landscape features and others have
significant historical association because they were present while the historically significant Laurel Hill cemetery was located on the site, so removal of the onsite significant trees would conflict with the policies stated above. The EIR should identify the trees which were present on the Laurel Hill cemetery. Due to this conflict, the proposed removal of Significant Trees is a significant impact that must be evaluated in the EIR.

In addition, the San Francisco Urban Forest Plan (SF UFP) recognizes that “trees and other vegetation clean our air and water, create greener neighborhoods, calm traffic, improve public health, provide wildlife habitat and absorb greenhouse gases.” Ex. J, SF UFP p. 1. Among the strategies required to achieve the SF UFP, Strategy 2.2.2 to “Encourage developers to incorporate existing trees into building and site designs” provides that “[c]onsideration should be given during review of building plans to the existing trees on the site, especially ‘significant’ trees (20 feet or more in height, 15 feet or greater canopy width, and/or 12 inches or greater in trunk diameter.” SF UFP pp. 39, 47. Also, Strategy 2.2.4 to “[r]equire contractors to carry Tree Protection Bonds during construction projects” recognizes that “[c]onstruction activities frequently result in accidental damage or loss of trees - including street trees. Development projects with the potential to disturb existing trees should be required to carry Tree Protection Bonds as insurance. Such bonds would allow recourse in the event that significant damage to trees occurs during the development process through fines, tree replacement or other measures.” SF UFP pp. 47. Strategy 2.2.5 to “[i]mprove process for approving Tree Protection Plans for construction projects” states that “[c]urrently Tree Protection Plans are collected by the Planning Department. Review of these plans should take place with appropriate urban forestry staff. The inspection and enforcement of plans should be carried out. These plans include important provisions to protect trees such as protective barriers, construction exclusion zones, and the restriction of material and equipment storage within tree drip zones.” Ibid.

The SF UFP also recognizes that Public Works Code section 810A “describes trees that are automatically protected under Significant Tree designation and “additional consideration that will be taken into account for tree removal applications.” SF UFP p. 73.

The proposed project would have a significant impact on the environment because it would require the removal of Significant Trees and would conflict with the above-described policies of the SF Urban Forestry Plan, including policies that support preserving significant trees on construction sites and require specific mitigation measures such as Tree Protection Bonds and improved process for approving Tree Protection Plans for construction projects by including appropriate urban forestry staff in the approval, inspection and enforcement of plans. In addition, the proposed project would conflict with the policies stated in the SF Urban Forestry Ordinance for consideration of the historical association, size, age, species and visual and aesthetic characteristics, including the tree’s form and whether it is a prominent landscape feature or part of the streetscape. The EIR should analyze whether the project as proposed could be built without the removal of each of the Significant Trees.
The IS’s reliance on regulatory compliance to prevent significant adverse impacts to these resources was not sufficient because it was not based on a project specific analysis of potential impacts and the specific effect of regulatory compliance. Such project specific analysis of potential impacts and the specific effect of regulatory compliance was not included in the Initial Study. The effect of regulatory compliance on these resources cannot be determined because the decision to remove a Significant Tree is discretionary. Also, the environmental evaluation did not commit the project sponsor to implementation of specific performance criteria as mitigation measures agreed as a condition of approval of the project or objective performance criteria for measuring whether the goals related to these resources would be achieved. Such specific measures were not provided or agreed to as mitigation measures adopted as a condition of approval of the proposed project.

Absent a binding agreement or approval decision which implements specific mitigation measures that contain objective performance criteria that would measure whether the policy goals for protection of these resources would be achieved, the substantial adverse impact from removal of 185 onsite trees, including 19 onsite Significant Trees and 15 protected street trees remains significant and must be analyzed as a significant impact in the EIR.

Mitigation measures imposed as a condition of approval of the proposed project should include the following:

**MITIGATION MEASURE.** Project sponsor will be required to employ a contractor who maintains in effect during all excavation and/or construction performed while trees are present on the site Tree Protection Bonds which would allow recourse in the event that significant damage to trees occurs during the development process through fines, tree replacement or other measures.” Ex. J, SF UFP pp. 47.

**MITIGATION MEASURE.** Prior to their approval, all Tree Protection Plans will be reviewed by appropriate urban forestry staff, and urban forestry staff will be required to perform onsite inspection and enforcement of the Tree Protection plans.

3. **The Proposed Project Would Have a Potentially Significant Adverse Effect, Either Directly or Through Habitat Modifications, on Resident or Migratory Birds.**

The proposed project would remove 185 onsite trees to allow for demolition, excavation and site preparation, including 19 onsite Significant Trees (i.e. trees within 10 feet of the public right-of-way that meet specific height, trunk, diameter, and canopy width requirements) and 15 protected street trees along California Street. (IS p. 69)

In addition to the significance standards stated in the preceding section, the Housing Element EIR acknowledges that “new construction could result in impacts related to biological resources
if new housing would result in disturbance from construction activities, tree removal...interference with migration, construction of tall buildings with glass walls that could increase bird strikes and possibly interrupt a migration corridor...”. (Ex. C, p. V.N-30, 46)

The Initial Study acknowledges that the proposed project “would result in the temporary loss of nesting and foraging habitat through the removal of onsite trees and vegetation during construction” and states that “after the approximately 7- to 15-year construction period and incorporation of site landscaping (including the planting of up to 250 new trees on the project site) birds would be expected to inhabit the project site.” IS p. 199. The IS does not state how soon after the incorporation of site landscaping bird habitation would be expected to occur on site. The Initial Study also discloses that tree removal and construction-related activities associated with the proposed project could adversely affect bird breeding “at the project site and in the immediate vicinity.” IS 199. “Construction activities that may cause visual disturbance or alter the ambient noise environment include vegetation removal, demolition of existing buildings, and construction of foundations and new buildings.” IS p. 199-200. The Initial Study also acknowledges that “landscaped areas within the project site may provide suitable habitat for resident and migratory birds covered under the Migratory Bird Treaty Act (MBTA) of 1918 (16 U.S.C. 703-711) and the California Fish and Game Code (sections 3503 and 3503.5). IS p. 199.

The information set forth above supports a fair argument that the proposed project could have a substantial adverse effect, either directly or through habitat modifications, on a species identified as a candidate, sensitive, or special-status species by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. The information set forth above also provides a fair argument that the proposed project would interfere substantially with the movement of native resident or migratory wildlife species or impede the use of native wildlife nursery sites. This impact would be significant under the standards of Appendix G of the CEQA Guidelines and the Housing Element EIR set forth above. The impact on habitat interference would be substantial since it would last at least 7 years and possibly more than 15 years, given the need for the newly planted, unestablished trees to grow to sufficient size to support bird habitat. The Initial Study provides no mitigation for this potentially significant impact on biological resources, so the impact is significant and must be evaluated as a significant impact in the EIR, along with mitigation measures and alternatives that could reduce or avoid the impact. The Initial Study provides potential mitigation only for interference with onsite bird nests.

In addition, the Initial Study admits that the proposed project “would increase the number of new buildings at the project site and the heights of existing buildings, which could create potential obstacles for resident or migratory birds. This could result in an increase in bird injury or mortality in the event of a collision. The existing office building at the center of the site would be partially demolished and separated into two buildings connected by a bridge at the fourth floor. The separated buildings (i.e. Center Buildings A and B) would be adaptively reused as residential buildings and would include two- to three-story vertical additions, increasing the
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height from approximately 55.5 feet tall to up to 92 feet tall, and a connecting bridge at the fourth floor. In addition, the proposed project includes the construction of 3 new structures at the site ranging from 37 to 45 feet in height (37 to 67 feet for the project variant), some of which would include balconies. San Francisco Planning Code section 139 addresses ‘feature-related hazards’, which are defined as ‘free-standing glass walls, wind barriers, skywalks, balconies, and greenhouses on rooftops that have unbroken glazed segments 24 square feet and larger in size.’ The proposed project or project variant would comply with the feature-related standards of planning code section 139 by using bird-safe glazing treatment on 100 percent of any feature-related hazards (e.g. balconies, free-standing glass walls, or skywalks). With planning code section 139 compliance and implementation of Mitigation Measure M-B1-1, the proposed project or project variant would not interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors. This impact therefore, would be less than significant with mitigation.” IS p. 201-202.

However Mitigation Measure M-B1-1 pertains only to interference with onsite bird nests. The remainder of the discussion amounts only to an argument that regulatory compliance would be sufficient to mitigate significant impacts. However, Planning Code section 139 allows the Zoning Administrator to waive the requirements contained within Section 139( c)(2) or modify such requirements to allow equivalent Bird-Safe Glazing Treatments upon the recommendation of a qualified biologist. Also, Planning Code section 139( c)(2)(B) allows general exceptions for historic buildings and, pursuant to the Secretary of Interior Standards for Rehabilitation of Historic Properties, requires treatment methods such as netting, glass films, grates, and screens. Thus, compliance with Planning Code section 139 may not result in use of bird-safe glazing treatment on 100% of the feature-related hazards. Since regulators are allowed to use discretion in applying the subject regulations, the specific effect of the application of the regulations cannot be determined.

The IS’s determination that regulatory compliance will be sufficient to prevent significant adverse impacts was not based on a project specific analysis of potential impacts and the specific effect of regulatory compliance. Such project specific analysis of potential impacts and the effect of regulatory compliance was not included in the Initial Study. Also, the environmental evaluation did not commit the project sponsor to implementation of specific performance criteria as objective criteria for measuring whether the goal would be achieved. Such specific measures were not provided and adopted as a condition of approval of the proposed project. Further, under Planning Code section 139(a), structures that create a feature-related hazard “are required to treat all of the feature-related hazard.” Mitigation Measure M-B1-1 does not incorporate this measure. Absent an agreement to implement specific mitigation measures that contain specific performance criteria and objective criteria for measuring whether the goal would be achieved, the substantial adverse impact of interference with the movement of native resident or migratory birds remains significant and must be analyzed in the EIR as a significant impact.
In addition, the Initial Study’s assertion that “the proposed project or project variant would comply with the feature-related standards of planning code section 139 by using bird-safe glazing treatment on 100 percent of any feature-related standards of planning code section 139 (e.g., balconies, free-standing glass walls, or skywalks)” conflicts with the standards of Planning Commission Resolution 9212, which states that “clear, untinted glass should be used at and near the street level.” Ex. C, excerpts from Housing Element EIR, p. V.A-35. The EIR should also analyze any and all conflicts between the bird-safe glazing treatment and the Planning Commission Resolution 9212 standards for clear, untinted glass at and near street level, because conflicts between applicable plans indicate that the impact may not be insignificant as a result of regulatory compliance.

Renderings of the proposed project show clear glass walls and do not depict frosted glass, permanent stencils, or the like. The EIR should identify specific mitigation measures that would be used to provide bird-safe glazing treatment and incorporate them as a condition of approval of the proposed project.

4. The Proposed Project Would Have a Significant Impact on the Environment Because the Project Would Conflict With Applicable Land Use Plans or Regulations and Would Have a Substantial Impact Upon the Existing Character of the Vicinity.

A. Urban Design Element of San Francisco General Plan and Residential Design Guidelines

The proposed project would conflict with the following policies of the Urban Design Element, among others:

Policy 1.1: Recognize and protect major views in the city, with particular attention to those of open space and water.

Visibility of open spaces, especially those on hilltops, should be maintained and improved, in order to enhance the overall form of the city, contribute to the distinctiveness of districts and permit easy identification of recreational resources. The landscaping at such locations also provides a pleasant focus for views along streets.

Objective 3: Moderation of major new development to complement the City pattern, the resources to be conserved and the neighborhood environment.

Policy 3.3: Promote efforts to achieve high quality design for buildings to be constructed at prominent locations.
Policy 3.4: Promote building forms that will respect and improve the integrity of open spaces and other public areas.

Policy 3.5: Relate the height of buildings to important attributes of the city patterns and to the height and character of existing development.

Policy 3.6: Relate the bulk of the buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction....

When buildings reach extreme bulk, by exceeding the prevailing height and prevailing horizontal dimensions of existing buildings in the area, especially at prominent and exposed locations, they can overwhelm other buildings, open spaces and the natural land forms, block views and disrupt the city’s character. Such extremes in bulk should be avoided by establishment of maximum horizontal dimensions for new construction above the prevailing height of development in each area of the city...

Policy 3.7: Recognize the special urban design problems posed in development of large properties.

Policy 3.8: Discourage accumulation and development of large properties, unless such development is carefully designed with respect to its impact upon the surrounding area and upon the City.

Policy 3.9: Encourage a continuing awareness of the long-term effects of growth upon the physical form of the city.

Policy 4.1: Protect residential areas from the noise, pollution and physical danger of excessive traffic.

Policy 4.2: Provide buffering for residential properties when heavy traffic cannot be avoided. Ex. V, Urban Design Element of San Francisco General Plan.

The proposed project would also conflict with the following provisions of the Residential Design Guidelines:

DESIGN PRINCIPLE: Design buildings to be responsive to the overall neighborhood context, in order to preserve the existing visual character.

Many neighborhoods have defining characteristics such as street trees, buildings with common scales and architectural elements, and residential and commercial uses that make...
the neighborhood identifiable and an enriching place to be. The neighborhood is generally considered as that area around a home that can easily be traversed by foot.

Though each building will have its own unique features, proposed projects must be responsive to the overall neighborhood context. A sudden change in the building pattern can be visually disruptive. Development must build on the common rhythms and elements of architectural expression found in a neighborhood. In evaluating a project’s compatibility with neighborhood character, the buildings on the same block face are analyzed. However, depending on the issues relevant to a particular project, it may be appropriate to consider a larger context.

Broader Neighborhood Context: When considering the broader context of a project, the concern is how the proposed project relates to the visual character and scale created by other buildings in the general vicinity.

**Defined Visual Character**

**GUIDELINE:** In areas with a defined visual character, design buildings to be compatible with the patterns and architectural features of surrounding buildings.

On some block faces, there is a strong visual character defined by buildings with compatible siting, form, proportions, texture and architectural details. On other blocks, building forms and architectural character are more varied, yet the buildings still have a unified character. In these situations, buildings must be designed to be compatible with the scale, patterns and architectural features of surrounding buildings, drawing from elements that are common to the block.

**III. Site Design**

**DESIGN PRINCIPLE:** Place the building on its site so it responds to the topography of the site, its position on the block, and to the placement of surrounding buildings.

**TOPOGRAPHY**

Guideline: Respect the topography of the site and the surrounding area.

New buildings and additions to existing buildings cannot disregard or significantly alter the existing topography of the site. The surrounding context guides the manner in which new structures fit into the streetscape, particularly along slopes and hills. This can be achieved by designing the building so it follows the topography in a manner similar to surrounding buildings.
Similarly, a proposed project may be located next to a historic or architecturally significant building that is set back from the street or is on a wider lot with front and side gardens. The front setback of the proposed project must respect the historic building’s setbacks and open space. Additionally, the front setback must serve to protect historic features of the adjacent historic building.

SIDE SPACING BETWEEN BUILDINGS

GUIDELINE: Respect the existing pattern of side spacing.

Side spacing is the distance between adjacent buildings...Projects must respect the existing pattern of side spacing.

VIEWS

GUIDELINE: Protect major public views from public spaces.

The Urban Design Element of the General Plan calls for protection of major public views in the City, with particular attention to those of open space and water. Protect major views of the City as seen from public spaces such as streets and parks by adjusting the massing of proposed development projects to reduce or eliminate adverse impact on public view sheds.

IV. Building Scale and Form

DESIGN PRINCIPLE: Design the building’s scale and form to be compatible with that of surrounding buildings, in order to preserve neighborhood character.

BUILDING SCALE

GUIDELINE: Design the scale of the building to be compatible with the height and depth of surrounding buildings.

The building scale is established primarily by its height and depth. It is essential for a building’s scale to be compatible with that of surrounding buildings, in order to preserve the neighborhood character.

Building Scale at the Street

GUIDELINE: Design the height and depth of the building to be compatible with the existing building scale at the street.
If a proposed building is taller than surrounding buildings, or a new floor is being added to an existing building, it may be necessary to modify the building height or depth to maintain the existing scale at the street. By making these modifications, the visibility of the upper floor is limited from the street, and the upper floor appears subordinate to the primary facade.

In modifying the height and depth of the building, consider the following measures; other measures may also be appropriate depending on the circumstances of a particular project:

- Set back the upper story. The recommended setback for additions is 15 feet from the front building wall.
- Eliminate the building parapet by using a fire-rated roof with a 6-inch curb.
- Provide a sloping roofline whenever appropriate.
- Eliminate the upper story.

**Building Scale at the Mid-Block Open Space**

**GUIDELINE:** Design the height and depth of the building to be compatible with the existing building scale at the mid-block open space.

**BUILDING FORM**

**GUIDELINE:** Design the building’s form to be compatible with that of surrounding buildings.

Though the Planning Code establishes the maximum building envelope by dictating setbacks and heights, the building must also be compatible with the form of surrounding buildings.

**GUIDELINE:** Design the building’s facade width to be compatible with those found on surrounding buildings.

**Proportions**

**GUIDELINE:** Design the building’s proportions to be compatible with those found on surrounding buildings.

Proportions are the dimensional relationships among the building’s features, and typically involve the relationship between the height and width of building features. Building features must be proportional not only to other features on the building, but also to the features found on surrounding buildings.
Rooflines

GUIDELINE: Design rooflines to be compatible with those found on surrounding buildings.

V. Architectural Features

DESIGN PRINCIPLE: Design the building’s architectural features to enhance the visual and architectural character of the neighborhood.

In designing architectural features, it is important to consider the type, placement and size of architectural features on surrounding buildings, and to use features that enhance the visual and architectural character of the neighborhood. Architectural features that are not compatible with those commonly found in the neighborhood are discouraged.

VI. Building Details

DESIGN PRINCIPLE: Use architectural details to establish and define a building’s character and to visually unify a neighborhood.

The use of compatible details visually unifies a neighborhood’s buildings, providing continuity and establishing the architectural character of the area.

WINDOWS

GUIDELINE: Use windows that contribute to the architectural character of the building and the neighborhood.

Windows are one of the most important decorative features, establishing the architectural character of the building and the neighborhood.

EXTERIOR MATERIALS

GUIDELINE: The type, finish, and quality of a building’s materials must be compatible with those used in the surrounding area.

When choosing building materials, look at the types of materials that are used in the neighborhood, and how those materials are applied and detailed. Ensure that the type and finish of these materials complement those used in the surrounding area, and that the quality is comparable to that of surrounding buildings. Ex. K, Residential Design Guidelines, excerpts.
Defining characteristics of the single-family residential buildings on Laurel Street across the street from the site include one-story in height at the front, with a second set-back story, sloped roofs, consistent entrance and front setback patterns and compatible stucco materials. Defining characteristics on Euclid Avenue across the street from the site are two-unit flats or multiple-unit apartment buildings with rear yards sloping toward the site. Defining characteristics of the residences on California Street and Presidio Avenue are approximately four-story buildings designed with traditional architectural forms. The proposed project conflicts with the prevailing character of the surrounding areas and neighborhood in these and other respects, including the existing pattern of mid-block open space, as can be seen in the plans showing the incongruent scale and building forms of the proposed project. Also, the new buildings and additions to existing buildings proposed in the project would disregard or significantly alter the existing topography of the site.

B. The Proposed Project Would Have a Significant Impact on the Environment Because the Project Would Conflict With Applicable Land Use Plans or Regulations and Would Have a Substantial Impact Upon the Existing Character of the Vicinity.

The Housing Element EIR state that a proposed project would normally have a significant effect on the environment if it would:

"Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or

Have a substantial impact upon the existing character of the vicinity." Ex. C, p. V.B-27-28.

On the Figure IV-3 of the Housing Element EIR, the Generalized Citywide Zoning Map, the project site is shown in a “Residential” area. Ex. C, 2014 Housing Element EIR, p. IV-14-15 and Figure IV-3.

"Figure IV-4 shows a generalized height map of the City.” Ex. C, 2014 Housing Element EIR, p. IV-14 and Figure IV-4. This map shows that the project site is in a height district of “40 ft” or less.

Map 06 of the 2014 Housing Element shows average generalized permitted housing densities by Zoning Districts as 54 average units per acre in medium density areas. Ex. L, 2014 Housing Element p. I.70. Policy 11.4 of the 2014 Housing Element refers to this map and states the policy to:
"Continue to utilize zoning districts which conform to a generalized residential land use and density plan and the General Plan." Ex. L, p. 37

Policy 11.4 text provides that:

"The parameters contained in the Planning Code under each zoning districts [sic] can help ensure that new housing does not overcrowd or adversely affect the prevailing character of existing neighborhoods. The City’s current zoning districts conform to this map and provide clarity on land use and density throughout the city. When proposed zoning map amendments are considered as part of the Department’s community planning efforts, they should conform generally to these [sic] this map, although minor variations consistent with the general land use and density policies may be appropriate. They should also conform to the other objectives and policies of the General Plan. Ex. L, p. 37.

Housing Element policies do not provide for zoning changes to allow retail or commercial office uses. 2014 Housing Element Policy 1.6 provides:

"Consider greater flexibility in number and size of units within established building envelopes in community based planning processes, especially if it can increase the number of affordable units in multi-family structures.

However, in some areas which consist mostly of taller apartments and which are well served by transit, the volume of the building rather than number of units might more appropriately control the density.

Within a community based planning process, the City may consider using the building envelope, as established by height, bulk, set back, parking and other Code requirements, to regulate the maximum residential square footage, rather than density controls that are not consistent with existing patterns. In setting allowable residential densities in established neighborhoods, consideration should be given to the prevailing building type in the surrounding area so that new development does not detract from existing character." Ex. L, p. 10.

In addition, Housing Element Policy 7.5 supports process and zoning accommodation for affordable housing, as it provides that:

"Encourage the production of affordable housing through process and zoning accommodations, and prioritize affordable housing in the review and approval process....

Local planning, zoning, and building codes should be applied to all new development, however when quality of life and life safety standards can be maintained zoning
accommodations should be made for permanently affordable housing. For example, exceptions to specific requirements, including open space requirements, exposure requirements or density limits, where they do not affect neighborhood quality and meet with applicable design standards, including neighborhood specific design guideline, can facilitate the development of affordable housing. Current City policy allows affordable housing developers to pursue these zoning accommodations through rezoning and application of a Special Use District (SUD).” Ex. L, p. 29.

Thus, the proposed project would conflict with the Housing Element of the General Plan because the proposed project would seek to use a Special Use District to change the permitted uses to allow retail uses, new commercial office uses and public parking uses and to increase height and/or bulk limits, which would not be zoning accommodations “for permanently affordable housing.” Also, the proposed project would be inconsistent with the prevailing building type in the surrounding area and/or detract from existing character, detract from neighborhood quality and/or conflict with provisions of the Residential Design Guidelines and Urban Design Element, for the reasons stated herein.

For these reasons, the proposed project would also conflict with the following other policies of the 2014 Housing Element:

Policy 11.3 Ensure growth is accommodated without substantially and adversely impacting existing residential neighborhood character.

Accommodation of growth should be achieved without damaging existing residential neighborhood character. ...In existing residential neighborhoods, this means development projects should defer to the prevailing height and bulk of the area.

Policy 11.5 Ensure densities in established residential areas promote compatibility with prevailing neighborhood character.” Ex. L, p. 37.

The Housing Element EIR explains that:

“The San Francisco Planning Code, which incorporates by reference the City’s Zoning maps, governs permitted uses, densities and the configuration of buildings in San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) cannot be issued unless either the proposed action conforms to the Planning Code, or an exception if granted pursuant to provisions of the Planning Code, or a reclassification of the site occurs....

Section 263 of the Planning Code contains special exceptions to the height limits for certain uses within certain areas. Buildings and structures exceeding the prescribed
height may be approved by the Planning Commission according to the procedures for conditional use approval in Section 303 of the Planning Code; provided, however, that such exceptions may be permitted only in the areas specified and only to the extent stated in each section.” Ex. C, p. V-A-32-33.

The City’s Preliminary Project Assessment (“PPA”) states that:

“various aspects of the project conflict with both the current RM-1 Zoning of the site, as well as City Planning Commission Resolution No. 4109. The Preliminary Project Assessment application indicates the intent of the property owner to pursue a rezoning, potentially to an NC District. Additionally, as noted in the comments below, a special Use District overlay to the current RM-1 District may also be a potential path for rezoning. In either case, rezoning of the property requires approval by the Board of Supervisors....various components of the project exceed the current 40 foot height limit. Accordingly, a height district reclassification of the property must be sought. This also requires approval by the Board of Supervisors.” Ex. M, PPA, p. 10.

As further explained in the City’s Preliminary Project Assessment:

“The project proposes a combination of residential, office, commercial parking, retail and entertainment uses. Of these proposed land use categories, only residential uses are currently permitted in the existing RM-1 District. Accordingly, pursuing the project as proposed would require a rezoning of the subject property. The project description provided in the Preliminary Project Assessment application indicates the owner’s interest in pursuing a rezoning of the property to an NC (Neighborhood commercial) district, but does not specify which type of NC District...

The project proposed retail uses throughout the property.

The demolition of existing structures or conversion of floor area dedicated to the site’s 363,218 square feet of existing nonconforming office use is an abandonment of that nonconforming use per Planning Code Section 183. Therefore, to re-establish office uses in the proposed new structures, the uses must comply with any applicable zoning controls.

The project includes 60 off-street parking spaces as part of a ‘Public Parking Garage’ defined in Planning Code Section 102. The existing RM-1 district does not permit public parking garages and, at this time, it is unclear if the described 60 ‘paid public parking spaces for community use’ are legally noncomplying with regard to the Planning Code. Additional information is needed regarding the existing and proposed location of these...
spaces and the date of their establishment to make that determination...

The site has subsequently undergone additional rezoning, as it is now within an RM-1 District. However, the stipulations of future development as outlined in Resolution 4109 continue to apply, absent modification by the Board of Supervisors per Planning Code Section 174....In the project comments that follow, when there is an inconsistency, the more restrictive is noted as the guiding control. As indicated in the Preliminary Project Assessment application, the project may result in the rezoning of the property which requires review and approval by the Board of Supervisors. Amending Resolution 4109 would also require review and approval by the Board of Supervisors....

In general, the RM-1 District controls are more restrictive than the Stipulations of Resolution 4109. However, the stipulations are more restrictive when defining the density and buildable area requirements as applicable to a portion of the subject property fronting on Laurel and Euclid Avenues. At present, the project does not comply with these restrictions and would require amending the Resolution...

The subject property is within an RM-1 District which permits a residential density of up to one unit per 800 square feet of lot area. However, as a Planned Unit Development the proposal may seek approval for a density equal to one less unit than what is permitted by the district with the next greater density (RM-2)...While additional information is necessary to calculate the exact maximum density for the area subject to Resolution 4109, initial calculations estimate approximately 508 units are allowed pursuant to the current RM-1 zoning and Resolution an upon seeking the additional density allowed as a Planned Unit Development, the estimated maximum is 660 dwelling units. If the Resolution did not apply, these respective amounts become 558 and 743...

The subject property is within a 40-X Height and Bulk District, restricting the maximum height of buildings to 40 feet above grade, as measured generally from curb at the center of each existing and proposed building. The upper measurement of the height limit changes depending on the grade at that location per Planning Code Section 260(a)(1). Additionally, the upper measurement of the height of a building varies based on the roof form per Planning Code Section 260(a)(2). While in general the proposal accurately applies these methodologies, curbs along the Walnut Street extension may not be used as the base of measurements because the Walnut Street extension is not a public right-of-way...The additional stories proposed for the altered structures will require that the project seek a Height District reclassification which is reviewed and approved by the Board of Supervisors...

The existing office building is 66.5 feet tall from the existing grade to the finished roof...
The project proposed a lot line adjustment that would extend the property’s Masonic Avenue Boundary into the public right-of-way. This adjustment requires a General Plan Referral because it includes the vacation of a public way and transportation route owned by the City and County. This adjustment will also require review by the Department of Public Works as a partial street vacation request...

Open Space. Additional information is needed to determine how the project complies with this requirement for each individual unit and to confirm that the spaces comply with the dimensional requirements for either private or common spaces... (Ex. M, PPA. pp. 12-17.

Planning Code section 209.2 provides that in an RM-1 district, the “Residential Density, Dwelling Units” is up to one unit per 800 square feet of lot area.” Retail uses and commercial uses are not permitted.

As acknowledged in the Housing Element EIR, a proposed project “could result in impacts related to conflicts with existing land use policy, plans, or regulations” if it “resulted in housing development that was not consistent with zoning and land use designations as outlined in the governing land use plans and/or the City’s Planning Code to the extent those regulations help to avoid or mitigate potential environmental impacts.” Ex. C, p. V.B-29. In addition, there could be “impacts related to land use character if new housing is substantially out of scale with development in an existing neighborhood, or if new development is so different than existing development that the new development would change the existing character of an area.” Ex. 2, p. V.B-33. “Similarly, substantial increases in residential densities in traditionally low-density neighborhoods could result in changes to land use character.” Ex. C, p. V.B-33.

The Initial Study admits that the “project as proposed is not consistent with the provisions set forth in the planning code for the RM-1 Zoning District and would not comply with development restrictions identified in Resolution 4109, described below. The existing office use within the project site, as well as the scale of the existing office building within the project site, does not conform to the low-density residential character described for the RM-1 Zoning District.” IS p. 22. The Initial Study misinterprets Resolution 4109 and fails to mention that it contains a limitation on the aggregate gross floor area of all buildings on the property of a gross floor area that “shall not exceed the total area of the property allotted to such use,” a limitation of 50% as to lot coverage of residential development, and a prohibition on any residential dwelling other than a one-family dwelling or a two-family dwelling occupying any portion of the property which is within 100 feet of the Euclid Avenue boundary line thereof, or which is within 100 feet of the easterly line of Laurel Street and south of the northerly line of Mayfair Drive extended, occupying a parcel of land having an area of less than 3300 square feet, and a requirement that such buildings be set back 12 feet from any other building and 10 feet from any street. The new buildings proposed on the site propose to violate these limitations, including the gross floor area
limitations, and the Mayfair and Euclid Buildings propose to violate the prohibition on any residential dwelling other than a one-family dwelling or a two-family dwelling being erected at the locations of the proposed buildings and/or would also violate the use limitations which prohibit retail uses. The Initial Study failed to analyze these provisions of Resolution 4109, and retail uses are not allowed under that Resolution. Ex. N, Resolution 4109 and Stipulation as to Character of Improvements.

The Initial Study states that the "proposed project would include amendments to the planning code and zoning maps to rezone a portion of the site from the current RM-1 zoning and 40-X Height and Bulk Districts." IS p. 22. First, the proposed planning code and zoning map amendments were not provided in the Initial Study, so the IS is incomplete and its description of the proposed project is inadequate and incomplete. Also, the Initial Study states that these:

"changes would be implemented through the creation of a Special Use District (SUD) that would establish land use zoning controls for the project site. An ordinance establishing the SUD would require a recommendation by the Planning Commission and approval by the Board of Supervisors. In addition, the project sponsor would seek approval of a Conditional Use authorization/Planned Unit Development to permit development of buildings in excess of 50 feet in height; to allow for more units than principally permitted in the RM-1 Zoning District, to allow certain planning code exceptions to open space requirements, dwelling unit exposure, and rear yard setback requirements mandated by the planning code in an RM-1 Zoning District; and to provide a waiver or modification of any applicable conditions of Resolution 4109." IS p. 23.

As discussed above, the City's Preliminary Project Assessment stated that amending Resolution 4109 would require review and approval of the Board of Supervisors.

Since the proposed project is within a 40-X Height and Bulk District, it does not meet the criteria required to allow the Planning Commission to increase the height limit pursuant to Planning Code section 253, which provides that "wherever a height limit of more than 40 feet in a RH District, or more than 50 feet in a RM or RC District, is prescribed by the height and bulk district in which the property is located, any building or structure exceeding 40 feet in height in a RH District, or 50 feet in height in a RM or RC District, shall be permitted only upon approval by the Planning Commission according to the procedures for conditional use approval in Section 303 of this Code." Further, under Planning Code section 253:

"In reviewing any such proposal for a building or structure exceeding 40 feet in height in a RH District, 50 feet in height in a RM or RC District, or 40 feet in a RM or RC District where the street frontage of the building is more than 50 feet the Planning Commission shall consider the expressed purposes of this Code, of the RH, RM, or RC Districts, and of the height and bulk districts, set forth in Sections 101, 209.1, 209.2, 209.3.
and 251 hereof, as well as the criteria stated in Section 303(c) of this Code and the objectives, policies and principles of the General Plan, and **may permit a height of such building or structure up to but not exceeding the height limit prescribed by the height and bulk district in which the property is located.** (Emphasis added.)

Since the property has a height limit of 40 feet in an RM-1 district, Planning Code section 253 does not authorize a height limit increase.

In addition, the proposed project would not meet the criteria applicable to conditional uses as stated in Section 303(c) and elsewhere in the Planning Code and further would not meet the requirements of Planning Code section 304 for a Planned Unit Development, including that the requirements that the project shall:

1. Affirmatively promote applicable objectives and policies of the General Plan;
2. Provide off-street parking adequate for the occupancy proposed;
3. Provide open space usable by the occupants and, where appropriate, by the general public, at least equal to the open spaces required by this Code;
4. Be limited in dwelling unit density to less than the density that would be allowed by **Article 2** of this Code for a district permitting a greater density, so that the Planned Unit Development will not be substantially equivalent to a reclassification of property;
5. In R Districts, include Commercial Uses only to the extent that such uses are necessary to serve residents of the immediate vicinity, subject to the limitations for NC-1 Districts under this Code, and in RTO Districts include Commercial Uses only according to the provisions of 231 of this Code;
6. Under no circumstances be excepted from any height limit established by **Article 2.5** of this Code, unless such exception is explicitly authorized by the terms of this Code. In the absence of such an explicit authorization, exceptions from the provisions of this Code with respect to height shall be confined to minor deviations from the provisions for measurement of height in Sections 260 and 261 of this Code, and no such deviation shall depart from the purposes or intent of those sections.”

The IS has not explained the nature of the “minor deviations” from the provisions for measurement of height that would be sought, so the IS is incomplete, and the EIR must identify them so the nature of the project can be known, and comments can address inaccuracies and conflicts with land use policies.

The proposed project would fail to affirmatively promote applicable objectives and policies of the General Plan as to density and height.

Approval of a Planned Unit Development cannot be substantially equivalent to a reclassification of property, which it would if misused in this matter, because the 744 residential units in the
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project variant would exceed the additional density of 660 units allowed as a Planned Unit Development above existing density limits (which include Resolution 4109) and the 558 project units would exceed the approximately 508 units allowed under the applicable stipulations as to future development contained in Resolution 4109, which can only be changed by the Board of Supervisors. (See Ex. O, developer’s calculation of permitted densities under alleged PUD boost)

Moreover, the proposed project, which is located in an R District, would not “include Commercial Uses only to the extent that such uses are necessary to serve residents of the immediate vicinity, subject to the limitations for NC-1 Districts under this Code.” The Initial Study does not state that a rezoning from the RM-1 District would be sought. The project site is directly adjacent to the Laurel Village neighborhood commercial area, and one block away from the Sacramento Street neighborhood commercial area and one block away from Trader Joe’s. Residents of the immediate vicinity are adequately served by retail uses.

Thus, the project may under no circumstances be excepted from any height limit established by Article 2.5 of this Code under the Planned Unit Development provisions, because no exception is explicitly authorized by the terms of the Planning Code in a 40-foot Height and Bulk District. The Initial Study fails to substantiate the nature of the proposed deviations from the provisions for the measurement of height as being minor and fails to establish that such deviation shall not depart from the purposes or intent of Planning Code sections 260 and 261. The Preliminary Project Assessment already warned the project proponent not to attempt to measure heights from the Walnut Street extension because it is a walkway and not a public right-of-way.

Further, the project would not provide open space usable by the occupants and, where appropriate, by the general public, at least equal to the open spaces required by this Code.

Since plan sheet G3.03 shows that the project proponent counted the paved Lower Walnut walkway and the approximately 16 foot front setback in front of proposed retail uses on California Street (described as California Plaza) as open space, the project does not comply with the open space requirements of Planning Code section 135 that “[u]sable open space shall be composed of an outdoor area or areas designed for outdoor living, recreation or landscaping, including such areas on the ground and on decks, balconies, porches and roofs, which are safe and suitably surfaced and screened, and which conform to the other requirements of this Section.” Moreover, the Initial Study admits that “the network of proposed new common open spaces, walkways, and plazas within the project site” “would be shaded mostly by proposed new buildings for much of the day and year.” IS p. 161. For this reason, as well, such network of new common open spaces does not qualify as open space under Planning Code section 135 because it is not “designed for outdoor living, recreation or landscaping.”

The Housing Element EIR further explains that:
“For construction of new residential buildings and alteration of existing residential buildings in R Districts, Section 311 of the Planning Code requires consistency with the design policies and guidelines of the General Plan and with the Residential Design Guidelines that are adopted for specific areas. ...The guidelines apply to development in all RH and RM districts, and are intended to maintain cohesive neighborhood identity, preserve historic resources, and enhance the unique setting and character of the City and its residential neighborhoods.

The guidelines are based on the following design principles, which are also used to determine compliance with the guidelines:

- Ensure that the building’s scale is compatible with surrounding buildings.
- Ensure that the building respects the mid-block open space.
- Maintain light to adjacent properties by providing adequate setbacks.
- Provide architectural features that enhance the neighborhood’s character.
- Choose building materials that provide visual interest and texture to a building.
- Ensure that the character-defining features of an historic building are maintained.” Ex. C, p. V.A-34.

The Housing Element EIR also explains that Proposition M, codified in Planning Code section 101.1, established eight Priority Policies including “protection of neighborhood character,” “landmark and historic building preservation,” “protection of open space,” and “preservation and enhancement of neighborhood-serving retail uses.” Ex. C, p. V.A-41-42.

The Housing Element EIR explains that “[s]ection 263 of the Planning Code contains special exceptions to the height limits for certain uses within certain areas. Buildings and structures exceeding the prescribed height limit may be approved by the Planning Commission according to the procedures for conditional use approval in Section 303 of the Planning Code; provided, however, that such exceptions may be permitted only in the areas specified and only to the extent stated in each section.” Ex. C, p. V.B-2. None of these exceptions apply to the proposed project.

The Initial Study uses an erroneous legal standard in determining that the project’s potential conflicts with land use plans (and other impacts analyzed in the IS) need not be studied as a significant impact in the EIR. As explained in the Initial Study for the 1629 Market Street Project:

“The Initial Study evaluates the proposed 1629 Market Street Mixed Use Project to determine whether it would result in significant environmental impacts. The designation of topics as ‘Potentially Significant’ in the Initial Study means that the EIR will consider the topic in greater depth and determine whether the impact would be significant.” Ex. P,
The Initial Study for the 3333 California Street project acknowledges that the proposed project "would not conform to the existing RM-1 zoning and 40-X Height and Bulk District, and amendments to the planning code would be required as part of the proposed project or project variant." The Initial Study then puts forth the erroneous conclusion that if "the Board of Supervisors finds that amendments to the planning code are warranted to allow for implementation of the proposed project or project variant, the Board of Supervisors would adopt amendments to establish the Special Use District, which would resolve any conflicts between the planning code and the proposed project or project variant. To approve the proposed project or project variant, the city would be required to make findings of project consistency with the planning code. The proposed project or project variant, as approved, would thus be consistent with relevant plans and policies once amended." IS. p. 110-111. The project’s proposed misuse of Special Use District procedures and other procedures was explained above.

The Initial Study errs in claiming that to approve the proposed project, the city would be required to make findings of project consistency with the planning code. In certain circumstances, the city is required to find that a proposed project is consistent with provisions of the General Plan. Planning Code section 101.1. The proposed project would be inconsistent with provisions of the Urban Design Element and Housing Element of the General Plan for the reasons set forth above, including that the bulk of the buildings does not relate to the prevailing scale of development and would have an overwhelming or dominating appearance, and that the height of buildings does not relate to important attributes of the city patterns and the height and character of existing development. Urban Design Element Policies 3.5 and 3.6. Policy 3.6 explains that it was intended to avoid disruption to the city’s character from buildings that reach extreme bulk, by exceeding the prevailing height and prevailing horizontal dimensions of existing buildings in the area which “can overwhelm other buildings, open spaces and the natural land forms, block views.” Thus, these provisions of the general plan were adopted for the purpose of mitigating or avoiding an environmental effect. At the project site, the proposed new buildings would block public views from the open green spaces and significantly shadow open spaces and overwhelm other buildings.

Also, application of a Special Use District is authorized by the Housing Element to encourage production of affordable housing, not to authorize deviations from residential use district classifications for retail or commercial uses. The Housing Element EIR identified “Policy 7.5: Encourage the production of affordable housing through process and zoning accommodations and prioritize affordable housing in the review and approval processes” as one of the “Policies With Potential for Physical Environmental Impacts.” Ex. C, p. IV-35. The Housing Element EIR acknowledged that “[i]mplementation of the 2009 Housing Element could result in impacts related to existing character if new housing is out of scale with development in an existing neighborhood or if new development is so different it would change the existing character of an
area.” Such impacts would occur if a Special Use District or other deviations were used for the purposes proposed by the project proponent, especially for the improper purposes set forth above. The new buildings would still be out of scale with surrounding development and disrupt the area’s character through their dominating appearance, so the significant adverse physical impacts would remain despite approval of an Special Use District under the circumstances requested by the project proponent. The project approval would not result in consistency with the policies of the Urban Design Element or Housing Element, because the IS does not identify those elements of the General Plan as proposed to be amended in connection with approval of the proposed project. IS p. 86.

The Initial Study also improperly asserted that the impact on land use plans and policies would be less than significant because that the proposed project “would adhere to applicable environmental regulations, and therefore, would not conflict with policies or regulations adopted for the purpose of avoiding or mitigating an environmental effect such that a substantial adverse physical change in the environment related would result.” IS p. 111. This is an unsupported conclusion which is inadequate under CEQA and is contradicted by the evidence discussed herein. No explanation is provided as to the nature of the environmental regulations that would be complied with, the performance standards that would result in compliance or the specific expected management actions that would be taken. The IS’s determination that regulatory compliance will be sufficient to prevent significant adverse impacts was not based on a project specific analysis of potential impacts and the specific effect of regulatory compliance.

Thus, the EIR must analyze the potentially significant impacts which the proposed project would have on conflicts with numerous applicable land use plans, policies and regulations, including those discussed herein, and the substantial impact that the proposed project would have upon the existing character of the vicinity. In the cumulative impact discussion, the Initial Study acknowledges that to some extent conflicts with land use plans and policies under the proposed project “could be embodied in a considerable contribution to a cumulative physical environmental impact” and “such cumulative physical impacts are addressed and analyzed under the specific environmental topics section in the initial study and will also be addressed in Chapter 4, Environmental Setting and Impacts, of the EIR.” This statement constituted recognition that plans and policies with which the project would conflict were adopted for the purpose of avoiding or mitigating an environmental effect.

In addition, the Housing Element EIR recognized that:

“Implementation of the 2004 Housing Element and 2009 Housing Element could result in impacts related to conflicts with existing land use policy, plans, or regulations if the Housing Elements resulted in housing development that was not consistent with zoning and land use designations as outlined in governing land use plans and/or the City’s Planning Code to the extent those regulations help to avoid or mitigate potential
environmental impacts. For example, if a height limit in a particular area was designed to avoid impacting a view from a public vantage point, there could be an impact from a policy that increased the height limits.” Ex. C, p. V.B-29.

The proposed project’s increased heights and bulk would conflict with existing public views from the publicly accessible open space that currently exists on the project site, including on Euclid, Laurel and Presidio avenues and the Terrace.

5. **The Project Could Have Significant Shadow Impacts on Existing Open Spaces that Have Been Used by the Public for Recreational Purposes, on Sidewalks on the East Side of Laurel Street, and on Publicly Accessible Open Space Proposed by the Project.**

The City’s Shadow Analysis Procedures and Scope Requirements state that the proposed project is subject to review under CEQA if it “would potentially cast new shadow on a park or open space such that the use and enjoyment of that park or open space could be adversely affected,” and such procedures describe potentially affected properties as including “parks, publicly-accessible open spaces, and community gardens.” (Ex. Q) Also, the 2017 Notice of Preparation of an EIR for a mixed use project states that “the topic of shadow will include an evaluation of the potential for the proposed project to result in shadow impacts on nearby sidewalks.” (Ex. P, Initial Study for 1629 Market Street Project, p. 19)

The Initial Study states that the “threshold for determining the significance of shadow impacts under CEQA is whether the proposed project or project variant would create new shadow in a manner that substantially affects the use and enjoyment of outdoor recreational facilities or other public areas.” IS p. 156.

The San Francisco Planning Department Shadow Analysis Procedures and Scope Requirements provide that a shadow analysis would be required:

“If the proposed project is subject to review under the California Environmental quality Act (CEQA) and would potentially cast new shadow on a park or open space such that the use of enjoyment of that park or open space could be adversely affected.” Ex. Q, p. 1.

Those procedures further provide that:

“Potentially Affected Properties. Potentially affected properties including: parks, publicly-accessible open spaces, and community gardens identified in the graphical depictions should be listed and described. The description of these properties should include the physical features and uses of the affected property, including but not limited to: topography, vegetation,
structures, activities, and programming. Each identified use should be characterized as ‘active’ or passive.’ Aerial photographs should be included, along with other supporting photos or graphics. The programming for each property should be verified with the overseeing entity, such as the Port of San Francisco, the Recreation and Parks Department, etc. Any planned improvements should also be noted.” Ex. Q, p. 2.

The Initial Study failed to analyze the significance of the shadow impact upon the entire open green spaces used by the public for recreational purposes on the project site.

The Initial Study inaccurately stated that “UCSF currently grants public access” to two existing open green spaces at the perimeter of the project site. In fact, these areas have been used by the public without the permission of the property owner for many years. At the time of issuance of the Initial Study, there were no signs posted indicating that use of the open space was under the permission of the property owner. As explained in the attached letter from attorney Fitzgerald, the public has acquired permanent recreational rights to the open space at the site; the rights were obtained by implied dedication prior to the enactment of Cal. Civil Code section 1009 in 1972. Ex. R) The public has also “acquired a prescriptive easement over the recreational open space. The recreational use has been continuous, uninterrupted for decades, open and notorious and hostile (in this context, hostile means without permission.) Every day, individuals and their dogs use the green space along Laurel, Euclid and along the back of the Site at Presidio. Individuals ignore the brick wall along Laurel and regularly use the green space behind the wall as a park for people and for their dogs. The use of the Site has not been permissive.” Ibid.

The Initial Study failed to analyze the impact of shadows on the entire open green space along Laurel, and excluded the open green space along Presidio, because the project proponent seeks permission to build upon, or alter, some of those areas. This is not an of-right project. As explained by the City’s Preliminary Project Assessment, the proposed project fails to comply with numerous requirements of the Planning Code, and rezonings and discretionary approvals would be required to be granted by the Planning Commission and Board of Supervisors. Under applicable discretionary review procedures, the Planning Commission could scale the project back to avoid construction on, or alteration of, the currently publicly-accessible open spaces, and/or make other modifications.

Under Public Resources Code section 21068, a “Significant effect on the environment” means a substantial, or potentially substantial, adverse change in the environment.

Under the CEQA Guidelines, 14 Cal. Code of Regulations section 15382, “Significant effect on the environment” means a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the
environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant.” To assess the changes to the environment that will result from the project, the agency treats existing conditions as the environmental baseline against which the project's changes to the environment are measured. 14 Cal. Code of Regulations section 15152.

As established by the nomination of the property to the National Register of Historic Places, the “landscape design connects the outdoors with the indoors both functionally and conceptually.” Ex. E, Nomination, p. 5. Among the character defining features of this historically significant resource, the nomination listed “Vegetation features that helps to integrate the character of the Fireman’s Fund site with that of the surrounding residential neighborhoods including (1) the large trees in and around the East and West parking Lots, (2) the lawns on the west, south and east sides of the property, and (3) the planted banks along laurel and masonic streets.” The subject lawn areas and the Terrace are currently used as publicly-accessible open spaces, and it is possible that the approving agencies will retain them as open spaces. These areas would be significantly shaded by the proposed project, with the 2-3 floors proposed to be added to the top of the building. Thus, significantly shading these areas should be treated as a potentially significant impact on the environment in the EIR.

However, the Initial Study failed to analyze the significance of the shadow impact on the entire open green areas and merely analyzed the potential impact upon the portions of these areas that the project proponent proposes not to build upon. However, Figure 37, Extent of Net New Project Shadow Throughout the Day and Year, shows the entire open green spaces along Laurel Street and Presidio Avenue as in the “frequent shadow” zone. IS p. 158. The area in which the Terrace is located would also be frequently shadowed, and the project as proposed would remove the Terrace. The Initial Study shows that there would be a significant adverse shadow impact upon the areas along Laurel Street, Presidio Avenue and the Terrace which the project proponent proposes to build upon or alter, and the Initial Study failed to analyze the potentially significant impact of shadows on these publicly-accessible areas and failed to make a determination that impacts on these areas would not be significant. Thus, the EIR should analyze the potential shadow impacts on these areas as potentially significant impacts under CEQA. Approving authorities may retain some or all of these open spaces. The Initial Study failed to use the correct significance standard, which required it to analyze whether impacts on these areas could be “potentially significant.” The Initial Study’s exclusion of these areas because they would possibly be within part of the built project was erroneous. The Initial Study acknowledges that the decision-makers could modify the project to continue the usability of these spaces. IS p. 160.

Since the evidence shows that new shadows would be frequent on the publicly-accessible open spaces, the EIR should evaluate these shadows as a potentially significant impact on the environment. As acknowledged in the Initial Study for 1629 Market Street Project, the “designation of topics as ‘Potentially Significant’ in the Initial Study means that the EIR will
consider the topic in greater depth and determine whether the impact would be significant.” Ex. P, p. 4.

Similarly, the Initial Study shows that the proposed project would cause frequent shadows on the sidewalks on the east side of Laurel Street. The Initial Study failed to specifically determine that the proposed project would not create new shadow on the sidewalks on the east side of Laurel Street in a manner that substantially affects public areas. Instead, it determined that impact would not be significant by using a lesser standard, stating that “[o]verall, the proposed project or project variant would not increase the amount of shadow on the sidewalks above levels that are common and generally expected in developed urban environments.” IS p. 160. Since the evidence shows that the new shadow would be frequent on sidewalks on the east side of Laurel Street, the EIR must evaluate this shadow as a potentially significant impact on the environment and make a determination of whether the impact would be significant under the correct significance standard.

As acknowledged in the Initial Study for 1629 Market Street Project, to determine the impact insignificant, a determination must be made under CEQA that the proposed project’s net new shadows would not be anticipated to substantially affect the use of “any publicly-accessible areas, including nearby streets and sidewalks.” Ex. P, p. 66.

In addition, the Initial Study shows that the proposed project would cause new shadows on the open space proposed to be used in the project, which would be open to the public. ” The Initial Study admits that “the network of proposed new common open spaces, walkways, and plazas within the project site” “would be shaded mostly by proposed new buildings for much of the day and year.” IS p. 161. Thus, the EIR must analyze shadow impacts on these publicly-accessible areas as significant impacts, but the IS improperly excluded them from analysis as significant impacts. Many of these areas are not now significantly shaded as part of the existing environment, but would be a a result of the proposed project.

The EIR should follow the City’s shadow analysis procedures and identify and describe all the potentially newly shadowed areas discussed above in graphic depictions together with aerial photographs and provide a quantitative analysis of the impacts that would result from the project. Ex. Q, p. 4.

In addition, it is inaccurate to state that under the proposed project, the Euclid Green “would be developed as common open space that would be open to the public.” IS p. 160. That green open space is currently used as recreational open space by the public, as I have observed.

It should be noted that shadows are physical impacts, not aesthetic impacts exempt from CEQA in certain transit-served areas. The EIR on the Housing Element of the San Francisco General Plan clearly treats shadows as a physical effect along with wind impacts and analyzes aesthetic
impacts in a separate section. Ex. C - Final EIR 2004 and 2009 Housing Element p. V.J-3, V.C-1. As further explained in that EIR:

“Shadow is an important environmental issue because the users or occupants of certain land uses, such as residential, recreational/parks, churches, schools, outdoor restaurants, and pedestrian areas have some reasonable expectations for direct sunlight and warmth from the sun. These land uses are termed ‘shadow sensitive.’” (Ex. C - Final EIR 2004 and 2009 Housing Element p. V.J-3)

Thus, shadows are a physical impact and are not an aesthetic impact.

6. **The Proposed Project Could Have a Significant Hazard and Hazardous Materials Impact.**

The Initial Study states that hazards or hazardous material would be significant if the project 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 complied pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment. IS p. 227-228.

The Initial Study acknowledges that during construction, particularly excavation and grading, construction workers would be exposed to chemicals in the soil and groundwater through skin contact, ingestion or inhalation of airborne dust or vapors, and the “public, including nearby offsite residents and future site occupants, could be exposed to these chemicals through inhalation of airborne dust or vapors or contact with accumulated dust if proper precautions were not implemented.” IS p. 232.

Langan Treadwell Rollo evaluated the additional samples collected in August 2014 from the location of the former onsite USTs following removal of the waste oil UST against the environmental screening levels for commercial uses, but the San Francisco Health Department
request that the soil gas results for the site be compared to current environmental screening levels for residential uses. IS p. 229-230. Volatile organic compounds were detected in soil gas at concentrations exceeding residential environmental screening levels, at two of seven sampling locations. IS p. 230. “The health department also requested that a site mitigation plan and a demolition and construction dust control plan be prepared for the site. The site mitigation plan would include soil and groundwater handling procedures, designs for minimization measures that control human exposure to remaining hazardous substances, an environmental contingency plan, and a health and safety plan...All compliance documentation would be reviewed and approved by the health department.” IS p. 230.

However, the Housing Element EIR states that “redevelopment of former commercial and industrial sites to residential uses would be required to undergo remediation and cleanup under DTSC and the SFBRWQCB before construction activities could begin. If contamination at any specific project were to exceed regulatory action levels, the project proponent would be required to undertake remediation procedures prior to grading and development under the supervision of the City’s SFDPH, HMUPA, or the SFBRWQCB (depending on the nature of any identified contamination). Ex. C, p. V.Q-42.

The Initial Study does not disclose the mitigation measures that the site mitigation plan would provide, including soil and groundwater handling procedures, designs for minimization measures that control human exposure to remaining hazardous substances, an environmental contingency plan, and a health and safety plan. An agency may not rely upon a corrective action plan to mitigate potential impacts of site contamination when the plan’s mitigation measures are not disclosed in the record. Citizens for Responsible Equitable Environmental Development v. City of Chula Vista (2011) 197 Cal.App.4th 327, 332. Since the Initial Study has not disclosed the mitigation measures that would be used, the EIR must analyze the project’s impact from hazardous materials as a significant impact, and analyze mitigation measures. The Initial Study has not disclosed the soil and groundwater handling procedures, designs for minimization measures that control human exposure to remaining hazardous substances, an environmental contingency plan, or a health and safety plan, which the public health department would require.

Since specific mitigation measures have not been developed, disclosed and adopted as a condition of approval of the project, the potentially significant impacts from hazards and hazardous materials has not been mitigated to a level of insignificance. The IS’s determination that regulatory compliance will prevent significant adverse impacts was not based on a project specific analysis of potential impacts, potential mitigation measures and the specific effect of regulatory compliance. The Initial Study has not explained the effect of regulatory compliance, identified methods the agencies will consider for mitigating the impact or indicated the expected outcome. By relying on a hope of compliance with regulations that apply to transitory conditions, such as excavation or construction activities that could release hazardous substances, and do not require onsite monitoring to determine compliance, the IS failed to perform a careful
analysis that would be sufficient to find the impact not significant. Thus, the impact remains significant and must be fully analyzed in the EIR, with review and mitigation approved by all agencies with jurisdiction over the nature of any identified contaminants.

Since LTR compares soil gas results to the Environmental Screening levels published by the San Francisco Regional Water Quality Control Board, review and approval of mitigation plans by DTSC and the SFBRWQCB may be required in addition to review and approval by the San Francisco Department of Public Health. The EIR should analyze the whether the soil gas detections are under the jurisdiction of DTSC and the SFBRWQCB or other agencies besides the San Francisco Department of Public Health and whether the mitigation plan conforms with the supplemental vapor intrusion guidance document for conducting uniform vapor intrusion evaluations in California expected to be released in mid-2018 by the State Water Resources Control Board, the San Francisco Bay Regional Water Quality Control Board, and the Department of Toxic Substances Control. IS, FN302.

Moreover, the Initial Study evaluates only whether the low levels of volatile organic compounds which were detected in soil gas would pose a vapor intrusion concern for commercial or residential residents at the Plaza A building. However, the impact could be significant if a member of the public, such as a resident across the street from the project site, could be exposed to such soil gas released during construction. The EIR should analyze potential impacts on the public and nearby residents of release into the air of such soil gas and also analyze whether such emissions could be emitted within one-quarter mile of a school.

In addition to contamination from the USTs, the Initial Study discloses that “the site may contain onsite hazardous waste associated with medical uses, such as radioactive materials or other contaminants that may be contained within the existing onsite fume hoods, centrifuges, refrigerators, and waste storage containers. There is also the potential for contaminants, including minor radioactive contamination, in the facility plumbing system from disposal of secondary washes. Currently this hazardous waste is properly disposed of offsite under manifest.” IS p. 233.

While UCSF would remove much of the chemicals and radioactive materials as part of their relocation, the date of their relocation is uncertain, as is the manner of disposal of the remaining materials. What is the date on which UCSF employees would be relocated from the site? The Initial Study states that any remaining medical hazardous waste would be disposed of in an approved facility during building demolition or reuse and would not pose a significant hazard to the public or the environment if applicable federal, state and local regulations are followed. IS 233. The Initial Study does not indicate the identified methods the agencies will consider for mitigating the impact, adopt specific mitigation measures, explain the effect of regulatory compliance or indicate the expected outcome. Thus, the potentially significant impact from medical hazardous waste, including radioactive contamination in the plumbing system from
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disposal of secondary washes, must be analyzed as a potentially significant effect in the EIR, together with all appropriate mitigation measures. The EIR should include as a mitigation measure the preclusion of connection of the piping system used for disposal of secondary washes containing minor radioactive contamination with the proposed graywater recycling system proposed to be installed and used on the property. Without such mitigation, water containing radioactive waste contamination could be used for irrigation onsite and the radioactive materials could be spread onsite.

**MITIGATION MEASURE.** No piping onsite which was used for medical uses, including disposal of secondary washes containing radioactive material, may be connected with any piping used in the graywater recycling system proposed to be installed on the property and used for onsite irrigation and other uses. The project proponent will be required to execute a binding agreement to implement such mitigation measure as a condition of approval of the project.

In addition, the Initial Study states that the building may contain hazardous building materials such as asbestos, lead-based paint, electrical transformers containing PCBs, fluorescent light ballasts containing PCBs or other contaminants, and fluorescent light tubes containing mercury vapors, which could escape in the environment and pose concerns for construction workers and the public if not properly handled or disposed of in accordance with applicable regulations. Again, the impact must be evaluated as a significant impact in the EIR because the Initial Study does not indicate the identified methods the agencies will consider for mitigating the impact, adopt specific mitigation measures, explain the effect of regulatory compliance or indicate the expected outcome. The project proponent proposes to expose substantial amounts of such materials, as it proposes to demolish substantial portions of the existing building and cut a large hole in the building for a passageway.

Also, the Initial Study states that bedrock which would be encountered during site excavation includes serpentinite, which contains naturally occurring asbestos, and during project excavation, naturally occurring asbestos minerals may present a human health hazard if they become airborne and are inhaled. IS p. 235. The Initial Study states that the construction contractor would be required to prepare an asbestos dust mitigation plan specifying measures that would be taken to ensure that no “visible” dust crosses the property boundary during construction. However, the Initial Study indicates that the 17 California Code of Regulations section 93105 requires the use of best available dust mitigation measures to prevent the offsite migration of asbestos-containing dust. Again, the impact must be evaluated as a significant impact in the EIR because the Initial Study does not indicate the identified methods the agencies will consider for mitigating the impact, adopt specific mitigation measures, explain the effect of regulatory compliance or indicate the expected outcome.

Also, under Appendix G of the CEQA Guidelines project hazards and hazardous materials would
be significant impact if the project would:

“ Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.” Ex. B.

The Housing Element EIR uses the same significance standard Ex. C, p. V.Q-40.

The Initial Study identifies several schools/daycare centers are located within a quarter mile of the project site, that states that demolition and construction activities would require handling and transport of hazardous wastes. However, the IS improperly relies upon unspecified future regulatory compliance as the basis for a conclusion that “there would be limited potential for such materials to affect the nearest school.” IS p. 237. The significance standard is triggered by a release within one-quarter mile of an existing school. For the reasons stated above, reliance upon unspecified future regulatory compliance is not sufficient to mitigate the adverse impact, and the potential that such materials could be emitted within one-quarter mile of a school requires the potentially significant impact to be analyzed in the EIR as a significant impact, together with specified mitigation measures that will be incorporated as conditions of approval of the proposed project.

The Initial Study admits that the project site is currently on the Leaking Underground Storage Tank Sites list maintained by the State Water Resources Control Board and “is included on other lists of hazardous materials sites compiled pursuant to Government Code section 65962.5. The listings are related to public notice requirements for permitted activities such as air emissions reporting for onsite activities, small quantity generation of hazardous waste in the medical laboratories, and the former USTs discussed in Impact HZ-2.” IS p. 238. However, the Initial Study is incomplete and inadequate because it does not identify the other lists of hazardous materials sites compiled pursuant to Government Code section 65962.5 on which the project site is included. The EIR must disclose each such site which lists the project site and the nature of the listing so that potential impacts from hazards and hazardous materials can be evaluated.

Thus, the City has failed to comply with the procedures required by CEQA, because Public Resources Code section 21092.6 requires the agency to include in the draft EIR any information derived from consultation of Government Code section 65962.5 (the Cortese list), but the Initial Study states that it will not further address the issue of hazardous materials or waste. Ex. S, CEB, Practice Under CEQA, section 13.65 p. 13-74. The City has failed to include in the IS the information “on other lists of hazardous materials sites compiled pursuant to Government Code section 65962.5. The listings are related to public notice requirements for permitted activities such as air emissions reporting for onsite activities, small quantity generation of hazardous waste in the medical laboratories, and the former USTs discussed in Impact HZ-2.” IS p. 238. The City must state all information contained in the listings on such other sites in the Draft EIR.
7. **The Proposed Project Could Have a Significant Adverse Impact on Greenhouse Gas Emissions.**

The Initial Study states that the project’s impact on greenhouse gas emissions ("GHG") would be significant if it would:

- "Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment" or
- "Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases." IS p. 146.

New CEQA Guideline section 15064.4, on the determination of significance of GHG emissions, reflects the existing CEQA principle that there is no iron-clad definition of "significance." CEQA Guidelines section 15064(b). Accordingly, lead agencies must use their best efforts to investigate and disclose all that they reasonably can regarding a project’s potential adverse impacts. Berkeley Keep Jets Over the Bay Com. v. Board of Port Comm. (2001) 91 Cal.App.4th 1344, 1380-81; Ex. T, California Natural Resources Agency, Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97, December 2009. Section 15064.4 is designed to assist lead agencies in performing that required investigation. Id., p. 20; In particular, it provides that lead agencies should quantify GHG emissions where quantification is possible and will assist in the determination of significance, or perform a qualitative analysis, or both as appropriate in the context of the particular project, in order to determine the amount, types and sources of GHG emissions resulting from the project. Ibid. Regardless of the type of analysis performed, the analysis must be based “to the extent possible on scientific and factual data.” Ibid. In addition, lead agencies should also consider several factors. Ibid.

As further explained in Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB97, December 2009, pp. 21-22:

"With the foregoing principles in mind, the quantification called for in proposed section 15064.4(a)(1) is reasonably necessary to ensure an adequate analysis of GHG emissions using available data and tools, in accordance with Public Resources Code Section 21083.05. Even where a lead agency finds that no numeric threshold of significance applies to a proposed project, the holdings in the Berkeley Jets and Protect the Historic Amador Waterways cases, described above, require quantification of emissions if such quantification will assist in determining the significance of those emissions. OPR and the Resources Agency find that quantification will, in many cases, assist in the determination of significance, as explained below. (State CEQA Guidelines, § 15142 ("An EIR shall be prepared using an interdisciplinary approach which will ensure the integrated use of the..."
First, quantification of GHG emissions is possible for a wide range of projects using currently available tools. Modeling capabilities have improved to allow quantification of emissions from various sources and at various geographic scales. (Office of Planning and Research, CEQA and Climate Change: Addressing Climate Change Through the California Environmental Quality Act Review, Attachment 2: Technical Resources/Modeling Tools to Estimate GHG Emissions (June 2008); CAPCOA White Paper, at pp. 59-78. Moreover, one of the models that can be used in a GHG analysis, URBEMIS, is widely used in CEQA air quality analyses. (CAPCOA White Paper, at p. 59) Second, quantification informs the qualitative factors listed in proposed section 15064.4(b). Third, quantification indicates to the lead agency, and the public, whether emissions reductions are possible, and if so, from which sources. Thus, if quantification reveals that a substantial portion of a project’s emissions result from energy use, a lead agency may consider whether design changes could reduce the project’s energy demand.

Proposed section 15064.4(a)(1) also reflects existing case law that reserves for lead agencies the precise methodology to be used in a CEQA analysis. (See, e.g. Eureka Citizens for Responsible Gov’t v. City of Eureka (2007) 147 Cal.App.4th 357, 371-373.) As indicated above, a wide variety of models exist that could be used in a GHG analysis. (CAPCOA White Paper, at pp. 59-78.) Further, not every model will be appropriate for every project. For example, URBEMIS may be an appropriate tool to analyze a typical residential subdivision or commercial use project, but some public utilities projects, such as waste-water treatment plants, may require more specialized models to accurately estimate emissions. (Id. at pp. 60-65.) The requirement to disclose any limitations in the model or methodology chosen also reflects the standard for adequacy of EIRs in existing State CEQA Guidelines section 15151...

If the lead agency determines that quantification is not possible, would not yield information that would assist in analyzing the project’s impacts and determining the significance of the GHG emissions, or is not appropriate in the context of the particular project, section 15064.4(a) would allow the lead agency to consider qualitative factors or performance criteria...

The existing CEQA Guidelines state that the determination of significance requires a lead agency to use its judgment based on all relevant information. (State CEQA Guidelines, § 15064(b); see also Id. at §§ 15064.7 (thresholds may be qualitative), 15142 (analysis should be interdisciplinary and both qualitative and quantitative.).)

Subdivision (a) would also allow a lead agency to rely on performance-based standards to...
assist in the determination of significance. Just as with quantification, the purpose of engaging in a qualitative or performance standard based analysis is to develop information relevant to a significance determination. Several examples exist of the types of performance standards that might appropriately be used in determining the significance of greenhouse gas emission. Proposed section 15183.5(b)(1)(D), for example, contemplates that a plan for the reduction of greenhouse gas emissions may contain performance based standards. Where such standards are developed as part of such a plan, a lead agency would have evidence indicating that compliance with such standards would indicate that the impact of greenhouse gas emissions would be less than significant. Further, in adopting SB375, the Legislature acknowledged that regional transportation plans, and the environmental impact reports prepared to analyze those plans, may contain performance standards that would apply to transit priority projects. (See, e.g., Public Resources Code, § 21155.2.) Other potential examples include the Bay Area Air Quality Management District’s proposed Best Management Practices for Construction Greenhouse Gas Emissions (calling for use of alternative fuels, local building materials and recycling), and the California Public Utilities Commission’s Performance Standard for Power Plans [sic] (requiring emissions no greater than a combined cycle gas turbine plant). Compliance with such standards may be relevant to the significance determination, when considered in conjunction with the project’s total projected emissions...

Similar to use of a significance threshold, a lead agency must exercise care to ensure that performance standards do not replace a full analysis of all potential emissions. (Protect the Historic Amador Waterways, supra, 116 Cal.App.4th at 1109 (“in preparing and EIR, the agency must consider and resolve every fair argument that can be made about the possible significant environmental effects of a project, irrespective of whether an established threshold of significance has been met with respect to any given effect.”).) For example, while a Platinum LEED ® rating could assist a lead agency in determining whether emissions related to a building’s energy use may be significant, that performance standard may not reveal sufficient information to evaluate transportation-related emissions associated with that proposed project.

As indicated above, even a qualitative analysis must be based to the extent possible on scientific and factual data. Further, the type of analysis that is required will depend on the context of a particular project....The following hypothetical examples may illustrate, however, how section 15064.4(a) could operate:

Project 2: a large commercial development is proposed in an suburban context. Heavy-duty machinery would be required in various construction phases spanning many months. Following construction, the development would rely on electricity, water and wastewater services from the local utilities. Natural gas burners would be used on site. The development would employ several hundred workers and
attract thousands of customers daily. A traffic study has been prepared for the project. The local air quality management district’s guidance document recommends that projects of similar size and character should use URBEMIS, or another similar model, to estimate the air quality impacts of the development.

In the context of Project 2 a quantitative analysis would likely be appropriate. The URBEMIS model, which would likely be used to analyze other emissions, could also be used to estimate emissions from both project-related transportation and on-site indirect emissions (landscaping, hot-water heaters, etc.) Modeling is typically done for projects of like size and character. Other models are readily available to estimate emissions associated with utility use. In the context of Project 2, a lead agency may find it difficult to demonstrate a good faith effort through a purely qualitative analysis. (See, e.g., Berkeley Keep Jets Over the Bay Com. v. Board of Port Comm. (2001) 91 Cal.App.4th 1344, 1370...)

Factors Potentially Indicating Significance

The qualitative factors listed in the proposed section 15064.4(b) are intended to assist lead agencies in collecting and considering information relevant to a project’s incremental contribution of GHG emissions and the overall context of such emissions. Notably, while subdivision (b) provides a list of factors what should be considered by public agencies in determining the significance of a project’s GHG emission, other factors can and should be considered as appropriate.

Determine Whether Emissions Will Increase or Decrease

The first factor in subdivision (b), for example, asks lead agencies to consider whether the project will result in an increase or decrease in different types of GHG emissions relative to the existing environmental setting. All project components, including construction and operation, equipment and energy use, and development phases must be considered in this analysis. (State CEQA Guidelines, § 15378 (Project includes “the whole of the action”).)... 

This section’s reference to the ‘existing environmental setting’ reflects existing law requiring that impacts be compared to the environment as it currently exists. (State CEQA Guidelines, § 15125.) This clarification is necessary to avoid a comparison of the project against a ‘business as usual’ scenario as defined by ARB in the Scoping Plan. Such an approach would confuse ‘business as usual’ projections used in ARB’s Scoping Plan with CEQA’s separate requirement of analyzing project effects in comparison to the environmental baseline. (Compare Scoping Plan, at p. 9 (‘The foundation of the Proposed Scoping Plan’s strategy is a set of measures that will cut greenhouse gas...')}
emissions by nearly 30 percent by the year 2020 as compared to business as usual.' with
Fat v. County of Sacramento (2002) 97 Cal.App.4th 1270, 1278 (existing environmental
conditions normally constitute the baseline for environmental analysis); see also Center
(August 6, 2008) (rejecting argument that a large subdivision project would have a
‘beneficial impact on CO2 emissions’ because the homes would be more energy efficient
and located near relatively uncongested freeways). Business as usual may be relevant,
however, in the discussion of the ‘no project alternative’ in an EIR. (State CEQA
Guidelines, § 15126(e)(2) (no project alternative should describe what would reasonably
be expected to occur in the future in the absence of the project).)...

Thresholds of Significance

The second factor in subdivision (b) asks whether a project exceeds a threshold of
significance for GHG emissions...

Several agencies have developed, or are in the process of developing, thresholds of
significance for GHG emissions. For example, thresholds are currently being developed,
or have already been adopted by the Bay Area Air Quality Management District for
operations and construction, the City of Davis for residential developments, and the South
Coast Air Quality Management District for industrial projects. Regardless of the
threshold chose, however, this section does not alter the pre-existing rule under CEQA
that if substantial evidence supports a fair argument that a project may result in
significant impacts, despite compliance with a threshold, an EIR must be prepared.
an EIR, the agency must consider and resolve every fair argument that can be made about
the possible significant environmental effects of a project, irrespective of whether an
established threshold of significance has been met with respect to any given effect.”
(Protect the Historic Amado Waterways, supra, 116 Cal.App.4th at 1109.)

Consistent with the above, if relying on a threshold developed by another agency, lead
agencies must exercise caution in selecting a threshold to ensure that the threshold is
appropriately applied...Some agencies have adopted ‘thresholds’ pursuant to other laws
that may not be applicable in the CEQA context. ARB has adopted several thresholds
pursuant to AB32, for example, to address specific purposes that are unrelated to CEQA.
For example, the de minimus threshold governs the level at which emissions will be
regulated by ARB’s AB 32 regulations. (Health & Safety Code, § 38561(e); Scoping
Plan, at pp. 96-97.) CEQA does not permit use of a de minimus threshold,
however...Additionally, the Reporting Threshold is the level at which emissions from
large industrial sources are required to be reported.
Consistency with a Plan or Regulation

Finally, the third factor in subdivision (b) directs consideration of the extent to which a project complies with a plan or regulation to reduce GHG emissions. That section further states, however, that to be used for the purpose of determining significance, a plan must contain specific requirements that result in reductions of GHG emissions to a less than significant level. This clarification is necessary because of the wide variety of climate action plans and GHG reduction plans that are currently being adopted by public agencies. ARB, for example, recently adopted its statewide Scoping Plan. That plan may not be appropriate for use in determining the significance of individual projects, however, because it is conceptual at this state and relies on the future development of regulations to implement the strategies identified in the Scoping Plan. (Scoping Plan, at p. 9.) Regulations that will require actual reductions of GHG emissions may not be adopted until 2012. (Ibid.) Once those regulations are adopted and being implemented, they may, if appropriate, be used to assist in the determination of significance, similar to the current use of air quality, water quality and other similar environmental regulations. (CBE, supra 103 Cal.App.4th at 111...)

In addition to the regulations that will be developed to implement the Scoping Plan, this factor would also allow lead agencies to consider plans that are developed to reduce GHG emissions on a regional or local level. (Scoping Plan, at p. 26.) The proposed section 15064.4(b)(3) is intended to be read in conjunction with the section 15064(h)(3), as proposed to be amended, and proposed section 15183.5. Those sections each indicate that local and regional plans may be developed to reduce GHG emissions. If such plans reduce community-wide emissions to a level that is less than significant, a later project that complies with the requirements in such a plan may be found to have a less than significant impact.

Notably, CEQA does not provide a specific definition of ‘comply’ in the context of determining a project’s consistency with a particular plan. Some guidance may be gleaned, however, from case law interpreting the requirements that a local government’s activities be consistent with its General Plan. In that context, a ‘zoning ordinance [for example] is consistent with the city’s general plan where, considering all of its aspects, the ordinance furthers the objectives and policies of the general plan and does not obstruct their attainment.’ (City of Irvine v. Irvine Citizens Against Overdevelopment (1994) 25 Cal.App.4th 868, 879.) Reading section 15064.4 together with 15064(h)(3), however, to demonstrate consistency with an existing GHG reduction plan, a lead agency would have to show that the plan actually addresses the emissions that would result from the project. Thus, for example, a subdivision project could not demonstrate ‘consistency’ with the ARB’s Early Action Measures because those measures do not address emissions resulting from a typical housing subdivision. (ARB,
Expanded List of Early Action Measures for Reduce Greenhouse Gas Emissions in California Recommended for Board consideration, October 2007; see also State CEQA Guidelines, §§ 15063(d)(3) (initial study must be supported with information to support conclusions), 15128 (determination in an EIR that an impact is less than significant must be briefly explained).) (Emphasis added)

SECTION 15064.7. THRESHOLDS OF SIGNIFICANCE

Specific Purposes of the Amendment

Proposed subdivision (c) of section 15064.7 would allow a lead agency to adopt a threshold developed by another agency, or recommended by experts, provided that such threshold is supported with substantial evidence...In adopting any threshold of significance, including one developed by an expert or agency with specialized expertise, the lead agency must support the threshold with substantial evidence in the administrative record. (State CEQA Guidelines, § 15064.7(b).)...Because any threshold must be supported with substantial evidence, and must be adopted through a public process, any threshold recommended by an expert that is ultimately adopted will undergo sufficient scrutiny to ensure its legitimacy. (State CEQA Guidelines, § 15064.7(b).)

SECTION 15126.4 CONSIDERATION AND DISCUSSION OF MITIGATION MEASURES PROPOSED TO MINIMIZE SIGNIFICANT EFFECTS.

Specific Purposes Proposed to Minimize Significant Effects.

Section 21083.05 of the Public Resources Code expressly requires OPR and the Resources Agency to develop regulations on the 'mitigation of greenhouse gas emissions.' The goals of this legislative mandate are to (1) reduce GHG emissions and (2) to provide consistency in the development of GHG emissions reduction measures...

Existing section 15126.4 provides guidance on CEQA’s general mitigation requirements. To emphasize that mitigation of GHG emissions is subject to those existing CEQA requirements, OPR and the Natural Resources Agency added a new subdivision (c) to the existing section 15126.4. The Amendments identify five general methods of mitigation that may be tailored to the specific circumstances surrounding a specific project...

Mitigation of Greenhouse Gas Emissions

Comments submitted on the Amendments indicated general concerns that mitigation for GHG emissions may not be effective or reliable. To further clarify the existing mitigation requirements that would apply to measures to reduce greenhouse gas emissions, the
Natural Resources Agency revised the lead-in sentences in subdivision (c). Specifically, the Natural Resources Agency added that all mitigation must be supported with substantial evidence and be capable of monitoring or reporting. This addition reflects the requirement in Public Resources Code that a lead agency's findings on mitigation be supported with substantial evidence and that it must adopt a mitigation monitoring and reporting program along with the project if mitigation measures are required. (Public Resources Code, §§ 21081(a)(1), 21081.6.)

Consistent with section 15126.4(a), a lead agency must support its choice of, and its determination of the effectiveness of, any reduction measures with substantial evidence. Substantial evidence in the record must demonstrate that any mitigation program or measure is [sic] will result in actual emissions reductions...

Measures to be Implemented on a Project-by-Project Basis

Finally, the fifth type of measure that could reduce GHG emissions at a planning level is the development of binding measures to be implemented on a project-specific basis. Proposed subdivision (c)(5) recognizes that, for a planning level decision, appropriate mitigation of GHG emissions may include the development of a program to be implemented on a project-by-project basis...

This type of mitigation is subject to the limits of existing law, however, Thus, proposed subdivision (c)(5) should not be interpreted to allow deferral of mitigation. Rather, it is subject to the rule in existing section 15126.4 (a) (1)(B) that such measures ‘may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specified way.’

SECTION 15130. DISCUSSION OF CUMULATIVE IMPACTS

Specific Purposes of the Amendment

Section 15130(b)(1)(B)

Section 21083(b) of the Public Resources Code requires that an EIR be prepared if the ‘possible effects of a project are individually limited but cumulatively considerable.’ that section further defines ‘cumulatively considerable’ to mean that ‘the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.’

In determining whether a project may have significant cumulative impacts, a lead agency
must engage in a two-step process. First, it must determine the extent of the cumulative problem. To do so, a lead agency must examine the ‘effects of past projects, the effects of other current projects, and the effects of probably future projects.’ Once it does so, the lead agency then determines whether the project’s incremental contribution to that problem is cumulatively considerable...

The existing Guideline section 15130(b) addresses the first step of the process. It offers two options for estimating the effects resulting from past, present and reasonably foreseeable projects. A lead agency may either rely on a list of such projects, or a summary of projections to estimate cumulative impacts. Existing section15130(b)(1)(B) allows a lead agency to rely on projections in a land use document or certified environmental document that addresses the cumulative impact under consideration...

The proposed amendments would also allow a lead agency to rely on information provided in regional modeling programs. The best projections of the cumulative effect of GHG emissions may be available in up-to-date models such as the International Council for Local Environmental Initiative’s Local Government GHG Protocol and the California Climate Action Reserve’s Registry general, industry and project type protocols. (Ex. T, California Natural Resources Agency, Final Statement of Reasons for Regulatory Action, Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gas Emissions Pursuant to SB 97, pp. 20-28, 30, 46, 49, 50, 53, 54)

The Initial Study failed to `quantify GHG emissions that could result from the proposed project, and such quantification is reasonably necessary to ensure adequate analysis of GHG emissions using available data and tools, and such quantification would assist in determining the significance of those emissions. URBEMIS is one model that is widely used in CEQA air quality analyses and can also be used to analyze a project’s GHG emissions. In fact, the local air quality management district’s guidance document recommends that projects of a similar size and character to a large commercial development proposed in a suburban context “should use URBEMIS, or another similar model, to estimate the air quality impacts of the development…” Ex. T, p. 23.

In addition, in June 2010, the BAAQMD adopted recommended thresholds with two alternatives for determining significance for most nonindustrial development projects. One is a bright-line threshold of 1100 MT/year of carbon dioxide equivalent emissions. The other recommended threshold is a per capita threshold of 4.6 MT/yr of CO2-equivalent emissions, based on the service population of the project. Ex. S, CEB, Practice Under the California Environmental Quality Act, § 20.81A, p. 20-100.

The Housing Element EIR states that BAAQMD has updated their CEQA air quality guidelines and “adopted significance standards for GHGs on June 2, 2010.” The updated CEQA Air
Quality Guidelines includes significance thresholds, assessment methodologies, and mitigation strategies for GHG emissions. Ex. C, p. V.I-12. The recently adopted GHG thresholds of significance, as discussed in BAAQMD’s May 2010 CEQA Air Quality Guidelines, includes two sets of GHG thresholds: one that would apply to specific development projects, and another threshold that would apply to plan-level CEQA analysis. Ibid.

The California Resources Agency has identified “the Bay Area Air Quality Management District’s proposed Best Management Practices for Construction Greenhouse Gas Emissions (calling for use of alternative fuels, local building materials and recycling)” as performance-based standards that are appropriate to use in determining significance of GHG emissions. Ex. T, p. 22.

The Initial Study has not provided substantial evidence that the project’s GHG emissions, and/or the project’s percentage reduction from business as usual ("BAU") correlates with statewide, regional or local goals. The IS’s claim that GHG impacts would not be significant was not supported by substantial evidence that the project’s energy-efficiency goals, construction-related GHG emission goals, and transportation-related GHG emission goals would be reached.

Moreover, the IS failed to consider “whether the project will result in an increase or decrease in different types of GHG emissions relative to the existing environmental setting. All project components, including construction and operation, equipment and energy use, and development phases must be considered in this analysis.” Ex. T, p. 24. Instead, the IS evaluated the project’s consistency with applicable local and regional plans for GHG reduction rather than considering whether the project will “result in an increase or decrease in different types of GHG emissions relative to the existing environmental setting.” Thus, the IS erroneously used existing plans as the baseline against which potential project effects were analyzed, instead of increases or decreases in different types of GHG emissions relative to the existing environment.

The IS’s consistency evaluation was supported by the bald claim that the project would comply with various regulations and programs relating to energy efficiency, waste reduction, tree planting and landscaping, etc. This analysis was inadequate because it was not based on a project specific analysis of potential impacts and the specific effect of regulatory compliance. Also, the environmental evaluation did not commit the project sponsor to implementation of specific performance criteria as mitigation measures agreed as a condition of approval of the project or objective performance criteria for measuring whether the project would achieve the goals of such programs or regulations.

The Initial Study states that “construction-related emissions would still have the potential to conflict with or obstruct implementation of the applicable air quality plan...Both construction and long-term operational emissions have the potential to result in emissions that could conflict with or obstruct implementation of the applicable air quality plan. IS p. 144. “As described above, construction and operation of the proposed project or project variant would generate criteria air...
pollutant and ozone precursor emissions that would contribute to regional air emissions and affect regional air quality. It is possible that the levels of emissions generated during construction or operation could violate or contribute substantially to an existing or projected air quality violation.” IS pp. 144-145.

The Initial Study’s claim that the project would comply with various plans or regulations to reduce GHG emissions is also deficient because the IS has failed to show that the plans or regulations contain specific requirements that would result the proposed project’s reducing GHG emissions to a less than significant level. Ex. T, p. 26. The IS has failed to show that the referenced plans or regulations actually address that emissions that would result from this proposed project or project variant. Ex. T, p. 27.

Thus, the IS has failed to comply with CEQA because it has failed to determine the extent to which the proposed project either increases or decreases GHG emissions, by comparing the project’s emissions to the current environment and whether the anticipated GHG emissions associated with the project exceed a threshold of significance set by the lead agency or another agency with jurisdiction over resources affected by the project.

Moreover, the IS’s GHG analysis is deficient under CEQA because it failed to provide substantial evidence that the proposed project’s percentage reduction in GHGs from business as usual would correlate with achieving AB 32’s statewide goal of reducing emissions by approximately 30 percent below BAU by 202, or other applicable goals of the City or other agencies. The IS lacks substantial evidence to show that the proposed project would reduce its GHG emissions to levels that would be consistent with achieving applicable state, regional, local or other agency GHG reduction goals.

The IS does not present substantial evidence demonstrating that project GHG emissions would be consistent with SB 32’s goal of reducing GHG emissions by 40% below 1990 levels by 2030 (IS p. 147, fn. 124), of the goals of Executive Order S-3-05 to reduce emissions to 1990 levels by 2020, and to reduce emissions to 80% below 1990 levels by 2050 (IS p. 147 fn. 121), or the targets of Executive Order B-30-15 of reducing GHG emissions to 40 percent below 1990 levels by 2030. (IS p. 147, fn. 122) Also, the IS inadequately relied on the claim that San Francisco has met the State and regional 2020 GHG reduction targets citywide, but this proposed project would have significant adverse air emissions from 7-15 years of construction and operations which would result for years after 2020, so the GHG analysis analysis should have been performed for a longer time-range.

In addition, the IS failed to implement mitigation measures requiring as a condition of approval that during operations and construction the project proponent implement enforceable measures that would ensure that targeted reductions in GHG emissions would be met, and that compliance with applicable programs and regulations would actually occur.
For the reasons stated above, the IS failed to follow CEQA procedures in determining the significance of the project’s effect on GHG emissions, failed to support with substantial evidence in the record its determination that the project’s and project variant’s effect on GHG emissions would not be significant, and failed to provide substantial evidence in the record showing that the project and project variant’s percentage reduction in GHGs in comparison with business as usual would correlate with achieving state, regional or local goals.

8. The Determination that the Project Could Not Have Significant Growth-Inducing Impacts is Not Supported by Substantial Evidence.

As required by section 15126.2(d) of the CEQA Guidelines, an EIR must consider the ways in which the proposed project could directly or indirectly foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment.

Implementation of the proposed project would require numerous zoning changes to establish new land use controls for the project site. As previously discussed herein, retail and new office uses are not allowed by the existing zoning set forth in Resolution 4109, and the project would propose to construct housing units in excess of the approximately 508 housing units allowed under Resolution 4109. The zoning changes sought and resulting land uses would change the mix and types of land uses that could be developed on the project site, and would allow for increased building heights and density.

The EIR should analyze whether the proposed project and project variant would result in residential development at a greater average housing density per acre than currently exists on the project site or in the immediate project vicinity.

Also, implementation of the proposed project would include the expansion of infrastructure for the provision of new or expanded distribution lines for water, gas and electrical service and sewer system lines.

The proposed project could be growth inducing if it would extend water supply infrastructure and/or gas and electric distribution infrastructure or sewer service infrastructure beyond what is necessary to serve uses proposed under the project.

The IS states that the project would include construction of new natural gas and sewer lines to serve the project site. IS p. 119. However, the IS provides no support for its conclusion that this infrastructure would not indirectly induce substantial population growth in the project area because the project site is an infill site surrounded by existing development and “the proposed infrastructure improvements would be sized to meet only project needs and would not enable additional development.” IS p. 119. The project description did not include specifications as to
the sizing of new or expanded infrastructure or impose limitations on its size as an enforceable condition of approval of the project.

The following mitigation measure should be adopted as a condition of approval of the proposed project:

**MITIGATION MEASURE.** The EIR will set forth technical specifications that show without question that proposed infrastructure improvements installed in connection with the project would be sized to meet only the needs of the project or project variant as proposed in the project description in the EIR and would not enable additional development; a qualified professional engineer will review the proposed specifications and sign a report verifying that such specifications will allow such infrastructure to only meet the needs of the project or project variant as proposed in the project description in the EIR and would not enable additional development; such report will be included in the Draft EIR and submitted for public comment; and the project approval will incorporate as enforceable mitigation measures such technical specifications that specifically provide that infrastructure installed on and/or nearby the project site would be sized to meet only the needs of the project or project variant as proposed in the project description in the EIR and would not enable additional development.

Absent substantial evidence to support the conclusion that no indirect impacts related to population growth as a result of expansion of infrastructure would occur, the evidence contained in the IS supports a fair argument that the expansion of infrastructure could indirectly foster population growth. The EIR must analyze this impact as a potentially significant impact.

Also, CEQA Guidelines section 15126.2(d) recognizes that increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The EIR should analyze in detail whether the project’s demand for water, gas, electricity and sewer service could adversely affect the current supply of water, gas, electricity and sewer service to residences surrounding the site or in the immediate vicinity, so that new or expanded connections could be required.

**9. The Project Description is Not Stable.**

For purposes of CEQA, a “project” is defined as comprising “the whole of an action “ that has the potential to result in a direct or reasonably foreseeable indirect physical change to the environment. 14 CCR section 15378(a).

The Initial Study lists approval of a subdivision map by San Francisco Public Works as an approval that would be required to implement the proposed project or project variant. IS p. 86.
However the Initial Study fails to provide any information on the nature of the subdivision that would be sought, including whether spaces proposed to be used for retail or office uses would be subdivided. The EIR should disclose all information in the possession of the City as to the nature of the subdivision that would likely be sought.

In addition, the Initial Study indicates that the Walnut Street extension would be a pathway, and the EIR should clarify that approval would not be sought to make the Walnut Street extension a public street or public right of way. The EIR should also clarify that approval would not be sought to divide the project site into blocks, because the whole site is now one lot and block.

The project description and objectives are artificially narrow and preclude consideration of reasonable alternatives for achieving the project’s underlying purpose. By describing the project as “mixed-use,” the Initial Study seeks to prejudice the consideration of other adaptive reuse alternatives, such as all-residential development, which would conform with the existing zoning. The proposed project, however, would conflict with the existing land use controls, including controls prohibiting retail uses and new office uses at the site, heights in excess of 40-feet, violation of open space and rear yard requirements, and would seek other deviations. The project description and objectives would require numerous zoning changes, so is not an of-right project. The community has supported new residential construction, and the project objectives should be corrected to seek to achieve adaptive reuse of this historically significant resource in a manner which complies with applicable land use controls and avoids or substantially reduces significant impacts on the environment under CEQA standards. An all-residential alternative should be included in the EIR so as not to artificially limit alternatives considered by omitting information from the EIR that is highly relevant to the Board of Supervisors, which would have to approve zoning changes to permit the project as proposed to proceed.

Further, the report of the project sponsor’s consultant as to preservation alternatives states that all new construction proposed in the preservation alternative has been designed to the greatest extent that is technically feasible “to be comparable in square footage to the proposed Project or Project Variant.” Ex. U, Page & Turnbull, 3333 California Street, Preservation Alternatives Report, excerpts, p. 8. According to the IS, the proposed project would have a total of 1,372,270 gross square feet, whereas the existing uses on the site occupy a total of 469,000 gross square feet. IS pp. 9, 21. The project variant would occupy a total of 1,476,987 gsf. Ex. U, p. 82. The EIR must clarify the actual objectives of the proposed project so as not to preclude consideration of reasonable alternatives for achieving the project’s underlying purpose. Considering this information, together with the other information in the IS, it is unclear whether the project objectives are to build mixed-use development, to rezone the site to allow retail and new office uses and increased height limits, to achieve an amount of square footage of development that is now sought by the proposed project or project variant, or to achieve feasible adaptive reuse of a historically significant resource.
In addition, the project description is unstable in that the Initial Study indicates that the project proponent would seek a development agreement that would permit a 15-year period for construction and “limit the City’s ability to rezone the site for a set period of time.” IS p. 23. Thus, the development described in the Initial Study may not be the full extent of the contemplated development, especially in view of the proposed removal of the 4th floor of the existing office building and the strengthening of the building to accommodate additional floors.

The EIR must disclose all information as to the number of additional floors that the strengthening of the structure is being designed to accommodate and all other designs that are being prepared to accommodate expansion. Is the strengthening of the building being designed to accommodate more floors than three, and if so, how many such additional floors? The Initial Study discloses only that two to three stories are proposed to be added to the existing building. Also, are any of the new buildings being designed to accommodate expansion, and how many additional floors are they being designed to accommodate? An Initial Study must consider all phases of project planning, including phases planned for future implementation. 14 CCR section 15063(a)(1). The EIR must also disclose all available information as to the terms of the proposed development agreement that the project proponent and/or the City is considering.

Additional floors added to buildings would allow space for more residential units or other uses sought by the developer, and could increase the number of occupants or users of the site, and the consequent volumes of traffic, air emissions, noise and shadows. The impact of shadow would be greater if more than two to three additional stories were added to the existing building. Thus, the information sought is relevant to analysis of environmental impacts.

Very truly yours,

Kathryn Devincenzi

ATTACHMENTS

Ex. A - E-mails dated March 22 and 28, 2018 with Planning Department

Ex. B - 14 California Code of Regulations section 15000 et seq. (“CEQA Guidelines”), Appendix G, excerpts

Ex. C - San Francisco 2004 and 2009 Housing Element EIR, excerpts

Ex. D - EIR for Pier 70 Mixed-Use District Project, excerpts
City and County of San Francisco
June 8, 2018
Page 61

Ex. E - Nomination of Fireman’s Fund Insurance Company Home Office for Listing in the National Register of Historic Places, excerpts

Ex. F - State Office of Historic Preservation File on California Historical Landmark #760, excerpts

Ex. G - Photographs

Ex. H - Langan Treadwell Rollo Preliminary Geotechnical Investigation dated 3 December 2014, excerpts

Ex. I - October 12, 2017 e-mail from Dan Safier

Ex. J - San Francisco Urban Forest Plan, excerpts

Ex. K - Residential Design Guidelines, excerpts

Ex. L - 2014 San Francisco Housing Element, excerpts

Ex. M - Preliminary Project Assessment, excerpts

Ex. N - Resolution 4109 and Stipulation as to Character of Improvements

Ex. O - Developer’s calculation of permitted densities

Ex. P - Initial Study for 1629 Market Street, excerpts

Ex. Q - San Francisco Planning Department Shadow Analysis Procedures and Scope Requirements

Ex. R - February 28, 2016 Letter from Fitzgerald to San Francisco Planning Department

Ex. S - CEB, Practice Under CEQA, excerpts


Ex. U - Page & Turnbull, 3333 California Street, Preservation Alternatives Report, excerpts

Ex. V - Urban Design Element of San Francisco General Plan, excerpts
3333 California Street, Mixed-Use Project
Initial Study: Case No. 2015-014028ENV

PART 1, Exhibits A-G
Ms. Devincenzi,

I can confirm that the petition is part of the administrative record. We expect to release the initial study next month.

Julie Moore, Senior Planner
Environmental Planning Division
San Francisco Planning Department
1650 Mission Street, Suite 400 San Francisco, CA 94103
Direct: 415.575.8733 | www.sfplanning.org

Kathy Devincenzi
<br>
To: "Moore, Julie (CPC)" <julie.moore@sfgov.org>

Ms. Moore,

Thank you. Please confirm that the City will not issue a negative declaration after the 30-day public comment period on the initial study, and the City will prepare an EIR for 3333 California.

Kathy Devincenzi
[Quoted text hidden]

Moore, Julie (CPC) <julie.moore@sfgov.org>
To: Kathy Devincenzi <krdevincenzi@gmail.com>

Your understanding is correct. Regardless of whether a negative declaration is issued after the 30-day comment period, providing your specific comments about the adequacy of the CEQA environmental review for the project in a timely manner will enable the Department to fulfill our responsibility under CEQA to engage in a good faith effort to disclose significant effects of the proposed project on the physical environment. The sooner you are able to provide such comments, the more thorough this evaluation is likely to be.

Regards,

Julie Moore, Senior Planner
Environmental Planning Division
From: Kathy Devincenzi <krdevincenzi@gmail.com>
Sent: Thursday, March 22, 2018 10:56 AM

I understand the reason for comments. I wrote to confirm that a negative declaration will not be issued in order to avoid surprise and prejudice.
Kathy Devincenzi <krdevincenzi@gmail.com> Fri, May 11, 2018 at 10:57 AM

To: "Moore, Julie (CPC)" <julie.moore@sfgov.org>
Bcc: Richard Frisbie <frfbeagle@gmail.com>

Julie,

Thank you for sending me the Initial Study.

We need the reference materials cited in the Initial Study. You said you were having them compiled electronically. Can we pick up a CD(s) containing all the reference materials?

Thank you,

Kathy Devincenzi
(415) 221-4700

Moore, Julie (CPC) <julie.moore@sfgov.org> Mon, May 14, 2018 at 12:04 PM

To: Kathy Devincenzi <krdevincenzi@gmail.com>

Ms. Devincenzi,

I had a miscommunication with the environmental consultant about this. I should receive copies in the next day and will email you when it is available.

My apologies for the delay. In the meantime, I have requested a link to transmit the HRE electronically.

Julie Moore, Senior Planner
Environmental Planning Division
San Francisco Planning Department
1650 Mission Street, Suite 400 San Francisco, CA 94103
Direct: 415.575.8733 | www.sfplanning.org
San Francisco Property Information Map

From: Kathy Devincenzi [mailto:krdevincenzi@gmail.com]
Sent: Friday, May 11, 2018 10:57 AM
To: Moore, Julie (CPC)
Subject: 3333 California Street

[Quoted text hidden]
Dear Ms. Moore,

Thank you for your reply. Can we have a 3-week extension on the 30-day review period due to unavailability of the reference materials for the Initial Study?

Kathy Devincenzi

Moore, Julie (CPC) <julie.moore@sfgov.org>  
To: Kathy Devincenzi <krdevincenzi@gmail.com>  

The CD is ready for pickup – or if you prefer, I can mail it.

We will extend the comment period to Friday, June 8th at 5 p.m.

Julie Moore, Senior Planner  
Environmental Planning Division  
San Francisco Planning Department  
1650 Mission Street, Suite 400 San Francisco, CA 94103  
Direct: 415.575.8733 | www.sfplanning.org  
San Francisco Property Information Map

From: Kathy Devincenzi [mailto:krdevincenzi@gmail.com]  
Sent: Monday, May 14, 2018 12:15 PM  
To: Moore, Julie (CPC)  
Subject: Re: 3333 California Street  
[Quoted text hidden]
CEQA APPENDIX G: ENVIRONMENTAL CHECKLIST FORM

NOTE: The following is a sample form and may be tailored to satisfy individual agencies' needs and project circumstances. It may be used to meet the requirements for an initial study when the criteria set forth in CEQA Guidelines have been met. Substantial evidence of potential impacts that are not listed on this form must also be considered. The sample questions in this form are intended to encourage thoughtful assessment of impacts, and do not necessarily represent thresholds of significance.

1. Project title: ________________________________

2. Lead agency name and address: ________________________________

3. Contact person and phone number: ________________________________

4. Project location: ________________________________

5. Project sponsor's name and address: ________________________________

6. General plan designation: ________________________________

7. Zoning: ________________________________

8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

9. Surrounding land uses and setting: Briefly describe the project's surroundings: ________________________________

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun? ________________________________

Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.
d) Expose sensitive receptors to substantial pollutant concentrations?  

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e) Create objectionable odors affecting a substantial number of people?  

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IV. BIOLOGICAL RESOURCES:
Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?  

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b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?  

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c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?  

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?  

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?  

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<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?  

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

<table>
<thead>
<tr>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

<table>
<thead>
<tr>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>

VII. GREENHOUSE GAS EMISSIONS.
Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

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<thead>
<tr>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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</table>

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

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<thead>
<tr>
<th>No Impact</th>
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VIII. HAZARDS AND HAZARDOUS MATERIALS.
Would the project:

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

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<thead>
<tr>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
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</table>

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

<table>
<thead>
<tr>
<th>No Impact</th>
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</table>

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

<table>
<thead>
<tr>
<th>No Impact</th>
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<tbody>
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</table>

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

<table>
<thead>
<tr>
<th>No Impact</th>
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<td>❑</td>
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</table>
### IX. HYDROLOGY AND WATER QUALITY

Would the project:

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<thead>
<tr>
<th></th>
<th>Potentially Significant Impact</th>
<th>Less Than Significant with Mitigation Incorporated</th>
<th>Less Than Significant Impact</th>
<th>No Impact</th>
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<tbody>
<tr>
<td>a)</td>
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<tr>
<td>b)</td>
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<td>c)</td>
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</table>

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?
### XIII. POPULATION AND HOUSING.

Would the project:

<table>
<thead>
<tr>
<th>a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
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<table>
<thead>
<tr>
<th>b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
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</table>

<table>
<thead>
<tr>
<th>c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

### XIV. PUBLIC SERVICES.

a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

<table>
<thead>
<tr>
<th>Fire protection?</th>
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<tbody>
<tr>
<td>No</td>
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<table>
<thead>
<tr>
<th>Police protection?</th>
</tr>
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<tbody>
<tr>
<td>No</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Schools?</th>
</tr>
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<tbody>
<tr>
<td>No</td>
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<table>
<thead>
<tr>
<th>Parks?</th>
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<tr>
<td>No</td>
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<table>
<thead>
<tr>
<th>Other public facilities?</th>
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<tbody>
<tr>
<td>No</td>
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</table>

### XV. RECREATION.

a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

<table>
<thead>
<tr>
<th>No</th>
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**Less Than Significant Impact**

**Potentially Significant with Mitigation Incorporated**

**Less Than Significant Impact**

**No Impact**
EXHIBIT C
San Francisco 2004 and 2009 Housing Element
Volume II: Final EIR (Section V.H to IX)
CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT

Figure IV-3
Generalized Citywide Zoning Map

- Public (including parks, openspace and publicly owned buildings)
- Residential
- Neighborhood Commercial
- Mixed Use (Residential/Commercial, Residential/Industrial)
- Commercial
- Industrial & Production, Distribution and Repair
- Water

See Redevelopment Plan

Source: CCSP Planning Code, May 2010
Figure IV-4
Generalized Citywide Height Map

Height Districts:
- ≤ 40 ft
- 41 - 50 ft
- 51 - 60 ft
- 61 - 68 ft
- 69 - 120 ft
- 121 - 550 ft

Parks
Water

See Redevelopment Plan

Source: CCSF Planning Code, May 2010
### Policies With Potential for Physical Environmental Impacts

**Table 1E.8**

<table>
<thead>
<tr>
<th>Policy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2</td>
<td>Allow residents in older, older properties to rely in areas with existing building amenities.</td>
</tr>
<tr>
<td>1.3</td>
<td>Create incentives for the inclusion of housing particularly affordable to lower income households.</td>
</tr>
<tr>
<td>1.4</td>
<td>Allow new secondary units in areas where new commercial development projects.</td>
</tr>
<tr>
<td>1.5</td>
<td>Permit the production of new housing and new family housing.</td>
</tr>
<tr>
<td>1.6</td>
<td>Enhance and support the construction of neighborhood character positions.</td>
</tr>
<tr>
<td>2.1</td>
<td>Encourage the production of new housing and secondary offers to lower income households.</td>
</tr>
<tr>
<td>2.2</td>
<td>All new secondary units in areas where new commercial development projects.</td>
</tr>
<tr>
<td>2.3</td>
<td>Support new housing projects that can effectively rely on public transportation.</td>
</tr>
<tr>
<td>2.4</td>
<td>Implement higher resident density in areas with higher density provides a significant number of mixed residential units.</td>
</tr>
<tr>
<td>2.5</td>
<td>Implement higher resident density in areas with higher retail amenities.</td>
</tr>
<tr>
<td>2.6</td>
<td>Support new housing projects where there is higher retail amenities.</td>
</tr>
</tbody>
</table>

### Supporting Policies

- **Policy 1.5**: Create incentives for the inclusion of housing particularly affordable to lower income households.
- **Policy 1.6**: Support new housing projects where walking and bicycling for the majority of daily trips.
- **Policy 2.1**: Implement higher resident density in areas with higher density provides a significant number of mixed residential units.
increase the likelihood that those individuals would utilize available public transit, or other alternatives modes of transportation (bicycle and walking) to work, decreasing the overall number of vehicle trips or vehicle miles traveled (VMTs) citywide. It also follows that housing in proximity to neighborhood services (such as along neighborhood commercial districts, mixed-use districts, or commercial areas) could reduce vehicle trips by shifting a portion of those trips to transit, bicycle or pedestrian trips. Proximity to neighborhood services could also result in lower VMT. For example, 2004 Housing Element Policies 1.2 and 1.9 and their corresponding implementation measures direct housing to commercial and educational areas more strongly than the 1990 Residence Element, which would reduce vehicle trips by locating housing in proximity to job cores and services. 2009 Housing Element Policies 12.1, 13.1, and 13.3 encourage housing near transit lines and existing transit infrastructure to a greater extent than their corresponding 1990 Residence Element policies. Therefore, no inconsistencies between the proposed Housing Elements and the Transportation Element have been identified.

**Urban Design Element**

The Urban Design Element is concerned with the physical character and environment of the City with respect to development and preservation. The following Urban Design Element policies may be potentially inconsistent with the proposed Housing Elements.

**Objective 3:** Moderation of major new development to complement the City pattern, the resources to be conserved and the neighborhood environment.

**Policy 3.3:** Promote efforts to achieve high quality of design for buildings to be constructed at prominent locations.

**Policy 3.4:** Promote building forms that will respect and improve the integrity of open spaces and other public areas.

**Policy 3.5:** Relate the height of buildings to important attributes of the city pattern and to the height and character of existing development.

**Policy 3.6:** Relate the bulk of buildings to the prevailing scale of development to avoid an overwhelming or dominating appearance in new construction.

**Policy 3.7:** Recognize the special urban design problems posed in development of large properties.

**Policy 3.8:** Discourage accumulation and development of large properties, unless such development is carefully designed with respect to its impact upon the surrounding area and upon the City.

**Policy 3.9:** Encourage a continuing awareness of the long-term effects of growth upon the physical form of the city.

**Policy 4.1:** Protect residential areas from the noise, pollution and physical danger of excessive traffic.
Policy 4.2: Provide buffering for residential properties when heavy traffic cannot be avoided.

The proposed Housing Elements would not adversely affect implementation of the above policies. Specifically, 2004 Housing Element Policies 11.1, 11.8, and 11.9 would use new housing to enhance neighborhood vitality and diversity and would ensure increased housing density would not conflict with existing neighborhood character. 2009 Housing Element Policies 11.1 and 11.7 encourage the preservation of neighborhood character. All of these policies would relate directly to the Urban Design Element policies. No inconsistencies between the proposed Housing Elements and the Urban Design Element have been identified.

Area Plans

The General Plan also includes several area (neighborhood) plans that serve to guide the nature of future development within specific districts of the City. The 2004 Housing Element and 2009 Housing Element do not include any changes to the land use objectives and policies in the City’s Area Plans or Redevelopment Plans for certain areas in the City. However, the proposed Housing Elements promote specific neighborhood and area plans as part of the planning process. 2004 Housing Element Policy 11.6 calls for the completion of the Better Neighborhoods area plans and 2009 Housing Element Policy 1.1 calls for a community planning process to guide new housing growth. Applicable Area Plans or Redevelopment Plans would continue to guide future development in specific neighborhoods or districts. A number of other planning efforts are currently underway including, but not limited to the Transit Center District Plan, Treasure Island, and Western SoMa, which could result in increased residential development potential in those areas. The estimated new housing construction potential for each of these areas is provided in Table IV-6 in Section IV (Project Description).

The more general policies in the 2004 and 2009 Housing Elements are made more precise in the applicable area plans as they relate to certain parts of the City. 2004 Housing Element Policies 1.7, 4.4, 11.6, 11.7, and 11.8 and 2009 Housing Element Policies 2.1 and 7.5 would promote increased housing density by encouraging the construction of new housing and discouraging demolition of existing housing. 2004 Housing Element Policies 3.1, 3.3, 3.4, and 3.5 and 2009 Housing Element Policies 2.5 and 7.6 encourage the preservation of existing residential units through maintenance and upgrade activities. 2004 Housing Element Policy 11.3 and 2009 Housing Element Policies 8.1, 9.1, 9.2, 9.3 support the production, management, and preservation of affordable housing units in accordance with San Francisco’s needs. 2004 Housing Element Policies 11.1, 11.8, and 11.9 and 2009 Housing Element Policies 11.1 and 11.7 would ensure new housing does not conflict with existing neighborhood character. 2004 Housing Element Policies 1.7 and 4.5 and 2009 Housing Element Policy 2.2 encourage family housing. Implementation of the policies in the proposed Housing Elements could also serve to increase energy efficiency of San Francisco’s housing stock by directing housing to locations where residents could have reduced reliance on automobiles, such as mixed use neighborhoods and areas surrounding existing transportation infrastructure. The proposed Housing Element policies discussed above further the intent related to housing of the Area Plans discussed below. No inconsistencies between the proposed Housing Elements and specific area plans have been identified.
Other Development Agreements

Executive Park

Executive Park is a 71-acre area located in southeastern San Francisco. It is bounded on the west by U.S. 101, on the east by the Candlestick Point Special Use District, on the north by Bayview Hill, and on the south by Candlestick State Park and the San Francisco Bay. Adjacent neighborhoods include the Bayview Hunters Point neighborhood to the north, and the Little Hollywood and Visitacion Valley neighborhoods to the northwest. Primary access to Executive Park is from Harney Way, Alana Way, Thomas Mellon Drive and Executive Park East Boulevard. Secondary access is provided via Blanken Avenue to the west, which connects Bayshore Boulevard with Executive Park West Boulevard, and Jamestown Avenue/Hunters Point Expressway to the east. Executive Park is now an office park with some housing on the far eastern end. The office buildings are surrounded by surface parking and the housing is internally focused and gated. The plan envisions a new San Francisco neighborhood: a mixed-used residential neighborhood with attractive public streets and open space connectivity. The Executive Park Area Plan is an ongoing effort that could provide approximately 1,600 additional housing units.

Park Merced

Park Merced is a residential neighborhood on approximately 152 acres of land in the southwest portion of San Francisco adjacent to Lake Merced and generally bounded by Vidal Drive, Font Boulevard, Pinto Avenue, and Serrano Drive to the north, 19th Avenue and Junipero Serra Boulevard to the east, Brotherhood Way to the south, and Lake Merced Boulevard to the west. The Plan would increase residential density, provide a neighborhood core with new commercial and retail services, modify transit facilities, and improve utilities within the development site. The principal land use goals are to reduce automobile use by concentrating housing close to employment, increasing the supply of housing, and providing better integrated residential and neighborhood-serving retail and office uses; to maximize opportunities to use pedestrian and bicycle pathways; to establish pedestrian-oriented nodes for the location of neighborhood services and amenities, open space, and community services; and to incorporate environmental factors such as sun, shade, and wind into the design and housing materials. The Parkmerced Area Plan is an ongoing effort that could provide approximately 5,600 additional housing units.

San Francisco Planning Code

The San Francisco Planning Code, which incorporates by reference the City’s Zoning Maps, governs permitted uses, densities and the configuration of buildings in San Francisco. Permits to construct new buildings (or to alter or demolish existing ones) cannot be issued unless either the proposed action conforms to the Planning Code, or an exception is granted pursuant to provisions of the Planning Code, or...

a reclassification of the site occurs. The following is a summary of Planning Code provisions related to controls on housing.

**Existing Zoning (San Francisco Planning Code)**

San Francisco utilizes a zoning system with two separate sets of districts: one that regulates land uses, and another that regulates the height and bulk of buildings. The existing use districts and height limits in the City are described below.

There are a total of 13 residential zoning districts in the City, reflecting a mix of land use. A summary of the planning code provisions for residential uses is provided in the San Francisco Planning Code Zoning Districts, Residential Districts Controls Summary, on the Planning Department’s website. Residential zoning designations in the City range in density from RH-1 (D) (House-One Family, Detached Dwellings) to RTO (Residential Transit Oriented Development).

The City contains 25 separate height and bulk districts that range in height from 40 feet to 550 feet. The City is divided into classes of height and bulk districts as indicated on the zoning maps. Additional height limits are imposed for certain use districts, such as areas located within narrow streets or alleys. Section 263 of the Planning Code contains special exceptions to the height limits for certain uses within certain areas. Buildings and structures exceeding the prescribed height may be approved by the Planning Commission according to the procedures for conditional use approval in Section 303 of the Planning Code; provided, however, that such exceptions may be permitted only in the areas specified and only to the extent stated in each section. Some of the areas eligible for exceptions to the height limits include north and south of the Ferry Building, east and west of Chinese Playground, Chinatown corners and parapets, and north of Market residential special use districts, among others.

**Planning Code Section 295**

Section 295 of the Planning Code, the Sunlight Ordinance, was adopted through voter approval of Proposition K in November 1994 to protect certain public open spaces from shadowing by new structures. Section 295 prohibits the issuance of building permits for new construction or additions that would result in structures greater than 40 feet in height that would shade property under the jurisdiction of, or designated to be acquired by, the Recreation and Park Commission, during the period from one hour after sunrise to one hour before sunset on any day of the year. An exception is permitted if the Planning Commission, upon advice from the Recreation and Park Department general manager and the Recreation and Park Commission, determines that the shadow would have an insignificant impact on the use of such property. 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.

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All of the open spaces within the City that are under Recreation and Park Department control are protected by Section 295. Privately-owned open spaces, including any open spaces that are required under the Planning Code as part of an individual development proposal, are not subject to Section 295. Section 295 is applicable to the analysis of shadow impacts in Section V.I (Wind and Shade) of this EIR.

**Planning Code Section 147**

Planning Code Section 147, applicable to the C-3, RSD, SLR, SLI, or SSO zoning districts, states that new buildings and additions to existing buildings where height limits are greater than 50 feet must be shaped to minimize shadow on public plazas or other publicly accessible open spaces other than those protected by Section 295, "in accordance with the guidelines of good design and without unduly restricting the development potential of the property." The following factors must be taken into account in determining compliance with this criterion: the amount of area shadowed, the duration of the shadow, and the importance of sunlight to the type of open space being shadowed. Various areas within the City are zoned RSD, SLR, SLI, or SSO and hence subject to Section 147. Section 147 is applicable to the analysis of shadow impacts in Section IV.I (Wind and Shade) of this EIR.

**Planning Code Section 311 and Residential Design Guidelines**

For construction of new residential buildings and alteration of existing residential buildings in R Districts, Section 311 of the Planning Code requires consistency with the design policies and guidelines of the General Plan and with the Residential Design Guidelines that are adopted for specific areas. Section 311 also states that the Director of Planning may require modifications to the exterior of a proposed residential building—including, but not limited to changes in siting, building envelope, scale, texture, detailing, openings, and landscaping—in order to bring it into conformity with the Residential Design Guidelines and the General Plan. The most recent set of Residential Design Guidelines was adopted in 2003. The guidelines apply to development in all RH and RM districts, and are intended to maintain cohesive neighborhood identity, preserve historic resources, and enhance the unique setting and character of the City and its residential neighborhoods.

The guidelines are based on the following design principles, which are also used to determine compliance with the guidelines:

- Ensure that the building’s scale is compatible with surrounding buildings.
- Ensure that the building respects the mid-block open space.
- Maintain light to adjacent properties by providing adequate setbacks.
- Provide architectural features that enhance the neighborhood’s character.
- Choose building materials that provide visual interest and texture to a building.
- Ensure that the character-defining features of an historic building are maintained.
Various areas within the City are zoned R and hence subject to Section 311 and the Residential Design Guidelines. Section 311 is applicable to the analysis of visual quality in Section V.C (Aesthetics) of this EIR.

Other Controls

Reflective Glass (Planning Commission Resolution 9212)

Planning Commission Resolution No. 9212 (1981) established a pair of guidelines for reviewing and acting on proposed building projects. The first guideline states that clear, untinted glass should be used at and near the street level. The second guideline states that mirrored, highly reflective, or densely tinted glass should not be used except as an architectural or decorative element. By prohibiting mirrored or reflective glass, this resolution serves to limit glare. Resolution 9212 is applicable to the analysis of visual quality in Section V.C (Aesthetics) of this EIR.

San Francisco Green Building Ordinance (SFGBO)

In 2008, the City adopted Chapter 13C (Green Building Requirements) into San Francisco Building Code. The purpose of the requirements is to promote the health, safety, and welfare of San Francisco residents, workers, and visitors by minimizing the use and waste of energy, water and other resources in the construction and operation of the buildings within the City and by providing a healthy indoor environment. The requirements are based on LEED® or GreenPoints® rating systems. Upon full implementation of the SFGBO in 2012, residential development will be required to achieve the following minimum standards:

1. Small residential (four or fewer units) – 75 GreenPoints;
2. Mid-sized residential (five or more units less than 75 feet in height) – 75 GreenPoints; or
3. High-rise large residential – 75 GreenPoints or LEED® Silver.

The ordinance requires compliance with the applicable LEED® performance standards or GreenPoint Rated checklists (which applies mostly to residential buildings) for New Construction, Version 2.2, LEED® criteria sustainable Sites (SS) 6.1 and SS6.2 for stormwater management, as well as the best management practices (BMPs) and Stormwater Design Guidelines of the SFPUC (1304C.0.3). Additionally, for high-rise residential buildings (1304C.1.3), new group B (Business) and M (Mercantile) occupancy buildings (1304C.2), and new large commercial buildings (1304C.2.2), water efficient landscaping (LEED® credit WE1.1) and water conservation are required (LEED® credit WE3.2).

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• consider the impacts of ozone control measures on particulate matter (PM), air toxics, and greenhouse gases in a single, integrated plan;

• review progress in improving air quality in recent years; and

• establish emission control measures to be adopted or implemented in the 2009-2012 timeframe

Overall, the intent of the CAP, as described above, would not conflict with the proposed Housing Elements. No inconsistencies between the proposed Housing Elements and the CAP have been identified.

The San Francisco Bay Plan

The San Francisco Bay Plan was completed and adopted by the San Francisco Bay Conservation and Development Commission in 1968 and submitted to the California Legislature and Governor in January 1969. The Bay Plan was prepared by the Commission over a three-year period pursuant to the McAteer-Petris Act of 1965 which established the Commission as a temporary agency to prepare an enforceable plan to guide the future protection and use of San Francisco Bay and its shoreline. In 1969, the Legislature acted upon the Commission’s recommendations in the Bay Plan and revised the McAteer-Petris Act by designating the Commission as the agency responsible for maintaining and carrying out the provisions of the Act and the Bay Plan for the protection of the Bay and its great natural resources and the development of the Bay and shoreline to their highest potential with a minimum of Bay fill. The Bay Plan is in the process of being updated. No inconsistencies between the proposed Housing Elements and this Plan have been identified.

Urban Forest Plan

Pursuant to Chapter 12 of the San Francisco Environment Code, the Urban Forestry Council advises City departments, including the Board of Supervisors and the mayor. Its tasks are to develop a comprehensive urban forest plan; educate the public; develop tree-care standards; identify funding needs, staffing needs, and opportunities for urban forest programs; secure adequate resources for urban forest programs; facilitate coordination of tree-management responsibilities among agencies; and report on the state of the urban forest. The Council’s scope of authority is completely advisory and educational in nature. The Council has prepared an Urban Forest Plan, which reviews the creation of San Francisco’s urban forest, analyzes the structure and functional benefits of the forests, and identifies the challenges that threaten its future, which could include impacts resulting from housing development. Designed to provide a road map for policy-makers and implementers, the Plan identifies goals that are critical to maximizing the value of the forest. Underlying these goals is the understanding that the urban forest is a living and evolving resource that is adapted to the unique and often challenging conditions of the urban environment. These goals are directed at the owners and managers of the trees that comprise the urban forest. No inconsistencies between the proposed Housing Elements and this Plan have been identified.

Proposition M

In November 1986, the voters of San Francisco approved Proposition M, the Accountable Planning Initiative, which added Section 101.1 to the City Planning Code to establish eight Priority Policies. These
policies, and the sections of this Environmental Evaluation addressing the environmental issues associated with the policies are (1) preservation and enhancement of neighborhood-serving retail uses (Section V.B); (2) protection of neighborhood character (Section V.B); (3) preservation and enhancement of affordable housing (Section V.D with regard to housing supply and displacement issues); (4) discouragement of commuter automobiles (Section V.F); (5) protection of industrial and service land uses from commercial office development and enhancement of resident employment and business ownership (Section V.B); (6) maximization of earthquake preparedness (Section V.O [Geology and Soils]); (7) landmark and historic building preservation (Section III.E [Cultural Resources and Paleontological Resources]); and (8) protection of open space (Section V.J [Shadows] and Section V.N).

Prior to issuing a permit for any project that requires an Initial Study under CEQA, and prior to issuing a permit for any demolition, conversion, or change of use, and prior to taking any action that requires a finding of consistency with the General Plan, Section 101.1 requires that the City find that the proposed project or legislation would be consistent with the Priority Policies. As noted above, the consistency of the Project with the environmental topics associated with the Priority Policies is discussed in Chapter V (Environmental Setting, Impacts, and Mitigation Measures) of this EIR. The case report and approval motions for the Project would contain the Planning Department’s comprehensive Project analysis and findings regarding consistency of the Project with the Priority Policies.

CONCLUSION

Overall, the proposed Housing Elements would not conflict with any of the goals of the plans and policies listed in this section. The potential of the proposed Housing Elements to conflict with applicable plans, polices, or regulations is discussed in detail under Impact LU-1 in Section V.B (Land Use and Land Use Planning).
Mixed Uses (Non-residential);

- Residential;

- Visitor-Serving Retail; and

- Parks and Open Space.

**Existing Zoning**

There are a total of 13 residential zoning districts in the City, reflecting a mix of land use. A summary of the planning code provisions for residential uses is provided in the San Francisco Planning Code Zoning Districts, Residential Districts Controls Summary, on the Planning Department’s website. The Summary of the Planning Code Standards for Residential Districts provides the name of the zoning district and maximum dwelling unit density, as well as other land use controls. Residential zoning designations in the City include, but are not limited to RH-1 (D) (House-One Family, Detached Dwellings), RH-2 (House-Two Family), RM-1 (Mixed [Apartments and Houses], Low Density) to RM-4 (Mixed [Apartments and Houses], High Density), RC-3 (Residential-Commercial Combined, Medium Density), RED (Residential Enclave District) and RTO (Residential Transit Oriented Development). Generally, RH-1 zoning districts allow for one dwelling unit per lot. RH-1(S) zoning districts allow for an additional minor second unit. RH-2 zoning districts generally allow for two units per lot, with RH-3 zoning districts allowing three units per lot. Residential Mixed zoning districts can allow up to three dwelling units per lot (RM-1), or up to one unit per 200 square feet (sf) of lot area (RM-4). RC-3 districts allow up to three units per lot or one unit per 400 sf of lot area and RC-4 districts allow up to one unit per 200 sf of lot area. RED districts have similar density standards as RC-3 and RM-3 zoning districts, in that, RED districts allow for one dwelling unit per 400 sf of lot area. RTO zoning districts generally allow one dwelling unit per 600 sf of lot area, although these density limits may be exceeded for providing additional affordable housing units and other special uses.

**Existing Height and Bulk Districts**

The City contains 25 separate height and bulk districts that range in height from 40 feet to 400 feet. The different classes of height and bulk districts are indicated on the zoning maps. Additional height limits are imposed for certain use districts, such as areas located within narrow streets or alleys. Section 263 of the Planning Code contains special exceptions to the height limits for certain uses within certain areas. Buildings and structures exceeding the prescribed height may be approved by the Planning Commission according to the procedures for conditional use approval in Section 303 of the Planning Code; provided, however, that such exceptions may be permitted only in the areas specified and only to the extent stated in each section. Some of the areas eligible for exceptions to the height limits include north and south of the Ferry Building, east and west of Chinese Playground, Chinatown corners and parapets, and north of

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Market residential special use districts, among others. Figure IV-4, Generalized Citywide Height Map, shows that generally the western half of the City is dominated by 40-foot height limits. Moving east, towards the Downtown, heights increase along Van Ness Avenue and continue into the Downtown. Additional information on existing height limits is included in the following discussion of individual planning districts.

San Francisco Planning Districts

For purposes of this section of the EIR, the City is discusses with respect to each Planning District, as depicted in Figure V.A-1. The City is comprised of 18 Planning Districts. The following discussion provides a general overview of the existing land use character within each of the 18 Planning Districts. The existing land use character is described in terms of general land uses, height limits, preservation districts, and other characteristics that may pertain to a given planning district, including details of various planning efforts. Over the years, the San Francisco Planning Department has undergone a number of focused planning efforts, initiated by either the Planning Department or the Redevelopment Agency, to guide the development of various areas or neighborhoods within the City. These efforts have resulted in the preparation of Area Plans or Redevelopment Plans. Within each Planning District, applicable Area and Redevelopment plans are also discussed with respect to land use character. These Area and Redevelopment Plans are also discussed in Section V.A (Plans and Policies).

South Bayshore

The South Bayshore area of the City is bordered to the north by the South of Market and Mission Planning Districts, to the west by the Bernal Heights and South Central Planning Districts, and to the south by San Mateo County and the San Francisco Bay. The entire eastern border of this district fronts along the San Francisco Bay. Existing height limits north of Islas Creek are 40 feet, increasing to 80 and 85 foot height limits along Third Street. West of Third Street heights decrease to 65 feet. Heights south of Islas Creek are 40 feet along Pier 90 and 90, increasing to 85 feet along Third Street and 80 feet for parcels near Pier 88. Land uses north and south of Islas Creek are designated M-2 (Heavy Industrial), and further east, land uses are primarily PDR (Production, Distribution and Repair) zoning districts. PDR zoning districts allow for a variety on non-residential activities and are an important reservoir of space for San Francisco’s new and evolving industry and unforeseen activity types. Business and activities allowed in PDR Districts generally share a need for flexible operating space that features large open interior spaces, high ceilings, freight loading docks and elevators, floors capable of bearing heavy loads, and large (often uncovered exterior) storage areas. These uses are often not ideally compatible with housing for operational reasons, including the need for significant trucking and delivery activities, 24-hour operation, and emission of noise, odors and vibrations. North and south of Islas Creek, a variety of PDR-related special use districts exists.

Industrial zoning districts (M-1 and M2 [Light Industrial]) extend south of Islas Creek, along the San Francisco shoreline, with 40 foot height limits. To the east of Hunter’s Point Boulevard lies the India Basin shoreline park, which is designated as Open Space. RM-1 zoning districts are located southeast of Innes Avenue and abut the Hunter’s Point Naval Shipyard. The Hunter’s Point Naval Shipyard generally
Chapter 35 of the San Francisco Administrative Code

Chapter 35 of the San Francisco Administrative Code "Residential and Industrial Compatibility and Protection" is designed to protect existing and future industrial businesses from potentially incompatible adjacent and nearby development. The City encourages the use of best available control technologies and best management practices whenever possible to further reduce the potential for incompatibility with other uses, including residential. Another goal of this ordinance is to protect the future residents of industrial and mixed-use neighborhoods by providing a notification process so that residents are made aware of some of the possible consequences of moving to an industrial or mixed-use neighborhood and by encouraging and, if possible, requiring, features in any new residential construction designed to promote the compatibility of residential and adjacent or nearby industrial uses.

San Francisco Redevelopment Agency Plans

The San Francisco Redevelopment Agency, formed in 1948, was established for the purpose of improving the environment of San Francisco and creating better urban living conditions through the removal of blight. Authorized and organized under the provisions of the California Community Redevelopment Law, the Agency is an entity legally separate from the City and County of San Francisco, but existing solely to perform certain functions exclusively for and by authorization of the City and County of San Francisco. The Agency operates primarily in redevelopment project areas designated by the Board of Supervisors. Redevelopment Plans within the City are discussed above.

San Francisco County Countywide Transportation Plan

Pursuant to state law, in 1990, the San Francisco County Transportation Authority was designated the Congestion Management Agency for San Francisco. The Transportation Authority is responsible for setting transportation investment priorities for the city, developing and maintaining a computerized travel demand forecasting model and related databases, and programming state and federal funds for local transportation projects. The Authority is also responsible for preparing a long-range Countywide Transportation Plan. The Countywide Transportation Plan is the City’s blueprint to guide transportation system development and investment over the next thirty years. The Plan is consistent with the broader policy framework of San Francisco’s General Plan and particularly its Transportation Element. The Countywide Transportation Plan further develops and implements General Plan principles by identifying needed transportation system improvements.

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Physically divide an established community;
• Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or

• Have a substantial impact upon the existing character of the vicinity.

Impact Evaluation

Section V.A (Plans and Policies) of this EIR describes the Area Plans of the General Plan and Redevelopment Plan Areas adopted by the San Francisco Redevelopment Agency that serve to guide the nature of future development in specific neighborhoods or districts in the City. The City’s General Plan includes adopted Area Plans for the following areas: Bayview Hunters Point, Central Waterfront, Chinatown, Civic Center, Downtown, East SoMa, Market & Octavia, Mission, Northeastern Waterfront, Showplace Square/Potrero, Rincon Hill, South of Market, Van Ness Avenue, and Western Shoreline. The San Francisco Redevelopment Agency maintains redevelopment plans for the following areas: Bayview Hunters Point, Federal Office Building, Golden Gateway, Hunters Point Shipyard, Mission Bay, Rincon Point - South Beach, South of Market, Transbay, Visitacion Valley, Western Addition A-1, and Yerba Buena Center. Redevelopment Areas also serve to guide the nature of future development in specific areas, and either contain special zoning and land use controls or specify that the controls of the San Francisco Planning Code apply.

Implementation of the proposed Housing Elements would not directly result in changes to applicable height and bulk zoning districts or to allowable uses under the Planning Code. Additionally, the 2004 Housing Element and 2009 Housing Element do not include any changes to any of the land use objectives and policies in the City’s Area Plans or Redevelopment Plans. While implementation of the proposed Housing Elements would not directly affect existing Area Plans or Redevelopment Plans, it would encourage new Area Plans with similar planning-related strategies that may be designed to accommodate growth. Applicable Area Plans or Redevelopment Plans would continue to guide future development in specific neighborhoods or districts.

As noted before, ABAG, in coordination with the State Department of Housing and Community Development (HCD), uses population and job growth projections from the State Department of Finance to determine the regional housing needs for the Bay Area and allocates housing to cities and counties within the Bay Area through the Regional Housing Needs Allocation (RHNA). In providing direction for meeting regional housing needs, ABAG’s RHNA number focuses on both the amount of housing and the affordability of housing. Currently, the City is generally meeting ABAG’s most recent household projections and is slightly exceeding ABAG’s latest population estimates. A variety of local factors support growth projections for San Francisco. The desirability of San Francisco, with its wealth of natural and urban amenities, has always appealed strongly to consumers. This desirability has resulted in continued high demand for housing, as evidenced by high property values and a growing population. Therefore, it is expected that residential development in the City would occur regardless of the proposed Housing Elements, and housing element law ensures that local agencies, including San Francisco, plan for...
the development of, and make land available for, new housing. To meet the City's share of the RHNA, including its income requirements, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how and where new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed use districts near Downtown. The 2009 Housing Element encourages housing in new commercial or institutional projects, housing projects near major transit lines, and accommodating housing in appropriate locations and densities through community planning efforts.

Impacts related to land use could occur if the proposed Housing Elements resulted in new development, including infrastructure, which would divide an established community. The 2004 and 2009 Housing Elements encourage future housing development in infill areas or on individual parcels, and future housing development would be expected to take place in established neighborhoods as shown in Figure IV-5 in Section IV (Project Description). The proposed 2004 and 2009 Housing Elements would not change allowable land uses already permitted by the City's Planning Code, therefore the proposed Housing Elements would not physically divide an established community. Furthermore, none of the policies in the 2004 or 2009 Housing Elements would encourage the division of a community. In fact, most policies would encourage residential growth in established areas within an established land use plan. For example, Policies 1.1, 1.2, 1.3, 1.4, and 1.5 of the 2004 Housing Element encourage housing in appropriate geographic locations as well as encouraging higher density and in-fill development. Therefore, implementation of these policies would not result in the division of an established community. Similarly, Policies 1.1, 4.6, 12.1, 12.3, 13.1, and 13.3 of the 2009 Housing Element encourage the development of strategically located housing near existing infrastructure or transit. Therefore, implementation of these policies would not result in the division of an established community. In addition, the 2004 and 2009 Housing Elements do not include any extensions of roadways or other development features through a currently developed area that could physically divide an established community. Therefore, implementation of either of the 2004 or 2009 Housing Elements would have no impact resulting from the division of an established community.

Impact LU-I: The proposed Housing Elements would not conflict with applicable land use plans, policy, or regulations. (Less than Significant)

Implementation of the 2004 Housing Element and 2009 Housing Element could result in impacts related to conflicts with existing land use policy, plans, or regulations if the Housing Elements resulted in housing development that was not consistent with zoning and land use designations as outlined in governing land use plans and/or the City's Planning Code to the extent those regulations help to avoid or mitigate potential environmental impacts. For example, if a height limit in a particular area was designed to avoid impacting a view from a public vantage point, there could be an impact from a policy that increased the height limits. However, as discussed throughout this document, the proposed Housing Elements would not result in changes to allowable land uses or height and bulk designations.

The following includes a general consistency discussion between City land use and planning policy documents and both the 2004 Housing Element and 2009 Housing Element. As stated in the analysis
Impact LU-2: The proposed Housing Elements would not have a substantial impact upon the existing character of the vicinity. (Less than Significant)

The City includes a mix of land uses, including residential, neighborhood retail, institutional and cultural, commercial, industrial, and open space areas. This mix of land uses varies throughout the City: some areas are predominately residential in nature, some predominately commercial, and other areas contain a variety of mixed uses (commercial strips surrounded by residential uses or commercial and industrial areas with small amounts of residential). These various types and mixtures of land uses contribute to the existing land use character throughout the City. The proximity of housing to these various land uses has shaped the development of San Francisco. As discussed throughout this EIR, varied land uses exist within relatively close proximity to residential uses, providing needed services as well as housing in proximity to job cores.

Figures V.B-1 and V.B-2 show the available housing unit capacity and pipeline units that are anticipated to be developed, or have the potential for residential development, outside existing Commercial Districts and within Downtown and Mixed-Use Districts, respectively. As shown in Figure V.B-1, approximately 17,587 units in the City’s pipeline occur outside the service area of one of the City’s Commercial Districts (calculated as more than 1/4 mile from a commercial district), with capacity for additional 498 units. The areas of the City with the most pipeline or capacity units not served by a Commercial District include Park Merced, Hunters Point Shipyard, and Candlestick neighborhoods. Planning efforts are underway in these areas, and the intent of these efforts is to develop commercial uses to support the new residential development. As shown in Figure V.B-2, approximately 3,134 units in the City’s pipeline occur within Downtown and Mixed Use Districts, with capacity for another 8,692 units in these areas. According to the land use inventory prepared by the City, the areas with the greatest potential for development near Downtown and Mixed Use Districts include Rincon Hill, East SoMa, and Mission. These figures reflect the trends that much of San Francisco’s residential neighborhoods are located in relatively close proximity to a variety of land uses. The following discusses the potential for the 2004 and 2009 Housing Element policies to affect land use character.

2004 Housing Element Analysis

Implementation of the 2004 Housing Element Housing Element could result in impacts related to land use character if new housing is substantially out of scale with development in an existing neighborhood, or if new development is so different than existing development that the new development would change the existing character of an area. The following 2004 Housing Element policies promote residential development in certain areas of the City and promote increased residential densities. A substantial increase of residential uses in an area that has been traditionally dominated by non-residential uses could result in changes to land use character. Similarly, substantial increases in residential densities in traditionally low-density neighborhoods could result in changes to land use character. The potential for the 2004 Housing Element policies to affect land use character is addressed below.
Overall, the 2004 Housing Element includes policies that would maintain consistency with existing neighborhood and land use character though the encouragement of in-fill development in a manner that does not present conflicts with the existing character of the vicinity. Furthermore, the 2004 Housing Element would not directly result in changes to zoning or height and bulk designations. New housing would be required to comply with the previously discussed regulations, the governing land use plan, the City's Residential Design Guidelines, and the Urban Design Element of the General Plan, which is concerned with the physical character and environment of the City with respect to development and preservation. Finally, Chapter 35 of the City's Administrative Code further reduces incompatibilities between residential and industrial uses. Therefore, the 2004 Housing Element would have a less than significant impact with respect to conflicts with existing land use character.

2009 Housing Element Analysis

Implementation of the 2009 Housing Element could result in impacts related to existing character if new housing is out of scale with development in an existing neighborhood or if new development is so different it would change the existing character of an area. The following 2009 Housing Element policies promote residential development in certain areas of the City and promote increased residential densities. The potential for these policies to affect land use character is addressed below.

<table>
<thead>
<tr>
<th>Impact</th>
<th>2009 Housing Element</th>
<th>Corresponding 1990 Residence Element Policy</th>
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</thead>
<tbody>
<tr>
<td>Direct growth to certain areas of</td>
<td>Policy 1.1: Focus housing growth- and the infrastructure necessary to support that</td>
<td>Implementation Measure 1.1.2: Pursuit of housing development opportunities in neighborhood and area plans.</td>
</tr>
<tr>
<td>the City.</td>
<td>growth according to community plans. Complete planning underway in key opportunity</td>
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<tr>
<td></td>
<td>areas such as Treasure Island, Candlestick Park and Hunters Point Shipyard.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Policy 1.3: Work proactively to identify and secure opportunity sites for</td>
<td>Policy 1.1: Promote development of permanently affordable housing on surplus, underused and vacant public</td>
</tr>
<tr>
<td></td>
<td>permanently affordable housing.</td>
<td>lands.</td>
</tr>
<tr>
<td></td>
<td>Policy 1.6: Consider greater flexibility in the number and size of units within</td>
<td>Policy 2.5: Allow flexibility in the number and size of units within permitted volumes of larger multi-unit</td>
</tr>
<tr>
<td></td>
<td>established building envelopes in community based planning processes, especially if it</td>
<td>structures, especially if the flexibility results in creation of a significant number of dwelling units that are permanently affordable to lower income households.</td>
</tr>
<tr>
<td></td>
<td>can increase the number of affordable units in multi-family structures.</td>
<td></td>
</tr>
<tr>
<td>Impact</td>
<td>2009 Housing Element</td>
<td>Corresponding 1990 Residence Element Policy</td>
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<tr>
<td>----------------------------------------------------------------------</td>
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<tr>
<td>Promote housing that fits within existing neighborhood character.</td>
<td>Policy 11.1: Promote the construction and rehabilitation of well-designed housing that emphasizes beauty, flexibility, and innovative design, respects existing neighborhood character.</td>
<td>Policy 12.4: Promote construction of well designed housing that conserves existing neighborhood character.</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>Policy 11.3: Ensure growth is accommodated without substantially and adversely impacting existing residential neighborhood character.</td>
<td>Policy 12.4: Promote construction of well designed housing that conserves neighborhood character.</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>Policy 11.5: Ensure densities in established residential areas promote compatibility with prevailing neighborhood character.</td>
<td>Policy 12.5: Relate land use controls to the appropriate scale for new and existing residential areas.</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>Policy 11.7: Consider a neighborhood's character with integrating new uses, and minimize disruption caused by expansion of institutions into residential areas.</td>
<td>Policy 12.3: Minimize disruption caused by expansion of institutions into residential areas.</td>
</tr>
<tr>
<td>Reduce land use conflicts through support of the long-range planning process.</td>
<td>Implementation Measure 8: Planning, Redevelopment and MOWED should complete long range planning processes already underway: Japantown, Glen Park, the Northeast Embarcadero Study, the Bayview Hunter's Point Plan, Candlestick/Hunters Point, India Basin Shoreline Community Planning Process, Treasure Island and Hunter's Point.</td>
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</table>

The 2009 Housing Element recognizes the diversity in architectural structures throughout the City. 2009 Housing Element Policy 11.1 would ensure that future development would be consistent with existing neighborhood character. The 2009 Housing Element advocates for housing to be incorporated into new commercial and institutional development, but notes that housing development in areas of commercial and institutional development should be determined based through a community planning process. Additionally, Implementation Measure 8 calls for the City to complete long range planning processes already underway for many areas of the City. These planning processes have identified locations where the City has determined that new residential development would be appropriate, and where the City has engaged the surrounding communities in a community planning process. The specific environmental
review conducted for those planning efforts will address the compatibility of those plans with the existing land use character.

As discussed previously, the 2009 Housing Element does not, overall citywide, promote increased residential densities more so than the 1990 Residence Element. The 2009 Housing Element promotes increased densities mostly as a strategy to be pursued during community planning processes. Any such community planning process would be required to undergo a separate environmental review pursuant to CEQA, and would be required to address the potential for the proposed land use controls of that community planning effort affect land use character. Furthermore, incremental increases in residential density in those areas that permit residential uses would not substantially change the existing land use character. Additionally, new residential uses would be required to be developed in accordance with the residential design guidelines or other applicable design guidelines, as well as Planning Code density requirements.

Although the 2009 Housing Element promotes housing in certain areas of the City, including within commercial developments and near transit, the proposed 2009 Housing Element would not change allowable land uses. As shown in Figures V.B-1 and V.B-2, much of the City is located in proximity to a variety of land uses including commercial districts and mixed use districts. Therefore, policies that promote additional residential development within mixed-use areas would not result in substantial changes to land use character.

Furthermore, new housing would need to comply with the previously discussed regulations, the governing land use plan, and the Urban Design Element of the General Plan. Finally, compliance with Chapter 35 of the City’s Administrative Code further reduces any potential incompatibilities between residential and industrial uses. In addition, the following 2009 Housing Element policies could reduce any potential impacts to character by directly or indirectly encouraging the preservation of neighborhood character.

Similar to the 2004 Housing Element discussed above, overall, the 2009 Housing Element contains policies and measures that would increase the City’s housing supply in a manner that does not present conflicts with existing land use character. The 2009 Housing Element would not result in changes to allowable land uses or height and bulk designations and future development would be required to comply with the previously discussed land use regulations. Therefore, the 2009 Housing Element would have a less than significant impact with respect to conflicts with existing land use character.

Cumulative Impacts

The geographic context for the cumulative impacts associated with land use issues is the City and County of San Francisco. Cumulative impacts occur when impacts from a proposed project that are significant or less than significant combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. Changes to the existing land use environment in the area could occur through the conversion of vacant land and low density uses to higher density uses, or though conversion of existing land use (e.g., from commercial to residential). However, it is assumed that future development would be consistent with policies in the adopted General Plan as well as zoning
requirements. Any new development is also anticipated to require CEQA review and design review, as well as other state and local regulations such as San Francisco Administrative Code Chapter 35, which would reduce potential land use conflicts. For this reason, cumulative impacts to land uses as a result of incompatible uses and changes to land use character would be less than significant. The contribution of the Housing Elements to such cumulative land use impacts is less than significant and is thus not cumulatively considerable because overall the Housing Elements promote compatibility with the surrounding land uses. This cumulative impact would be less than significant.

It is also anticipated that any new development will be reviewed for consistency with adopted land use plans and policies by the City, such as CEQA, the Planning Code, and the California Subdivision Map Act, all of which require findings of plan and policy consistency prior to approval of entitlements for development. For this reason, cumulative impacts associated with inconsistencies of future development with adopted plans and policies would be less than significant. In addition, the contribution of the Housing Elements to such cumulative impacts would be less than significant. As a result, the proposed Housing Elements would not contribute to any impacts associated with plan or policy inconsistency. This is considered to be a less than significant cumulative impact.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

No mitigation measures are warranted by the proposed Housing Elements.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.
V. ENVIRONMENTAL SETTING AND IMPACTS
C. AESTHETICS

INTRODUCTION

This section addresses the potential impacts of the 2004 Housing Element and 2009 Housing Element policies related to scenic vistas, scenic resources, visual character or quality of surrounding area, and potential new sources of light and glare.

ENVIRONMENTAL SETTING

Visual Character

The visual setting of the City is varied, reflecting the unique visual characteristics of the City’s topography, street grids, public open spaces, and distinct neighborhoods. San Francisco’s skyline may be characterized by a general pattern of densely clustered high-rise commercial development in the downtown core that tapers off to low-rise development at its periphery. This compact urban form signifies the downtown as the center of commerce and activity and produces a downtown “mound,” distinctive from the City’s numerous hills. Although distinctive, this form is neither smooth nor uniform. A range of building heights in the downtown creates gaps, peaks, dips and inconsistencies within this pattern, allowing taller buildings and building tops to stand out in profile against the sky. The tension between conformity and variety in the skyline results in a readable and recognizable image for San Francisco, with notable landmarks such as the Transamerica Pyramid, sitting apart from the “mound.”

Outside of the highly commercial and built-up downtown area, much of the City is characterized by unique residential neighborhoods, which each exhibit their own distinctive visual character. Neighborhoods within the City can vary greatly in terms of density, scale, architectural style, and general design pattern. Most neighborhoods have a traditional neighborhood commercial district with a main street which provides goods and services to residents in the vicinity. Commercial storefront buildings usually contain businesses on the first floor and residential units above. This type of development creates a village-like appearance, common throughout much of San Francisco’s neighborhoods and districts.

Section V.B (Land Use and Land Use Planning) discusses the land use character of the 18 Planning Districts within the City, as depicted on Figure V.A-1, and describes existing height limits and land uses within each of the Planning Districts, including descriptions of neighborhood commercial areas.

Open Space

Public open spaces often give a neighborhood its identity, a visual focus, a center for activity and provide a counterpoint to often dense mixed-use residential and commercial neighborhoods by providing visual relief from the built environment. Open spaces in the City include playgrounds, civic spaces, regional parks, and neighborhood parks. Refer to Section V.J (Recreation) for more information about parks and open spaces.
Executive Order S-01-07 establishing the Low Carbon Fuel Standard (LCFS) requires a 10% or greater reduction in the average carbon intensity for transportation fuels in California regulated by ARB (also a discrete early action measure).

AB 1493 (Pavley Standard) requires ARB to adopt regulations to reduce GHG emissions for noncommercial passenger vehicles and light-duty trucks of model year 2009 and thereafter.

Under Senate Bill 107, California’s Renewable Portfolio Standard (RPS) requires retail suppliers of electric services to increase procurement from eligible renewable energy resources to 20% by 2010.

California Executive Order S-14-08 mandates retail suppliers of electric services to increase procurement from eligible renewable energy resources to 33% by 2020.

Senate Bill (SB) 1368 requires the California Public Utilities Commission (PUC) and CEC to establish GHG emission performance standards for the generation of electricity.

Regional

The BAAQMD is the primary agency responsible for comprehensive air pollution control in the entire San Francisco Bay Area Air Basin. As such, the BAAQMD works directly with the Association of Bay Area Governments, the Metropolitan Transportation Commission, and local governments and cooperates actively with all federal and state government agencies. The BAAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

BAAQMD has published a document titled *BAAQMD CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans* (BAAQMD CEQA Guidelines, December 1999). In that document BAAQMD provides guidance and recommendations on the methodologies of analysis and suggested thresholds of significance that Lead Agencies can use when analyzing air quality impacts during CEQA review of projects. This document does not address climate change or GHG emissions.

The BAAQMD recently updated their 1999 CEQA Air Quality Guidelines (referenced above) and adopted significance thresholds for GHGs on June 2, 2010. The updated CEQA Air Quality Guidelines includes significance thresholds, assessment methodologies, and mitigation strategies for GHG emissions. The recently adopted GHG thresholds of significance, as discussed in BAAQMD’s May 2010 CEQA Air Quality Guidelines, includes two sets of GHG thresholds: one that would apply to specific development projects, and another threshold that would apply to plan-level CEQA analyses. The proposed 2004 and 2009 Housing Elements are an update to the City’s General Plan and therefore, the plan-level threshold would be the applicable threshold for the proposed Housing Elements. However, as discussed in Section V.H (Air Quality), according to the BAAQMD, the recently adopted thresholds of significance for GHGs are intended to apply to environmental analyses that have begun on or after adoption of the revised CEQA thresholds (June 2, 2010). Therefore, the proposed project would not be subject to BAAQMD’s recently
INTRODUCTION

This section addresses the potential impacts of the 2004 Housing Element and 2009 Housing Element policies related to wind and shadow. The San Francisco Planning Code contains provisions pertaining to wind and shadow minimization. Because wind and shadow contribute substantially to the San Francisco environment and can be highly susceptible to an impact from development, these issues are analyzed as part of CEQA review in San Francisco.

ENVIRONMENTAL SETTING

Wind

Wind impacts are generally caused by large building masses extending substantially above neighboring buildings, and by buildings oriented such that a new large wall catches a prevailing wind, particularly if such a wall includes little or no articulation.

Long-term wind data in San Francisco is available from historical wind records from the U.S. Weather Bureau weather station located above the old Federal Building at 50 United Nations Plaza. Table V.J-1 shows that average wind speeds are greatest in the summer and least in the fall. Winds also exhibit a diurnal variation with the strongest winds occurring in the afternoon, and lightest winds occurring in the early morning.

<table>
<thead>
<tr>
<th>Prevailing Wind Direction</th>
<th>January</th>
<th>April</th>
<th>July</th>
<th>October</th>
<th>Annual</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Freq</td>
<td>Speed</td>
<td>Freq</td>
<td>Speed</td>
<td>Freq</td>
</tr>
<tr>
<td>North</td>
<td>12.5</td>
<td>7.9</td>
<td>2.2</td>
<td>11.0</td>
<td>0.3</td>
</tr>
<tr>
<td>North-northeast</td>
<td>1.3</td>
<td>5.6</td>
<td>0.7</td>
<td>6.1</td>
<td>0.3</td>
</tr>
<tr>
<td>Northeast</td>
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<td>5.3</td>
<td>1.3</td>
<td>4.7</td>
<td>1.1</td>
</tr>
<tr>
<td>East-northeast</td>
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<td>6.3</td>
<td>0.6</td>
<td>4.8</td>
<td>0.2</td>
</tr>
<tr>
<td>East</td>
<td>11.9</td>
<td>4.8</td>
<td>2.6</td>
<td>4.5</td>
<td>0.1</td>
</tr>
<tr>
<td>East-southeast</td>
<td>2.1</td>
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<td>0.3</td>
<td>5.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Southeast</td>
<td>9.1</td>
<td>6.4</td>
<td>2.4</td>
<td>7.8</td>
<td>0.2</td>
</tr>
<tr>
<td>South-southeast</td>
<td>2.8</td>
<td>5.6</td>
<td>0.3</td>
<td>3.8</td>
<td>0.1</td>
</tr>
<tr>
<td>South</td>
<td>6.7</td>
<td>5.0</td>
<td>4.2</td>
<td>7.1</td>
<td>1.1</td>
</tr>
<tr>
<td>South-southwest</td>
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<td>4.8</td>
<td>0.4</td>
<td>4.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Southwest</td>
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<td>8.0</td>
<td>7.7</td>
<td>9.2</td>
<td>15.6</td>
</tr>
<tr>
<td>West-southwest</td>
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<td>5.9</td>
<td>1.7</td>
<td>7.7</td>
<td>1.2</td>
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<tr>
<td>West</td>
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<td>43.0</td>
<td>10.9</td>
<td>53.0</td>
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<tr>
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<td>14.9</td>
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<tr>
<td>Northwest</td>
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<td>9.3</td>
<td>10.7</td>
<td>10.7</td>
</tr>
<tr>
<td>North-northwest</td>
<td>1.2</td>
<td>5.7</td>
<td>0.6</td>
<td>10.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Calm</td>
<td>7.7</td>
<td>-</td>
<td>2.1</td>
<td>-</td>
<td>0.3</td>
</tr>
</tbody>
</table>
Shadow

Shading is an important environmental issue because the users or occupants of certain land uses, such as residential, recreational/parks, churches, schools, outdoor restaurants, and pedestrian areas have some reasonable expectations for direct sunlight and warmth from the sun. These land uses are termed “shadow-sensitive”. For a discussion of parks and open space in San Francisco, refer to Section V.K (Recreation).

Shadow lengths are dependent on the height and size of the building or object from which they are cast and the angle of the sun. The angle of the sun varies with respect to the rotation of the earth (i.e., time of day) and elliptical orbit (i.e., change in seasons). The longest shadows are cast during the winter months and the shortest shadows are cast during the summer months.

In the City, the presence of the sun’s warming rays is essential to enjoying open space. This is because climatic factors, including ambient temperature, humidity, and wind, often combine to create a comfortable climate only when direct sunlight is present. Therefore, the shadows created by new development nearby can critically diminish the utility of the open space. This is particularly a problem in the Downtown area and in adjacent neighborhoods, where there is a limited amount of open space, pressure for new development, and zoning controls that allow tall buildings. Neighborhoods that experience shading issues include the Downtown area and many of the adjacent areas, including Civic Center, Nob Hill, Financial District, Mission Bay, and South of Market. Together these areas could accommodate approximately 12 percent of the City’s pipeline housing units and approximately five percent of the overall capacity for new housing within the City. Refer to Figure IV-4 in Section IV. Project Description, which shows the Citywide Height Map.

The City of San Francisco is densely developed with urban uses. As discussed in Section V.K (Recreation), the City is served by over 200 neighborhood park, recreation, and open space facilities. These facilities are considered “shadow-sensitive”.

In general, all applications for new construction or additions to existing buildings above 40 feet in height must be reviewed to determine whether a project would cast additional shadows on properties under the jurisdiction of, or designated to be acquired by the Recreation and Park Department. The Planning Department staff develops a “shadow fan” diagram that shows the maximum extent of the shadows cast by a proposed building throughout the year, between one hour after sunrise and one hour before sunset. If the shadow fan indicates a project shadow does not reach any property protected by Planning Code Section 295 (the sunlight ordinance), no further review is required. If the shadow fan shows that a project has potential to shade such properties, further analysis is required.

1 This calculation used the entire Downtown District to represent the Civic Center, Nob Hill, and Financial District areas. The aforementioned areas do not encompass the entire Downtown District. Therefore, the percentage of pipeline housing units and overall capacity that are in areas with shading issues are likely overstated.
and are dominated by either coast live oak (*Quercus agrifolia*) or California wax myrtle (*Myrica californica*). Small stands of California wax myrtle forest occur in the eastern portion of Golden Gate Park, but these may be planted trees. However, stands of coast live oak forest within Golden Gate Park are thought to be remnants of the historic vegetation. Stands of coast live oak forest occur at several other natural areas, and those at Buena Vista Park and 15th Avenue Steps are also likely to be remnant stands of the historic San Francisco vegetation. Baker Beach and Fort Funston are also likely to include seabluff scrub habitat, another sensitive community.5

In addition, an EIR is currently being prepared for the Significant Natural Resource Areas Management Plan (SNRAMP) Areas on Department of Recreation and Parks property in the City, which are different than the natural areas previous discussed. The SNRAMP will be used by the resource managers over the next 20 years. The 31 Natural Areas located within the City are scattered mostly throughout the central and southern portions of the City and constitute approximately four percent of the total City area. They range in size from less than one acre (i.e., 15th Avenue Steps) to almost 400 acres (i.e., Lake Merced).

The movement and migration of wildlife in urban and suburban areas has been substantially altered due to habitat fragmentation over the past century. This fragmentation is most commonly caused by development, which can result in large patches of land becoming inaccessible and forming a virtual barrier between undeveloped areas, or resulting in additional roads which, although narrow, may result in barriers to smaller or less mobile wildlife species. Fragmented habitat corridors are located throughout the City. Habitat fragmentation results in isolated “islands” of habitat, which prevents the exchange of genetic material within species populations in different geographic areas necessary to maintain the genetic variability to withstand major environmental disturbances such as fire or climate change.7

**Wetlands**

Wetlands are generally considered to be areas that are periodically or permanently inundated by surface or groundwater, and support vegetation adapted to life in saturated soil. Wetlands are recognized as important features on a regional and national level due to their high inherent value to fish and wildlife, use as storage areas for storm and flood waters, and water recharge, filtration, and purification functions. Technical standards for delineating wetlands have been developed by the U.S. Army Corps of Engineers (ACE) and the U.S. Fish and Wildlife Service (USFWS), which generally define wetlands through consideration of three criteria: hydrology, soils, and vegetation. The ACE and the California Department of Fish and Game (CDFG) have jurisdiction over modifications to stream channels, rivers banks, lakes and other wetland features. Due to the extent of development and past filling within the City, jurisdictional wetlands and other water features are not prevalent within the City. However, wetlands are

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5 These areas include rocky cliffs along the shoreline that are likely to support seabluff scrub habitat.
6 The Notice of Preparation of an Environmental Impact Report for the Natural Areas Management Plan was released on April 22, 2009.
Sensitive vegetation communities are also identified by CDFG on its List of California Natural Communities Recognized by the CNDDDB. Impacts to sensitive natural communities and habitats identified in local or regional plans, policies, regulations or by federal or state agencies must be considered and evaluated under the CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

Local

San Francisco General Plan

The San Francisco General Plan provides general policies and objectives to guide land use decisions and development throughout the City. General Plan objectives and policies relevant to biological resources are discussed in Section V.A (Plans and Policies) of this EIR.

Chapter 8 of the San Francisco Environmental Code

Chapter 8 of the San Francisco Environment Code bans the use of tropical hardwood and virgin redwood for reasons including atmospheric imbalance and global warming and that the destruction of rainforests is contributing currently to extinction of 30 species of plant and animal life each day. The City prohibits the use, acquisition or purchase, directly or indirectly, by any City or County department or agency, of any tropical hardwoods or tropical hardwood wood products as well as virgin redwood or virgin redwood wood products.

San Francisco Integrated Pest Management Ordinance

Chapter 3 of the San Francisco Environmental Code states that the City, in carrying out its operations, shall assume pesticides are potentially hazardous to human and environmental health. City departments shall give preference to reasonably available nonpesticide alternatives when considering the use of pesticides on City property. The Integrated Pest Management Ordinance provides an outline of the City’s integrated pest management (IPM) approach.

Urban Forest Plan

Pursuant to Chapter 12 of the San Francisco Environment Code, the Urban Forestry Council advises city departments, including the Board of Supervisors and the mayor. Its tasks are to develop a comprehensive urban forest plan; educate the public; develop tree-care standards; identify funding needs, staffing needs, and opportunities for urban forest programs; secure adequate resources for urban forest programs; facilitate coordination of tree-management responsibilities among agencies; and report on the state of the urban forest. The Council’s scope of authority is completely advisory and educational in nature. The Council has prepared an Urban Forest Plan, which reviews the creation of San Francisco’s urban forest, analyzes the structure and functional benefits of the forests, and identifies the challenges that threaten its future. Designed to provide a road map for policy-makers and implementers, the Plan identifies goals that are critical to maximizing the value of the forest. Underlying these goals is the understanding that the urban forest is a living and evolving resource that is adapted to the unique and often challenging
conditions of the urban environment. These goals are directed at the owners and managers of the trees that comprise the urban forest.

**Urban Forestry Ordinance**

Section 804 of Article 16, "Urban Forestry Ordinance," in the San Francisco Public Works Code outlines the jurisdiction of the San Francisco Department of Public Works (DPW) over trees and landscaping. DPW has jurisdiction over planning, planting, protection, maintenance, and removal of trees or landscaping in the public right-of-way, as well as over certain trees on private property if they are deemed hazard, landmark, or significant trees. Pursuant to Article 16, the San Francisco Urban Forestry Ordinance's purposes include: realize the optimum public benefits of trees on the City's streets and public places; integrate street planting and maintenance with other urban elements and amenities; promote efficient, cost effective management of the City's urban forest; reduce the public hazard, nuisance, and expense occasioned by improper tree selection, planting, and maintenance; provide for the creation of an equitable, sustained, and reliable means of funding urban-forest management throughout the City; create and maintain a unified urban-forest resource; recognize that trees are an essential part of the City's aesthetic environment; recognize that green spaces are vital to San Francisco's quality of life; and ensure that landscaping in sidewalk areas is properly constructed and maintained in order to maximize environmental benefits, protect public safety, and limit conflicts with infrastructure. Directions are provided for planting and removal of street trees by the DPW and persons outside the DPW.

**Significant Trees**

Significant trees are defined by City ordinance as trees in, or within 10 feet of, a public right-of-way that are greater than 20 feet tall, have a canopy greater than 15 feet in diameter, or have a trunk greater than 12 inches in diameter at 4.5 feet above grade. Removal of significant trees requires the authorization of the DPW director or the director's designee, and is subject to the rules and procedures governing permits and disclosures as above.

**Landmark Trees**

In 2007, the San Francisco Board of Supervisors adopted legislation for designation and protection of landmark trees. Landmark trees can be anywhere within San Francisco, including private property. They are designated as such by the Board of Supervisors, based on criteria such as age, location, species, or visual quality. Once the tree has been designated, a notice indicating this designation is recorded for the property on which the tree is located. The City Zoning Administrator is required to identify landmark trees on proposed development or construction sites, and to notify the Urban Forestry Council and DPW. Special permits are required if the property is later proposed for development. The City Zoning Administrator is responsible for maintaining a list of designated landmark trees.

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Impact Evaluation

As discussed previously, the 2004 Housing Element and 2009 Housing Elements would not change the land use objectives and policies in the City’s area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the Regional Housing Needs Assessment (RHNA) as determined by the Association of Bay Area Governments (ABAG). Therefore, the rezoning of land uses is not required. To meet the City’s share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how new
housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. The 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

**Impact BI-1: The proposed Housing Elements would not have a substantial adverse effect on any candidate, sensitive, or special-status species; riparian habitat or other sensitive natural communities; federally protected wetlands; or interfere with the movement of species. (Less than Significant)**

New construction could result in impacts related to biological resources if new housing would result in disturbance from construction activities, tree removal, construction on or near wetlands or sensitive habitats or riparian areas, interference with migration, take of special status-species (e.g. development/redevelopment of abandoned buildings that provide habitat for bats could impact those species), application of pesticides and herbicides, construction of tall buildings with glass walls that could increase bird strikes and possibly interrupt a migration corridor, and conflict with provisions of an adopted habitat conservation plan. As shown in Figure IV-4 in Section IV (Project Description), the City’s height districts allow the tallest buildings (121 to 550 feet) in the Downtown and SoMa areas, with a few exceptions in other areas of the City. Generally, lower heights in the western and southern portions of the City would not affect bird migration. Increases in density could be accomplished by promoting development to full height limits in the Downtown area, which could affect bird migration. On the other hand, increasing density could accommodate more of the City’s fair share of the RHNA in fewer buildings, necessitating less new construction and less potential for disturbance or interference to biological resources.

**2004 Housing Element Analysis**

The 2004 Housing Element does not propose policies that would directly or indirectly encourage development of areas with sensitive habitat or species. However, the following 2004 Housing Element policies could affect bird migrations by encouraging increased density in Downtown areas.

<table>
<thead>
<tr>
<th>Impact</th>
<th>2004 Housing Element</th>
<th>Corresponding 1990 Residence Element Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct growth to certain areas of the City.</td>
<td>Policy 1.1: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas.</td>
<td>Policy 2.1: Set allowable densities in established residential areas at levels which will promote compatibility with prevailing neighborhood character. Policy 2.2: Encourage higher residential density in areas adjacent to downtown, in underutilized commercial and industrial areas proposed for conversion to housing and in neighborhood commercial districts where higher density will not have harmful effects, especially if the higher density provides a significant number of units that are affordable to lower income households. Set allowable densities in established residential areas.</td>
</tr>
<tr>
<td>Impact</td>
<td>2004 Housing Element</td>
<td>Corresponding 1990 Residence Element Policy</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------</td>
</tr>
<tr>
<td>Maintain and improve the condition of the existing supply of public housing.</td>
<td>Policy 3.3: Maintain and improve the condition of the existing supply of public housing.</td>
<td>Policy 5.4: Maintain and improve the existing supply of public housing.</td>
</tr>
<tr>
<td>Implementation Measure 3.6.6: The Planning Department will encourage property owners to use preservation incentives to repair, restore, or rehabilitate historic resources in lieu of demolition. These include federal tax credits for rehabilitation of qualified historical resources, Mills Act property tax abatement programs, the State Historic Building Code, and tax deductions for preservation easements.</td>
<td></td>
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</tbody>
</table>

As shown above, the 2004 Housing Element proposes policies that discourage demolition and promote the maintenance of existing public housing (including Policies 2.1, 3.3, and 3.6) to a degree similar to the 1990 Residence Element, which could reduce the amount of new housing required to meet the City’s housing needs. Essentially, both the 1990 Residence Element and 2004 Housing Element recognize the need for the retention and maintenance of existing housing, and therefore do not represent a shift in policy. The preservation of existing housing reduces the potential for new development to build to maximum allowable height and bulk limits, thereby reducing the potential for subsequent biological resource impacts resulting from new development at maximum allowable height and bulk limits.

Although the 2004 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensures that there is adequate land available to meet future housing needs. Potential impacts related to biological resources would be offset by compliance with the Open Space Element of the San Francisco General Plan, Chapter 8 of the San Francisco Environment Code, San Francisco’s Green Building Ordinance, San Francisco’s IPM Ordinance, San Francisco’s Urban Forest Plan, and San Francisco’s Urban Forestry Ordinance to minimize impacts related to biological resources. Furthermore, any new development within the City would be subject, on a project-by-project basis, to independent CEQA review. Therefore, the 2004 Housing Element would have a less than significant impact with respect to biological resources.
As shown above, the 2009 Housing Element promotes housing through community planning processes (Policies 1.1, 1.6, and Implementation Measures 8, 80 and 97). The 2009 Housing Element also promotes housing on underused, vacant and surplus lands (Policy 1.3 and Implementation Measures 3 and 4), and housing within mixed-use areas (Policy 1.8 and Implementation Measure 80), thereby directing housing to commercial areas. As discussed previously, directing new housing to certain areas of the City could increase the amount of new housing occurring in those areas, thereby potentially resulting in new development potentially requiring tree removal, construction on or near wetlands or sensitive habitats or riparian areas, interference with migration, take of special status-species (e.g., development/redevelopment of abandoned buildings that provide habitat for bats could impact those species), application of pesticides and herbicides, construction of tall buildings with glass walls that could increase bird strikes and possibly interrupt a migration corridor, and conflict with provisions of an adopted habitat conservation plan.

The 2009 Housing Element generally promotes increased density through community planning processes (Policies 1.4, 1.6, and Implementation Measures 13 and 79) and for affordable housing (Policy 7.5 and Implementation Measures 36 and 64). The 2009 Housing Element also includes a strategy designed to reduce the amount of space required for non-housing functions (Implementation Measure 12). While the 2009 Housing Element contains a policy that advocates for family-sized housing units (Policy 4.1 and Implementation Measure 32), overall density increases from such policy would be speculative as less units would be accommodated within a given building envelope. However, as discussed in the analysis of the 2004 Housing Element, increased density standards could result in more units within a given building envelope, which could be partially achieved by the construction of multi-family housing built to maximum allowable height and bulk, thereby potentially resulting in new development potentially requiring tree removal, construction on or near wetlands or sensitive habitats or riparian areas, interference with migration, take of special status-species (e.g., development/redevelopment of abandoned buildings that provide habitat for bats could impact those species), application of pesticides and...
herbicides, construction of tall buildings with glass walls that could increase bird strikes and possibly interrupt a migration corridor, and conflict with provisions of an adopted habitat conservation plan.

Similar to the 2004 Housing Element, major themes of the 2009 Housing Element include the preservation and maintenance of existing housing. The following 2009 Housing Element policies discourage demolition and encourage the maintenance of the City’s existing housing stock, thereby reducing the amount of new housing required to meet the City’s housing needs and subsequent biological resource related impacts resulting from development at maximum allowable height and bulk limits.

<table>
<thead>
<tr>
<th>Impact</th>
<th>2009 Housing Element</th>
<th>Corresponding 1990 Residence Element Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discourage demolition and improve existing housing supply.</td>
<td>Policy 2.3: Prevent the removal or reduction of housing for parking.</td>
<td>Objective 5: To maintain and improve the physical condition of housing while maintaining existing affordability levels.</td>
</tr>
<tr>
<td></td>
<td>Policy 2.4: Promote improvements and continued maintenance to existing units to ensure long term habitation and safety.</td>
<td>Policy 5.1: Assure that existing housing is maintained in decent, safe sanitary conditions at existing affordability levels.</td>
</tr>
<tr>
<td></td>
<td>Policy 3.1: Preserve rental units, especially rent controlled units, to meet the City’s affordable housing needs</td>
<td>Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.</td>
</tr>
<tr>
<td></td>
<td>Policy 3.2: Promote voluntary housing acquisition and rehabilitation to protect affordability for existing occupants.</td>
<td>Policy 5.2: Promote and support voluntary housing rehabilitation which does not result in the displacement of lower income occupants.</td>
</tr>
<tr>
<td></td>
<td>Policy 3.4: Preserve “naturally affordable” housing types, such as smaller and older ownership units.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Policy 3.5: Retain permanently affordable residential hotels and single room occupancy (SRO) units.</td>
<td>Policy 3.7: Preserve the existing stock of residential hotels.</td>
</tr>
<tr>
<td></td>
<td>Policy 9.3: Maintain and improve the condition of the existing supply of public housing, through programs such as HOPE SF.</td>
<td>Policy 5.4: Maintain and improve the existing supply of public housing. Policy 7.5: Encourage energy efficiency in new residential development and weatherization in existing housing to reduce overall housing costs.</td>
</tr>
</tbody>
</table>
As shown above, the 2009 Housing Element proposes policies that discourage demolition and promote the maintenance of existing public housing (including Policies 2.4, 3.1, 3.2, 3.4, 3.5 and 9.3) to a degree similar to the 1990 Residence Element. The maintenance and preservation of existing housing would help to preserve the existing housing stock, requiring less new development to meet housing goals, thereby resulting in less development at maximum allowable height and bulk limits. 2009 Housing Element Policy 2.4, 3.1, 3.2, 3.4, 3.5 and 9.3 are essentially the same as their corresponding 1990 Residence Element policies. Essentially, both the 1990 Residence Element and 2009 Housing Element recognize the need for the retention and maintenance of existing housing, and therefore do not represent a shift in policy. The preservation of existing housing reduces the potential for new development to build to maximum allowable height and bulk limits, thereby reducing the potential for subsequent biological resource impacts resulting from new development at maximum allowable height and bulk limits.

The 2009 Housing Element does not propose policies that would directly or indirectly encourage development of areas with sensitive habitat or species. Overall, the 1990 Residence Element promotes increased density on a broader, citywide scale to a greater extent than the 2009 Housing Element. However, there are three areas under which the 2009 Housing Element promotes greater density than the 1990 Residence Element. These include the following themes: increasing density near transit; construction of affordable housing; and development through the community planning process. Neither the 2009 Housing Element nor the 1990 Residence Element propose increased density specifically for the Downtown area and, therefore, do not represent a shift in policy. Although the 2009 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and ensure that there is adequate land available to meet future housing needs. Potential impacts related to biological resources would be offset by compliance with the previously discussed regulations. Therefore, the 2009 Housing Element would have a less than significant impact with respect to biological resources.

Impact BI-2: The proposed Housing Elements would not conflict with any local policies or ordinances protecting biological resources nor would the proposed Housing Elements conflict with the provisions of an adopted habitat conservation plan. (No Impact)

2004 Housing Element and 2009 Housing Element Analysis

As discussed under Impact BI-1, the 2004 Housing Element policies promote increased density more so than the 1990 Residence Element. The 2004 Housing Element directs growth to commercial and industrial areas, neighborhood commercial districts, the Downtown and on infill development sites, although to a greater degree than the 1990 Residence Element. The 2004 Housing Element also advocates for housing in community plan areas and along transit corridors, both of which are policies that were not included in the 1990 Residence Element.

Overall, the 1990 Residence Element promotes increased density on a broader, citywide scale to a greater extent than the 2009 Housing Element. However, there are two areas under which the 2009 Housing Element promotes greater density than the 1990 Residence Element. These include the following themes: increasing density for affordable housing projects and increased density as a strategy to be pursued during the community planning process. As shown above, the 2009 Housing Element promotes housing through
community planning processes, near transit and other infrastructure, and in proximity to neighborhood services. The 2009 Housing Element also promotes housing on underused, vacant and surplus lands, and housing within mixed-use areas, thereby directing housing to commercial areas.

Directing growth to certain areas of the City and increased density could increase the amount of new housing occurring in those areas, thereby resulting in new development built to maximum allowable height and bulk, potentially increasing building height and mass. In seeking to achieve the objectives of the proposed Housing Elements, significant impacts could result if new construction conflicts with local policies or ordinances protecting biological resources or an adopted conservation plan. Although the proposed Housing Elements would not result in the construction of residential units, it would shape how and where new residential development should occur and ensures that there is adequate land available to meet future housing needs. A key strategy for meeting the City’s housing goals is to maintain the City’s existing housing stock. Both the 2004 Housing Element and 2009 Housing Element propose policies that discourage demolition and promote the maintenance of existing public housing to a degree similar to the 1990 Residence Element. The preservation of existing housing reduces the need for new development to maximum allowable height and bulk limits.

Neither the 2004 Housing Element nor the 2009 Housing Element contains policies that would directly or indirectly conflict with any policies protecting biological resources or any adopted habitat conservation plans. New residential development would be required to comply with the previously discussed regulations and plans, including the Open Space Element of the San Francisco General Plan, Chapter 8 of the San Francisco Environment Code, San Francisco’s Green Building Ordinance, San Francisco’s IPM Ordinance, San Francisco’s Urban Forest Plan, and San Francisco’s Urban Forestry Ordinance. Development of the opportunity sites within the City would not fundamentally conflict with any applicable habitat conservation plan (HCP) or natural community conservation plan (NCCP) because neither of these exists in the City. Furthermore, the proposed Housing Elements encourage higher density and infill development in already urbanized areas. Furthermore, the proposed Housing Elements would not result in conflicts with plans and policies related to the protection of biological resources because they would not directly or indirectly result in population growth or new development. Therefore, the 2004 and 2009 Housing Elements would have no impact with respect to conflicts with local plans or ordinances protecting biological resources or with the provisions of an adopted habitat conservation plan.

Cumulative Impacts

The geographic context for cumulative biological resources impacts are generally localized and affect the immediate vicinity surrounding development. Cumulative impacts occur when impacts that are significant or less than significant from a proposed project combine with similar impacts from other past, present, or reasonably foreseeable projects in a similar geographic area. This would include the demolition of existing structures or new construction in the project area or immediately adjacent to its project boundaries resulting from past, present and reasonably foreseeable future projects combining with similar impacts from the 2004 Housing Element and 2009 Housing Element. The cumulative effect of development within the City could contribute to impacts related to biological resources. As discussed throughout this EIR, growth would occur regardless of implementation of the proposed Housing
Elements. The proposed Housing Elements provide direction for how residential development in the City should occur. Furthermore, any new development within the City would be subject, on a project-by-project basis, to independent CEQA review as well as policies in the San Francisco General Plan, governing area plans, design guidelines, zoning codes (including development standards), and other applicable land use plans that are intended to reduce impacts to biological resources. The 2004 Housing Element and 2009 Housing Element policies would not directly or indirectly affect biological resources. New development could affect such resources, but would be evaluated on a project-by-project basis. In addition, the 2004 Housing Element and 2009 Housing Element are public policy documents and would not result in direct significant impacts. The contribution of potential impacts from the proposed Housing Elements to the cumulative biological resource impacts would not be cumulatively considerable. Therefore, cumulative impacts related to biological resources would be less than significant.

MITIGATION AND IMPROVEMENT MEASURES

Mitigation Measures

No mitigation measures are warranted by the proposed Housing Elements.

Improvement Measures

No improvement measures are warranted by the proposed Housing Elements.
Industrial Waste Ordinance (Ordinance No. 199-77)

The San Francisco Industrial Waste Ordinance requires that groundwater meet specified water quality standards before it may be discharged into the sewer system. The Bureau of Systems Planning, Environmental and Compliance of the San Francisco Public Utilities Commission must be notified of projects necessitating dewatering. Should dewatering be necessary, the final soils report would address the potential settlement and subsistence impacts of this dewatering.

Unreinforced Masonry Buildings Ordinance

Adopted by the Board of Supervisors in 1992, UMB Ordinance No. 225-92 requires the City to notify all owners of UMBs and requires all property owners to retain a licensed civil structural engineer or architect to file a Building Inventory Form with the City to identify the “hazard class” of a particular UMB building. The ordinance also requires all owners of UMBs to seismically upgrade buildings by February 15, 2006. Building owners are responsible for financing the cost of the work.

The UMB ordinance spells out four different alternative standards for seismic strengthening of UMBs. Each standard requires a different level of construction and range of costs. The ordinance also specifies conditions that must be met if either of the two less extensive and costly approaches is used to seismically upgrade a UMB. The DBI, who is charged with oversight and enforcement of the program, also has the authority to initiate abatement proceedings in cases where an owner fails to seismically upgrade a building.

Exterior alterations, seismic retrofit and/or demolition of UMBs must be evaluated by the Planning Department in order to determine the type of review process required prior to the authorization of a building permit application. Some projects, however, may be approved administratively. Seismic retrofitting of UMBs is guided by the Architectural Design Guidelines for the Exterior Treatment of Unreinforced Masonry Buildings During Seismic Retrofit, developed by the American Institute of Architects.

IMPACTS

Significance Thresholds

The proposed Housing Elements would normally have a significant effect on the environment if they would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; (Refer to Division of Mines and Geology Special Publication 42.)
- Strong seismic ground shaking;
- Seismic-related ground failure, including liquefaction; or
- Landslides.

- Result in substantial soil erosion or the loss of topsoil;
- Be located on geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code, creating substantial risks to life or property;
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; or
- Change substantially the topography or any unique geologic or physical features of the site.

Impact Evaluation

As discussed previously, the 2004 Housing Element and 2009 Housing Elements would not change the land use objectives and policies in the City's area and redevelopment plans. According to Part I of the 2009 Housing Element (Data and Needs Analysis), the City has available capacity to meet the Regional Housing Needs Allocation (RHNA) as determined by the Association of Bay Area Governments (ABAG). Therefore, the rezoning of land uses is not required. To meet the City's share of the RHNA, the proposed Housing Elements aim to do the following: 1) preserve and upgrade existing housing units to ensure they do not become dilapidated, abandoned, or unsound, and 2) provide direction for how new housing development in the City should occur. With respect to the latter, the 2004 Housing Element encourages new housing in Downtown and in underutilized commercial and industrial areas. The 2004 Housing Element also encourages increased housing in neighborhood commercial districts and mixed-use districts near Downtown. The 2009 Housing Element encourages housing in new commercial or institutional projects and accommodating housing through existing community planning processes.

The San Francisco Bay Area and surrounding areas are characterized by numerous geologically young faults. However, there are no known fault zones or designated Alquist-Priolo Earthquake Fault Zones in the City. Therefore, the proposed Housing Elements would have no impact with respect to rupture of a known earthquake fault.

Although the proposed Housing Elements would not result in the construction of residential units, all new development would be connected to the City's existing wastewater treatment and disposal system. Development would not involve the use of septic tanks or alternative wastewater disposal systems.
Impact GE-2: The proposed Housing Elements would not result in substantial soil erosion or the loss of topsoil. (Less than Significant)

New construction could result in impacts related to soil erosion and the loss of topsoil if new housing, particularly on vacant or undeveloped sites, would result in grading activities, or if new development would require much more extensive grading. This exposure could result in erosion or loss of topsoil. The 2004 and 2009 Housing Element policies that promote increased density could result in heavier buildings on soil types or in proximity to slopes that are susceptible to erosion. Heavier buildings would require stronger and deeper foundations, involving more excavation than lighter buildings.

2004 Housing Element Analysis

As discussed under Impact GE-1, the 2004 Housing Element policies promote increased density more so than the 1990 Residence Element. (See 2004 Housing Element Policies 1.1, 1.6, 1.7, 1.8, 4.4, 4.5, 11.6, 11.7, 11.8, 11.9 and Implementation Measures 1.1.1, 1.3.1, 1.6.2, 1.8.1, 1.8.3, 4.4.1, 11.6.1 and 11.7.1.) Directing growth to certain areas of the City and increased density could increase the amount of new housing occurring in those areas, thereby resulting in new development built to maximum allowable height and bulk, potentially increasing building height and mass compared to exiting buildings. In addition, new construction could result in impacts related to erosion and the loss of topsoil by promoting housing construction on undeveloped sites. Both the potential for heavier buildings and the construction of housing on vacant or undeveloped sites could result in erosion or the loss of topsoil due to the need for extensive grading.

As discussed under Impact GE-1, the 2004 Housing Element proposes policies that promote development on undeveloped sites to the same extent as the 1990 Residence Element. 2004 Housing Element Policy 1.5 does not represent a policy shift from 1990 Residence Element Policy 1.1. The City’s soft site analysis is essentially the identification of the underutilized and vacant sites, which is the subject of 2004 Implementation Measure 4.1.4. A portion of 2004 Implementation Measure 4.1.4 is similar to 2004 Housing Element Implementation Measure 1.3.3 with respect to development of Brownfield sites, which is not viewed as a policy shift. Therefore, the 2004 Housing Element would result in grading activities to an extent similar to the 1990 Residence Element and would result in a similar amount of erosion or loss of topsoil. In addition, as discussed under Impact GE-1, 2004 Housing Element Policies 3.1, 3.3, and 3.4 would retain existing housing by promoting seismic upgrades/retrofits, maintenance of existing housing, and correction of code violations to a degree similar to the 1990 Residence Element. The preservation of existing housing reduces the pressure for new housing development that could result in increased soil erosion or loss of topsoil. However, as discussed under Impact GE-1, 2004 Housing Element Policies 1.7, 4.4, 11.6, 11.7, and 11.8 would promote increased density compared to the 1990 Housing Element. Construction associated with housing could potentially result in substantial soil erosion or the loss of topsoil through the need for grading activities because increased density would result in heavier buildings that would require deeper foundations and more grading. Therefore, the 2004 Housing Element could promote increased density, which could potentially result in more soil erosion and a greater loss of topsoil compared to the 1990 Residence Element. Although the 2004 Housing Element would not result in the construction of residential units, it would shape how new residential development should occur and
on underused, vacant and surplus lands (Policy 1.3 and Implementation Measures 3 and 4), which have the potential to be contaminated. Although some 2009 Housing Element policies could increase the potential to encounter contaminated sites, 2009 Housing Element Policy 13.4 and Implementation Measure 36 could potentially reduce this impact by encouraging preservation of existing housing units, potentially reducing demolition and the corresponding exposure hazards, as described under Impact HZ-1. Furthermore, as discussed extensively in Section V.E (Cultural and Paleontological Resources) under Impact CP-1, and throughout this EIR, both the 2009 Housing Element contains numerous policies that promote the preservation of existing housing units. Retention of existing housing could reduce the potential for new construction that may occur on contaminated sites, but could also maintain units that may already be contaminated with LBP and ACM.

The 2009 Housing Element would not result in the construction of residential units, though all new development would be required to comply with all applicable federal, state, and local regulations. Therefore, the 2009 Housing Element would have a less than significant impact with respect to upset and accident conditions involving the release of hazardous materials into the environment.

Impact HZ-3: The proposed Housing Elements would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. (Less than Significant)

Residential uses typically do not generate hazardous materials and household hazardous materials are typically labeled to ensure proper use. The exact location and quantity of hazardous materials associated with new housing is unknown. However, as discussed under Impact HZ-1, an increase in residential uses could result in additional transport, use and disposal of hazardous materials. The majority of the City's industrial and commercial land uses are clustered in the southeastern portion of the City near U.S. Highway 101. However, the Housing Elements would not directly result in new construction or locating new housing near existing or proposed schools and would have no effect on the emission of hazardous substances.

Although hazardous materials and waste generated from construction of housing may pose a health risk to nearby schools, all businesses associated with housing construction that handle or involve on-site transportation of hazardous materials would be required to comply with the provisions of the City's Fire Code and any additional regulations as required in the California Health and Safety Code Article 1 Chapter 6.95 for a Business Emergency Plan, which would apply to those businesses associated with construction activities. Both the federal and state governments require all businesses that handle more than a specified amount of hazardous materials to submit a business plan to a regulating agency. In addition, implementation of federal and state regulations would minimize potential impacts by protecting schools from hazardous materials and emissions. For example, federal regulations such as RCRA would ensure that hazardous waste is regulated from the time that the waste is generated until its final disposal, and NESHAP would protect the general public from exposure to airborne contaminants that are known to be hazardous to human health. The HMUPA is responsible for CUPA authority in the City and would require all businesses handling hazardous materials to create a Hazardous Materials Business Plan which would reduce the risk of an accidental hazardous materials release.
Brownfield or infill development sites. As discussed under Impact HZ-1, 2004 Housing Element Policies 1.7, 4.4, 11.6, 11.7, and 11.8 could promote increased density and housing construction, which could potentially increase development pressure on hazardous materials sites. 2004 Housing Element Implementation Measures 1.3.3 and 4.1.4 are both related to development of Brownfield sites, but are not considered to represent a shift in City policy. 2004 Housing Element Implementation Measure 4.1.7 more generally states that appropriate sites, which could include Brownfields, shall be identified for permanently affordable housing. Because of restrictions already imposed on such sites, there would be no significant impacts related to hazardous materials sites following remediation. Remediation efforts could, however, impact below ground resources including cultural resources, geology and soils, and hydrology and water quality. Impacts related to hazardous waste sites are typically project-specific and projects on Brownfield sites would be subject to the review and/or mitigation imposed by the City's SFDPH and/or the applicable regulator of hazardous waste. Specific mitigation measures would be developed in consultation with the SFDPH based on the real or perceived contaminants that may be onsite.

As discussed above, the 2004 Housing Element includes policies that would encourage higher residential density in underutilized commercial and industrial areas but also stresses that harmful effects should not occur as a result. For the most part, the areas mentioned in 2004 Housing Element Implementation Measure 1.3.2 comprise the Eastern Neighborhoods portion of the City. As outlined in the Eastern Neighborhoods EIR, the change in land use from an existing industrial use to new residential units would require adherence to strict cleanup levels. 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. Because of the well-established regulatory framework for site assessment and remediation, impacts related to exposure to hazardous materials due to land use changes are considered less than significant.

Development of Brownfield sites or redevelopment of former commercial and industrial sites to residential uses would be required to undergo remediation and cleanup under DTSC and the SFRBWQCB before construction activities could begin. If contamination at any specific project were to exceed regulatory action levels, the project proponent would be required to undertake remediation procedures prior to grading and development under the supervision of the City's SFDPH, HMUPA, or the SFRBWQCB (depending upon the nature of any identified contamination). The 2004 Housing Element would direct new construction to Brownfield sites and former commercial and industrial sites that would be required to comply with all applicable federal, state, and local regulations. Therefore, the 2004 Housing Element would have a less than significant impact with respect to development of hazardous materials sites.

2009 Housing Element Analysis

The following 2009 Housing Element implementation measures could result in impacts related to hazardous materials sites by siting residential uses in formerly commercial or industrial areas and on Brownfield or infill development sites. The 2009 Housing Element promotes residential development on
PIER 70 MIXED-USE DISTRICT PROJECT
VOLUME 2

CITY AND COUNTY OF SAN FRANCISCO
PLANNING DEPARTMENT: CASE NO. 2014-001272ENV
STATE CLEARINGHOUSE NO. 2015052024

DRAFT EIR PUBLICATION DATE: DECEMBER 21, 2016
DRAFT EIR PUBLIC HEARING DATE: FEBRUARY 9, 2017
DRAFT EIR PUBLIC COMMENT PERIOD: DECEMBER 22, 2016 - FEBRUARY 21, 2017

Written comments should be sent to:
Lisa Gibson
Acting Environmental Review Officer
San Francisco Planning Department
1650 Mission Street, Suite 400
San Francisco, CA 94103
lisa.gibson@sfgov.org
point informing the public of potential risks associated with use of the structure and prohibiting public access.

**Impact GE-4:** The Proposed Project would not create substantial risks to life or property as a result of locating buildings or other features on expansive or corrosive soils. *(Less than Significant)*

Much of the project site is underlain directly by bedrock, which is not expansive. The artificial fill beneath the project site is sandy and gravelly and would not be expansive. The Young Bay Mud is below the water table and is permanently saturated; therefore, it would not be subject to moisture changes that would cause expansion and contraction of the clay materials. Further, any backfill materials used for the Proposed Project would have a low expansion potential and would be adequately compacted in accordance with the recommendations of the geotechnical report prepared for the Proposed Project. Although corrosive soils have been identified at the project site, as discussed in “Corrosive Soils” on pp. 4.N.8-4.N.9, buried features of the Proposed Project would be constructed to resist corrosion in accordance with the San Francisco and Port of San Francisco Building Codes. Therefore, impacts related to problematic soils would be less than significant. No mitigation is necessary.

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

The 35-foot-tall Irish Hill remnant is not considered a unique geologic or physical feature because it does not embody distinctive characteristics of any regional or local geologic principles; does not provide a key piece of information important to geologic history; does not contain minerals not known to occur elsewhere in the county; and is not used as a teaching tool. The remnant of Irish Hill is a prominent historic topographic feature in San Francisco. However, it was nearly leveled by extensive blasting and quarrying during the late 1800s and early 1900s, as described in “Project Site Topography and Geology,” p. 4.N.2. Therefore, the existing hill is not representative of the original topography. In addition, construction of the new 21st Street would remove only the northern spur of the hill, and would not substantially alter the existing topography. Irish Hill is a contributing landscape feature of the Union Iron Works Historic District; the potential effects on this historic resource are addressed in Section 4.D, Cultural Resources.

As described in “Site Grading,” in Chapter 2, Project Description, p. 2.67-2.69, site grades would be increased by up to 5 feet to prevent inundation due to sea level rise. However, this grading would not result in a substantial change in topography because no existing slopes would be eliminated and no new slopes would be created as a result of raising the site grade. Therefore, impacts related to alteration of topography and unique geologic or physical features of the site would be less than significant. No mitigation is necessary.
National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, How to Complete the National Register of Historic Places Registration Form. If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property
   Historic name: Fireman's Fund Insurance Company Home Office
   Other names/site number: University of California at San Francisco Laurel Heights Campus
   Name of related multiple property listing: N/A

(Enter "N/A" if property is not part of a multiple property listing)

2. Location
   Street & number: 3333 California Street
   City or town: San Francisco 94118 State: CA County: San Francisco 075
   Not For Publication: ❑ Vicinity: ❑

3. State/Federal Agency Certification
   As the designated authority under the National Historic Preservation Act, as amended,
   I hereby certify that this ___ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

   In my opinion, the property ___ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

   ___ national ___ statewide ___ local

   Applicable National Register Criteria:
   ___A ___B ___C ___D

   ____________________________
   Signature of certifying official/Title: Date

   ____________________________
   State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

   ____________________________
   Signature of commenting official: Date

   Title: State or Federal agency/bureau or Tribal Government
located in the center of the property. There is also a much smaller, one-story Service Building in the northwest corner of the property. The two buildings were designed to complement each other in character and materials. The Office Building is a glass walled building with an open character. The Service Building is a brick building with a closed character. The Office Building is an International Style building which despite its size is built into its sloping hillside site in such a way as to minimize its presence. Its four wings, each built for different functions, range from three floors to seven floors. It is characterized by its horizontality, its bands of windows separated by the thin edges of projecting concrete floors, and brick trim. The wings of the building frame outdoor spaces whose landscape design connects the outdoors with the indoors both functionally and conceptually. The landscape design includes outdoor spaces for use by employees, parking lots, circulation paths, and vegetation. The principal outdoor spaces are the Entrance Court, the Terrace, and small areas around the Auditorium.

Narrative Description

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The Fireman’s Fund Home Office property is located in a central area of the north half of the City of San Francisco near the intersection of two principal streets, California and Presidio. The property occupies almost all of a large irregular block bound by California Street on the north, (continuing clockwise) Presidio Avenue on the east, Masonic Avenue on the southeast, Euclid Avenue on the south, and Laurel Street (in straight and curved sections) on the west. Fireman’s Fund occupies about 10.2 acres—the entire block except for a small triangular parcel at the corner of California and Presidio. (See Map 1 and Map 4)

The site itself slopes down from about 300 feet in elevation in the southwest corner to about 225 feet in the northeast corner. It is part of a cluster of low hills associated with Lone Mountain whose several high points were developed as cemeteries in the nineteenth century. The Fireman’s Fund site was previously a portion of the Laurel Hill Cemetery, and was long recognized for its views. Today there are distant views from the property to the southeast and downtown, to the northwest and a partial view of the Golden Gate Bridge, and to the west into the Richmond District.

The property is surrounded on all sides by thoroughly developed parts of the City of San Francisco. The site itself is at a junction of several different historical developments. To the east and north, the streets are laid out in a modified extension of the original grid of the city. Across Presidio Avenue on the east the neighborhood is called the Western Addition, characterized by a mix of middle-class homes built in the nineteenth century, and by flats and apartments built in
Horizontal bands of nearly identical window units

Uninterrupted glass walls

Window units of aluminum and glass

Circular garage ramps

Exposed concrete piers over the Garage

Wrought iron deck railings that match gates in the landscape

Brick accents and trim

Service Building

Massing of rectangular volumes

Brick walls with a minimum of openings

Landscape

Terrace, as the “centerpiece” of the landscape, designed to integrate the architecture of the building with the site and with the broader setting (through views of San Francisco); key character-defining features include its biomorphic-shaped lawn surrounded by a paved terrace and patio (paved with exposed aggregate concrete divided into panels by rows of brick); brick retaining wall and large planting bed around the east and north sides of the paved patio, custom-designed wood benches, and three circular tree beds constructed of modular sections of concrete.

Entrance Court, providing a connection between the Executive/Visitors Gate on Laurel Street and an entrance to the building on the west side of the Cafeteria Wing; key character-defining features include a central paved parking lot surrounded on its north, east, and west sides by narrow planting beds; exposed aggregate sidewalks along the north, east, and west sides of the parking lot; and a low free-standing brick wall along its north side.

Auditorium’s two outdoor sitting areas—one on the east side of the Auditorium and one on its west side—that connect to entrances into the Auditorium; key character-defining features for the area on the west side of the Auditorium include the pavement (exposed aggregate divided into panels by rows of bricks), circular tree bed constructed of modular sections of concrete; and metal benches; key character-defining features for the area on the east side of the Auditorium include the pavement (concrete divided into panels by wood inserted into expansion joints).
EXHIBIT F
S U R V E Y
of
California Registered Historical Landmarks

Name: SITE OF LAUREL HILL CEMETERY
Number: 760

County: San Francisco

Location: SE Corner Walnut and California, 3333 California St., San Francisco


Condition of Plaque: Excellent, but needs cleaning

Condition of Base: Mounted to brick wall

Condition of Surroundings: Good

Wording on Plaque: FORMER SITE OF LAUREL HILL CEMETERY
1854-1946

The builders of the West, Civic and Military Leaders, Jurists, Inventors, Artists, and eleven United States Senators were buried here -- The most revered of San Francisco's hills.

Are there Highway Directional Signs? NO If so, where?

Remarks:

Plaque on private property.

Submitted by: Jim Arbuckle
Date: 4-26-79
FORMER SITE OF
LAUREL HILL CEMETERY
1854 - 1946

AND PART OF THE LAND ON WHICH
THE OLDEST HOUSE IN SAN FRANCISCO
STOOD AT THIS LOCATION
CA. 1850 - 1851

CALIFORNIA HISTORICAL
HISTORICAL LANDMARK NO.

MADE PLATE 1967
Remarks of
GARDINER JOHNSON
Member of California Historical Society
(Past President, The Bar Association of
San Francisco; now chairman of the
Association's Committee on the History
of the Bench and Bar.
Former Member, California Legislature
(1935-1947; 18th Assembly District)

San Francisco - May 31, 1961

"LAUREL HILL CEMETERY - BURIAL PLACE OF
SAN FRANCISCO'S HISTORIC DEAD."

As a member of the California Historical Society I am pleased to join
with my associates in that organization and the members of the State Park Com-
mission in placing this plaque marking the site of historic "Laurel Hill Cemetery,"
which was originally known as "Lone Mountain Cemetery."

The inscriptions on the monuments in a city's early cemeteries usually
record the dramatic history and the adventure of its founding. In Laurel Hill
Cemetery, which existed from 1854 to 1946, were found the most famous and illus-
trious names of early San Francisco. For instance, here there were recorded the
inscriptions on the graves of eleven United States Senators; six from California;
four from Nevada; and one from Oregon.

Here were buried the last remains of Baker and Broderick:

Edward D. Baker, the former San Francisco lawyer who became a United
States Senator from Oregon, and who, while still a member of the Senate, was killed
leading his first charge at the Battle of Ball's Bluff on the banks of the Potomac
on October 21, 1861; and

David C. Broderick, stone-cutter's son and volunteer fireman in New York
City, who became a United States Senator from California only to be killed in a
duel with Judge David S. Terry of the State Supreme Court. He died on September 16,
1859.
In addition to Broderick, the other United States Senators from California buried in Laurel Hill were James A. McDougall, William M. Gwin, Milton Latham, Aaron A. Sargent, and John F. Miller.

The four Senators from Nevada were William Sharon, James G. Fair, John Percival Jones, and William M. Stewart. The Senator from Oregon was Edward D. Baker.

For many years prior to 1853 San Francisco's principal cemetery was the Cemetery of Yerba Buena which was located in the area between Market, McAllister and Larkin Streets (near where the City Hall stands to-day). By November, 1853, many thoughtful people in San Francisco considered the Yerba Buena Cemetery site to be too near to the city for a permanent burial place. Accordingly, the Lone Mountain Cemetery project was undertaken by a private corporation composed of Nathaniel Gray, Frank B. Austin and William H. Ranlett.

The new cemetery grounds were to be located near "Lone Mountain" situated three or four miles west of the plaza. From the summit of this beautifully-shaped hill it was then possible to obtain one of the finest and most extensive views of both land and water. The title "Lone Mountain" Cemetery was selected by a council of advisers. The name was changed to Laurel Hill Cemetery in 1867.

Originally the planners intended to include in the grounds a tract of land about 320 acres in extent, the entire tract lying between the Presidio and the Mission. Subsequently, it was found that 160 acres would form a sufficiently large cemetery, and so the limits of the original plan were reduced. Because of the reduction in the size of the project, "Lone Mountain" was not situated within the cemetery boundaries, but adjoined them on the south.

The dedication of Lone Mountain Cemetery was held at 11:00 o'clock A.M. on May 30, 1854. It was reported that the weather was beautiful, and that ladies comprised at least one-half of those present. There were no street cars at that time; in fact, there were no streets within miles of the place. The only available
Former Site of Laurel Hill Cemetery 1854-1946

The Builders of the West, Civic and Military Leaders, Jurists, Inventors, Artists, and Eleven United States Senators Were Buried Here -- The Most Revered of San Francisco's Hills.

California Registered Historical Landmark No. 760

EXHIBIT  G
3333 California Street, Mixed-Use Project
Initial Study: Case No. 2015-014028ENV

PART 2, Exhibits H-M
PRELIMINARY GEOTECHNICAL INVESTIGATION
3333 CALIFORNIA STREET
San Francisco, California

Prepared For:
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Peter Brady, P.E.
Senior Staff Engineer

Hadi J. Yap, Ph.D. G.E.
Vice President

3 December 2014
731639901
Groundwater levels encountered in borings drilled at the site were generally between 18 and 38 feet bgs, which is below the soil susceptible to liquefaction. Therefore, we conclude the potential for liquefaction at the site is very low. Consequently, we conclude the potential for lateral spreading is also very low.

6.3 Seismic Densification

Seismic densification can occur during strong ground shaking in loose, clean granular deposits above the water table, resulting in ground surface settlement. Up to 15 feet of loose to medium dense sand was encountered in the borings above the water table. The loose and medium-dense sand may densify during an earthquake. We estimate settlement that may result from cyclic densification of the sand would be between ¼ and 1 inch, depending on thickness of the sand. The basement for the proposed buildings should remove most of the soil susceptible to seismic densification; therefore, we estimate less than ¼ inch of settlement should occur under the proposed buildings.

7.0 DISCUSSION AND CONCLUSIONS

On the basis of the results of our subsurface exploration, laboratory testing, and engineering studies, we conclude the proposed development is feasible from a geotechnical engineering standpoint. The primary geotechnical issue associated with the proposed development is the presence of fill and loose sand. These materials will affect foundation support and temporary excavation support. Our discussion and conclusions regarding these issues and their impact on the design and construction of the proposed structure are discussed in the following sections.

7.1 Foundations and Settlement

We understand the new buildings are planned with one below-grade level for parking. We anticipate stiff to very stiff clay, medium dense sand, and bedrock will be exposed at the foundation level. Where fill or loose sand is present below the planned depth of excavation additional excavation will be required to gain adequate support. Where this condition exist, the footing can be deepened or the over-excavation backfilled with lean concrete. On the basis of our engineering studies, we conclude the proposed buildings can be supported on shallow footings gaining support in the native soil or bedrock. We estimate total settlement of footings would be on the order of ½ to 1 inch, depending on the bearing material. Differential settlement between adjacent footings would be on order on one half of the total settlement. Where footing subgrade consists of medium dense sand, we estimate up to ¼ inch of seismic densification settlement could occur as discussed in Section 6.3.
The existing parking garage beneath the eastern wing of the main building extends three levels below grade. New building that will be constructed adjacent to the parking garage may impose surcharge on the basement wall of the parking garage. To avoid surcharging the wall, the western perimeter wall of the new building may need to be supported on drilled piers that gain support in the bedrock below the elevation of the bottom of the parking garage.

### 7.2 Excavation and Shoring

The proposed single basement will require an excavation of approximately 12 feet below the ground surface. The primary considerations related to the selection of the shoring system are:

- the presence of fill (which contains construction debris) and loose to medium-dense sand
- the potential settlement of adjacent structures and improvements caused by movement of the temporary shoring.

During excavation, the sides of the excavation and adjacent streets should be retained. The most common, and generally the most economical shoring system in the San Francisco Bay area is a soldier-pile-and-wood-lagging system. This shoring system consists of steel piles that are placed in predrilled holes; the annulus between the piles and the sides of the hole is backfilled with concrete. Wood lagging is placed between the soldier piles as excavation proceeds. For an excavation on the order of 12 feet deep, the shoring can be designed as a cantilever system. If the excavation is significantly deeper than 12 feet, tiebacks or internal bracings could be installed to provide lateral resistance and limit deflection. Considering the proposed depth of the excavation, we judge a cantilever soldier-pile-and-lagging shoring system could be used for this project.

A three-level, below-grade, parking garage is present beneath the eastern wing of the main building. To retain the excavation sides for the multi-level basements, a retaining system with tiebacks may have been used. Therefore, tiebacks may be encountered during basement excavation for new structure located east of the parking garage.

Drilling of the shafts for the soldier piles will likely require casing and/or use of drilling mud (slurry) to prevent caving. To prevent settlement of adjacent improvements, soldier
piles should not be installed by driving or vibratory methods. A monitoring program should be established to evaluate the effects of the construction on the adjacent buildings and surrounding ground.

Sand with low fines content was encountered within the zone of excavation. To reduce caving, lagging boards should be placed with every foot of excavation to limit caving. Voids that result from caving soil behind wood lagging should be grouted before proceeding to the next row of lagging.

The bottom of excavation should be above the groundwater level. During drilling of the soldier-pile holes, groundwater or perched water may be encountered. To keep the holes from caving, casing and/or drilling slurry may be needed. Alternatively, the soldier piles may be installed using auger-cast method.

Generally, soldier piles can be installed under the City’s sidewalk provided that the top 3 feet of the soldier piles are removed after the permanent basement wall is cast. If tiebacks are needed, it has been our experience that using hollow-stem augers to install tiebacks in sand will result in loss of ground. Therefore, tiebacks, if required, should be installed using smooth-cased method (such as a Klemm rig) to reduce loss of ground.

The selection, design, construction, and performance of the shoring system should be the responsibility of the contractor and its shoring designer. A structural engineer knowledgeable in this type of construction should design the shoring.

7.3 Basement Floor Slabs

The soil at slab subgrade should consist of stiff to very stiff clay, medium dense sand, and bedrock. Therefore, the slabs may be supported on grade. If weak soil is present at subgrade level, the weak soil should be removed and replaced as engineered fill.

7.4 Corrosion Potential

The near surface soil was determined to be moderately corrosive. The corrosive soil will adversely affect below grade improvements, such as foundations and utilities. The results of the tests and more specific commentary and recommendations for protection of buried structures are presented in Appendix D.
7.5 Construction Considerations

If site grading is scheduled for the rainy season, usually between November and April, the near-surface soil may be too wet to achieve adequate compaction during site preparation and fill placement and may deflect significantly under the weight of construction equipment. For these conditions, moisture conditioning of the material and the use of lightweight equipment may be required to lower the soil to a moisture level that will promote proper compaction. Methods of moisture conditioning include mixing and turning (aerating) the soil to naturally dry the soil and lower the moisture content to an acceptable level. Aeration typically requires at least a few days of warm, dry weather to effectively dry the material. Other soil stabilization alternatives to provide a stable, workable subgrade for grading operations and other equipment include over-excavating the wet soil and replacing with drier material and/or mixing the soil with lime and/or cement.

If localized soft or wet areas are encountered, it may be necessary to over-excavate to a depth of 18 to 24 inches, place a layer of stabilizing geo-synthetic, and backfill with granular material to stabilize the subgrade and bridge the soft material.

At some locations, the excavation for the basement will encounter bedrock. Rock types will vary vertically and laterally. Also, the degree of weathering, fracturing and jointing will vary within each rock type. In San Francisco, excavation in rock has been performed with earth moving equipment, such as loaders and heavy-duty backhoes. However, because the quality of the rock varies, hard rock may be encountered that will require excavation using hoe-rams or dozers equipped with rippers. Jack hammering may be required in areas where the rock exhibits little weathering, fracturing, or jointing and in confined areas, such as footing and utility excavations.

Bedrock encountered in the borings consists of serpentinite and sandstone. Serpentinite contains naturally occurring asbestos. Therefore, a Site Mitigation Plan (SMP) may need to be prepared prior to construction. Bedrock handling and disposal should be performed in accordance with the SMP.
The contractor should be aware that there may be existing shoring elements, such as tiebacks behind basement walls, which could have been installed during the construction of the three-level parking garage. In addition, remnants of building footings within the site may be encountered during excavation.

8.0 RECOMMENDATIONS

Recommendations regarding site preparation, foundation design, floor slabs, and seismic design are presented in the following sections.

8.1 Site Preparation and Grading

This section presents earthwork recommendations for site preparation and grading.

8.1.1 Site Clearing

Site demolition should include the removal of all slabs, foundations, retaining walls, pavements, utilities, and other below-grade improvements that will interfere with the proposed construction. Where utilities that are removed extend off site, they should be capped or plugged with grout. It may be feasible to abandon utilities in-place by filling them with grout, provided they will not impact future utilities or building foundations. The utility lines, if encountered, should be addressed on a case-by-case basis.

8.1.2 Temporary Slopes

Excavations deeper than five feet that will be entered by workers should be shored or sloped for safety in accordance with the Occupational Safety and Health Administration (OSHA) standards (29 CFR Part 1926). Inclinations of temporary slopes should not exceed those specified in local, state or federal safety regulations. As a minimum, the requirements of the current OSHA Health and Safety Standards for Excavations (29 CFR Part 1926) should be followed. The Contractor should determine temporary slope inclinations based on the subsurface conditions exposed at the time of construction. However, temporary slopes less than 10 feet high should be inclined no steeper than 1.5:1 (horizontal to vertical). In addition, we recommend all vehicles and other surcharge loads be kept at least 10 feet away from the tops of temporary slopes.
8.1.3 Site and Subgrade Preparation

All areas to receive improvements should be stripped of vegetation and organic topsoil. Stripped materials should be removed from the site or stockpiles for later use in the landscaped areas, if approved by the landscape architect. Voids resulting from the demolition activities should be properly backfilled with lean concrete or engineered fill as described below.

Prior to placement of any engineered fill, the onsite soil exposed by stripping should be scarified to a depth of at least 12 inches, moisture-conditioned to at least three percent above optimum moisture content, and compacted to at least 95 and 90 percent relative compaction\(^9\) for sand and clay, respectively. The soil subgrade should be kept moist until it is covered by select fill.

If soft areas are encountered during site preparation and grading, the soft material should be removed and replaced with engineered fill. If the soft material is deeper than 24 inches, we recommend over-excavating to a depth of 18 to 24 inches, placing a geotextile fabric, such as Mirafi 500X or approved equal at the bottom of the over-excavation, and backfilling with granular material. Alternatively, the over-excavation can be backfilled with lean concrete.

8.1.4 Fill Placement and Compaction

Fill should consist of onsite or imported soil that is non-corrosive, free of organic matter or other deleterious material, contains no rocks or lumps larger than four inches in greatest dimension, has a liquid limit of less than 25 and a plasticity index lower than 8, and is approved by the Geotechnical Engineer.

Fill should be placed in horizontal lifts not exceeding eight inches before compacted, moisture-conditioned to above optimum moisture content, and compacted to at least 90 percent relative compaction. Fill thicker than five feet and/or consisting of clean sand or gravel (soil with less than 10 percent fines by weight) should be compacted to at least 95 percent relative compaction.

We should be provided with samples of proposed fill at least three days before use at the site. The grading contractor should provide analytical test results or other suitable environmental documentation indicating the imported fill is free of hazardous materials at least three days before use at the site. If this data is not available, up to two weeks should be allowed to

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\(^9\) Relative compaction refers to the in-place dry density of soil expressed as a percentage of the maximum dry density of the same material, as determined by the ASTM D1557 laboratory compaction procedure.
perform analytical testing on the proposed import material. A bulk sample of approved fill should be provided to us at least three working days before use at the site so a compaction curve can be prepared.

8.1.5 Utility Trenches

We anticipate excavations for utility trenches can be made with a backhoe. All trenches should conform to the current CAL-OSHA requirements.

Utility trenches should be excavated a minimum of four inches below the bottom of pipes or conduits and have clearances of at least four inches on both sides. Where necessary, trench excavations should be shored and braced to prevent cave-ins and/or in accordance with safety regulations. If trenches extend below the groundwater level, it will be necessary to temporarily dewater them to allow for placement of the pipe and/or conduits and backfill.

To provide uniform support, pipes or conduits should be bedded on a minimum of four inches of sand or fine gravel. After pipes and conduits are tested, inspected (if required), and approved, they should be covered to a depth of six inches with sand or fine gravel, which should then be mechanically tamped to at least 90 percent relative compaction. If fill with less than 10 percent fines is used, the entire depth of the fill should be compacted to at least 95 percent relative compaction. Jetting of trench backfill should not be permitted. Special care should be taken when backfilling utility trenches in pavement areas. Poor compaction may cause excessive settlements resulting in damage to the pavement section.

Where utility trenches backfilled with sand or gravel enter the building pads, an impermeable plug consisting of either native clay or lean concrete, at least five feet in length, should be installed where the trenches enter the building. Furthermore, where sand- or gravel-backfilled trenches cross planter areas and pass below asphalt or concrete pavements, a similar plug should be placed at the edge of the pavement. The purpose of these recommendations is to reduce the potential for water to become trapped in trenches beneath the building or pavements. This trapped water can cause heaving of soils beneath slabs and softening of subgrade soil beneath pavements.

8.1.6 Exterior Slabs

To reduce the potential for differential movement and cracking, exterior concrete slabs should be underlain by at least 4 inches of Class 2 aggregate base. The upper 12 inches of the soil subgrade should be compacted to at least 95 and 90 percent relative compaction for sand and clay, respectively.
TABLE 4  
 Depths to Bedrock

<table>
<thead>
<tr>
<th>Boring</th>
<th>Approximate Ground Surface Elevation Feet</th>
<th>Approximate Depth to Bedrock Feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>B-1</td>
<td>269</td>
<td>31</td>
</tr>
<tr>
<td>B-2</td>
<td>269</td>
<td>15</td>
</tr>
<tr>
<td>B-3</td>
<td>245</td>
<td>7</td>
</tr>
<tr>
<td>B-4</td>
<td>302</td>
<td>18</td>
</tr>
<tr>
<td>B-5</td>
<td>301</td>
<td>10</td>
</tr>
<tr>
<td>EB-5</td>
<td>246</td>
<td>11</td>
</tr>
</tbody>
</table>

Uplift loads may be resisted by the weight of the footings and any overlying soil. If the weight of these is not sufficient to provide the necessary uplift resistance, drilled piers or anchors may be used. If anchors are required, we should provide recommendations for their design. Drilled pier recommendations are presented in section 8.3.

The foundation subgrade should be free of standing water, debris, and disturbed materials prior to placing concrete. If fill, soft, or loose soil is present at the foundation subgrade, it should be removed to expose competent material and be replaced by lean concrete.

We should check foundation excavations prior to placement of reinforcing steel to check for proper bearing and moisture. Maintaining proper moisture will likely require wetting the excavations periodically until the concrete is placed.

8.3 Drilled Piers

As mentioned in Section 7.1, the existing parking garage beneath the eastern wing of the main building extends three levels below grade. New building that will be constructed adjacent to the parking garage may impose surcharge on the basement wall of the parking garage. To avoid surcharging the wall, the western perimeter wall of the new building may need to be supported on drilled piers that gain support in the bedrock below the elevation of the bottom of the parking garage. After the building layout is finalized, we should evaluate the need and refine our recommendations for drilled piers.

Drilled piers should be designed to derive their axial capacity from skin friction in the bedrock below adjacent building walls and foundations. For axial compression loads, drilled piers should
be designed using an allowable friction value of 2,000 psf; this value includes a factor of safety of approximately 2. Drilled piers should have a minimum diameter of 24 inches. Piers installed in a group should be spaced at least three diameters on center. For temporary uplift load, the skin friction value recommended for compressive capacity should be used. Total settlement of drilled piers should be small.

Resistance to lateral loads can be obtained from: 1) passive resistance acting on pier caps and grade beams oriented perpendicular to the direction of lateral load, and 2) lateral resistance of the piers. Passive resistance of pier caps and grade beams may be calculated using the recommendations we provided for shallow foundations. Lateral resistance of piers will depend on the stiffness of the pier, the strength of the surrounding soil, allowable deflection of the pier top, and the moment induced by the pier. If drilled piers are used, we can prepare moment and deflection profiles resulting from lateral loads.

Drilled piers should be installed by a qualified contractor with demonstrated experience in this type of foundation. Loose material may potentially cave during drilling, thus casing and/or drilling fluid may be required. Casing should extend to below any caving material. If casing is not extended through caving material, water or drilling slurry should be used, to stabilize holes. Concrete placement should start upon completion of the drilling and clean out. Concrete should be placed from the bottom up in a single operation using a tremie and/or a pumper pipe. The pipe should be maintained at least five feet below the upper surface of the concrete during casting of the piers. As the concrete is placed, casing used to stabilize the hole can be withdrawn. The bottom of the casing should be maintained at least three feet below the surface of the concrete.

8.4 Excavation and Temporary Shoring

Where space does not permit a sloped excavation, shoring will be required. We judge a cantilever soldier pile and lagging shoring system is the most appropriate for the depth of the excavation planned and types of soil present. For the design of the cantilever shoring system, we recommend using a lateral pressure corresponding to equivalent to an equivalent fluid unit weight of 40 pcf in soil and 25 pcf in rock; the depth to bedrock at boring location is presented in Table 4.

Penetration of soldier piles should be sufficient to provide lateral stability. For lateral resistance below the bottom of the excavation, we recommend using an allowable passive pressure of 2,000 psf. The passive value includes a factor of safety of about 1.5 and can be applied over
three pile diameters or the pier spacing, whichever is less. If traffic loads are expected within 10 feet of the shoring system, we recommend designing for an additional load of 100 psf applied to the upper 10 feet of the wall.

A soldier pile and lagging system is relatively flexible, and movement should be anticipated. If the shoring system is properly designed and installed, we expect movements at the top of the shoring should not exceed one inch.

8.5 Basement Floor Slabs

We anticipate that stiff to very stiff clay, medium dense sand, or bedrock will be exposed beneath the proposed building floor slabs; therefore, we conclude the slabs can be supported on grade.

If the subgrade is disturbed during excavation for footings and utilities, it should be prepared to provide firm support for casting of the slab. Loose, disturbed materials should be excavated, removed, and replaced with engineered fill or lean concrete during final subgrade preparation.

We recommend installing a capillary moisture break and a water vapor retarder if water vapor moving through the slab is unacceptable or if there are finished floor coverings susceptible to moisture. A capillary moisture break consists of at least four inches of clean, free-draining gravel or crushed rock. The vapor retarder should meet the requirements for Class C vapor retarders stated in ASTM E1745-97. The vapor retarder should be placed in accordance with the requirements of ASTM E1643-98. These requirements include overlapping seams by six inches, taping seams, and sealing penetrations in the vapor retarder. The vapor retarder should be covered with two inches of sand to aid in curing the concrete and to protect the vapor retarder during slab construction. The particle size of the gravel/crushed rock and sand should meet the gradation requirements presented in Table 5.
8.6 Permanent Below-Grade Walls

Permanent below-grade walls should be designed using an at-rest lateral pressure equivalent to a fluid unit weight of 60 pcf for soil and 45 pcf for rock. Because the site is in a seismically active region, the wall design should be checked for seismic condition. During earthquakes, the walls will be subjected to active pressure plus seismic pressure increment. We used the procedures outlined in (Sitar, et. al., 2012) to compute the seismic pressure increment. The results of our analyses indicate that the design wall pressure for seismic condition is similar to that for static at-rest condition.

If surcharge loads are present above an imaginary 1.5:1 (horizontal: vertical) projected up from the bottom of a retaining wall, a surcharge pressure should be included in the wall design. If this condition exists, we should be consulted to estimate the added pressure on a case-by-case basis.

Where traffic will pass within 10 feet of walls, traffic loads should be considered in the design of the walls. Traffic loads may be modeled by a uniform pressure of 100 psf applied in the upper 10 feet of the walls.

The lateral earth pressures given assume the walls are properly backdrained to prevent buildup of hydrostatic pressure. Backdrains can be provided by using a prefabricated drainage panels over the entire height of the walls. To protect against moisture migration, below-grade walls should be waterproofed and water stops placed at all construction joints. The waterproofing should be placed directly against the backside of the walls unless the manufacturer of the waterproofing directs otherwise.

8.7 Seismic Design

As discussed in Section 4.2, bedrock is relatively deep (31 feet bgs at boring B-1) in the northwest portion of the site, and less than 20 feet bgs (B-2 through B-5) the south and eastern portions of the site.

In accordance with the provision of the 2013 CBC, for the northwestern portion of the site, where bedrock is relatively deep, we recommend seismic design parameters listed below:

- Risk Targeted Maximum Considered Earthquake (MCE) $S_S$ and $S_I$ of 1.514g and 0.688g, respectively.
- Site Class D
• Site Coefficients $F_a$ and $F_v$ of 1.0 and 1.5, respectively

• Maximum Considered Earthquake (MCE) spectral response acceleration parameters at short periods, $S_{MS}$, and at one-second period, $S_{M1}$, of 1.514g and 1.032g, respectively.

• Design Earthquake (DE) spectral response acceleration parameters at short period, $S_{DS}$, and at one-second period, $S_{D1}$, of 1.009g and 0.688g, respectively.

For the eastern and southern portions of the site, where bedrock is relatively shallow, we recommend seismic design parameters listed below:

• Risk Targeted Maximum Considered Earthquake (MCE$_R$) $S_s$ and $S_l$ of 1.514g and 0.688g, respectively.

• Site Class C

• Site Coefficients $F_a$ and $F_v$ of 1.0 and 1.3, respectively

• Maximum Considered Earthquake (MCE) spectral response acceleration parameters at short periods, $S_{MS}$, and at one-second period, $S_{M1}$, of 1.514g and 0.895g, respectively.

• Design Earthquake (DE) spectral response acceleration parameters at short period, $S_{DS}$, and at one-second period, $S_{D1}$, of 1.009g and 0.596g, respectively.

9.0 FUTURE GEOTECHNICAL SERVICES

Prior to construction, we should review the project plans and specifications to check their conformance to the intent of our recommendations. During construction, we should observe excavation, temporary shoring and foundation installation, subgrade preparation and compaction of backfill. These observations will allow us to compare the actual with the anticipated subsurface conditions and check that the contractor’s work conforms to the geotechnical aspects of the plans and specifications.

10.0 LIMITATIONS

The conclusions and recommendations presented in this report result from limited engineering studies and are based on our interpretation of the geotechnical conditions existing at the site at the time of investigation. Actual subsurface conditions may vary. If any variations or undesirable conditions are encountered during construction, or if the proposed construction will differ from that described in this report, Langan Treadwell Rollo should be notified to make supplemental recommendations, as necessary.
EXHIBIT I
Dear John, Kathy, Catherine, M.J., and Dick:

First of all, thank you for the meeting last week at your home. As we agreed in the meeting, we are responding to your recent questions regarding the project. We have re-arranged your questions slightly to group them according to subject. If we haven’t answered any of your questions, please let us know. We very much appreciate your willingness to promptly write back to us with your five outstanding issues on the project that are currently preventing us from obtaining LHIA support for the project. We appreciate your doing this so we can set a follow up meeting to find a mutually workable solution.

**LHIA Questions:**

**Q:** You also stated that Prado wants to have a development agreement to lock in entitlements for longer periods of time than would normally be allowed?

**A:** Yes, we are looking to enter into a development agreement (DA) with the City for a term of approximately 15 years. For large projects with multiple buildings like 3333 California Street, the City generally requires a DA. The DA vests the entitlements, protecting the entitlements from changes in the law in exchange for certain community benefits. This would include the community benefit of certainty of the entitlements during that period. If we did not build the project during the term of the DA, then the DA would expire and we would lose the protections of the DA.

**Q:** What portion of the project would be built first?

**A:** At this time, we have assumed that the Masonic and Euclid buildings would be built first. In general, we anticipate construction beginning with a staging and site preparation phase, which will include some demolition, then excavation for underground parking, followed by construction of the buildings. With the exception of work on the sidewalks, addition of landscaping, paving, and connecting to the City’s various systems and utilities, our general contractor, Webcor Builders, is anticipating that construction will occur within the site. We will be preparing a detailed construction management plan, and the EIR will include mitigation measures around construction emissions, air quality, etc. with which we will have to comply.

**Q:** What would you expect to be built in each successive phase of the project?

**A:** At this time, we anticipate the following in each phase – Phase 1: Masonic and Euclid buildings; Phase 2: Center Buildings A and B; Phase 3: Plaza A, Plaza B and Walnut buildings; and Phase 4: Mayfair Building and Laurel Duplexes.

**Q:** What do you anticipate the total period of time will be during each phase of construction?

**A:** Our current planning assumes that each phase would overlap, e.g., Phase 2 begins approximately 20 months after Phase 1. Specifically, we think Phase 1 could take 30 months, Phase 2 could take 24 months, Phase 3 could take 36 months, and Phase 4 could take 20 months. Assuming an overlap of phases, from start to finish it could take approximately six to seven years to complete all phases of the construction. This construction phasing and related
durations are consistent with and defined in the phasing schedule under review in our environmental application. While the phasing could be accelerated, we have assumed a relatively conservative approach to the construction phasing.

Q: What is the period of time that you anticipate that construction will occur?

A: We anticipate that construction will occur in the spring of 2020.

Q: What is the reason for constructing the project in phases?

A: By allowing for potential phased construction, we would have the ability to complete and occupy portions of the project as each phase is completed. If conditions do not exist to build out the entire project, we can phase construction in order to align with market conditions and financing availability.

Q: How many extensions do you anticipate requesting for the entitlements?

A: None. Any extension of the DA's term would be a material amendment that would require Board of Supervisor's approval.

Q: During those extended periods, would it be possible for Prado to request changes in the project as related specifically to increased height, increased bulk, increased numbers of residential units, increased amounts of retail or office space? What about the possibility of design changes or other changes? Could Prado apply to change any part of the construction to provide the opportunity to have high rise construction?

A: Once the EIR is certified and the project is approved, any material changes to the project would be subject to new environmental review, would require Planning Commission and Board of Supervisor approvals and also an amendment to the DA. Any increase in height over what is entitled in our project would require a revision to the Planning Code and Zoning Maps that would entail Planning Commission and Board of Supervisors approval.

Q: There are genuine concerns about reducing open spaces and reduced on-site parking places.

A: Open space will be part of the entitlements and will likely be considered by the City as one of the public benefits supporting the DA -- for that reason alone, reducing the amount of it would be very difficult if not impossible. The open space requirements will be carefully described in the project's approvals and will also be recorded against the property. So, as with any material changes to the approved project, any material change to the open space would be very difficult and would involve a public process and City approval. As to parking spaces, as you know, the City would like to see the number of spaces reduced. We plan to continue advocating for the proposed number of project parking spaces in our application.

Q: During the phased construction could Prado transfer shares in the project to provide for new or additional investors?

A: We have no plan to transfer any shares in the project and construction lenders generally prohibit any changes of ownership by the project developer during construction and stabilization of a project. PSKS, along with our equity partners and lenders, intend to provide all of the capital necessary to construct, own and operate the project. We plan to
retain day-to-day control of the project during development, construction, stabilization and ongoing operations. We design and build our projects to hold for the long-term owner.

We look forward to reconnecting and thank you again for making the time to meet with us.

Sincerely, Dan

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EXHIBIT J
Introduction

San Francisco was once a nearly treeless land of sand dunes, coastal scrub and wetlands. Trees in San Francisco, however, face a new challenge: trees in San Francisco are estimated at over $100 million. The city's street trees are a valuable capital asset, and for the future, the city must plan to plant and care for its street trees. The Urban Forest Plan offers a vision and strategy to ensure an expanded, healthy and livable urban forest. It is a complex system that needs a long-term plan to ensure its health and longevity. The Urban Forest Plan offers a vision and strategy to ensure an expanded, healthy and livable urban forest.

Historically underfunded and inadequately maintained, the city's street canopy is one of the smallest of any large U.S. city. Our urban forest is a valuable capital asset, but the city's street trees are a complex system that needs a long-term plan to ensure its health and longevity. The Urban Forest Plan offers a vision and strategy to ensure an expanded, healthy and livable urban forest.

Lack of funding has restricted the city's ability to plant and care for its street trees. Maintenance is increasingly being transferred to property owners, which is widely unpopular. Our urban forest is a valuable capital asset, but the city's street trees are a complex system that needs a long-term plan to ensure its health and longevity. The Urban Forest Plan offers a vision and strategy to ensure an expanded, healthy and livable urban forest.

From the Embarcadero's stately Palms to the tall Cypresses of Golden Gate Park, trees are a beloved feature of the city and critical piece of the urban infrastructure. They clean our air and water, create green neighborhoods, calm traffic, improve public health, provide wildlife habitat and absorb greenhouse gases. Annually, the benefits provided by trees in San Francisco are estimated at over $100 million.

Trees in San Francisco, however, face a new challenge: The city's street trees are a valuable capital asset, but the city's street trees are a complex system that needs a long-term plan to ensure its health and longevity. The Urban Forest Plan offers a vision and strategy to ensure an expanded, healthy and livable urban forest.

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Habitat & Biodiversity

San Francisco is home to diverse ecological communities, and the city's urban forest comprises over 1.6 million trees, which can provide a multitude of ecosystem services, such as shade, carbon sequestration, and habitat for wildlife. The city's strategies to promote biodiversity include the planting of street trees that provide food, habitat, and cover for a variety of animal and insect species. San Francisco also strives to create a native palette of plants, shrubs, and grasses that support local wildlife and contribute to the city's ecological integrity.
San Francisco's proximity to the ocean and moderate climate spare the city from extremes of hot and cold. Typical of the California coast, our Mediterranean climate is characterized by dry summers and wet winters. Similar climatic conditions are found in parts of Australia, South America, Africa, and the Mediterranean. This allows a wide variety of animals, trees, and other plants to grow around the globe alike.

The Pacific Flyway, a major north-south route of travel for migratory birds, offers a wide variety of animals, trees, and other plants around the globe alike. Areas with Mediterranean climate are found in parts of Australia, South America, Africa, and the Mediterranean. This is characterized by dry summers and wet winters. Similar climatic conditions are found in parts of Australia, South America, Africa, and the Mediterranean. This allows a wide variety of animals, trees, and other plants to grow around the globe alike.
San Francisco Urban Forest Plan builds on several City policies, programs, and initiatives. The City's Bicycle Plan and Policies, related to cycling networks and open space, provide a foundation for the Urban Forest Plan. These documents provide a framework for greenway networks and streetscape design, with a focus on improving the city's ecological function, street design, and mobility. The Urban Forest Plan provides an opportunity to expand the city's green infrastructure and support habitat creation and recreation opportunities. For a comprehensive list of Urban Forest-related City policies, see Appendix: Existing San Francisco Urban Forest & Green Policies.
The Plan is based on the following five goals for the urban forest:

1. **GOAL 1**: Grow the Urban Forest through new planting to maximize the social, economic and environmental benefits of trees and urban greening.

2. **GOAL 2**: Protect the Urban Forest from threats and loss by preserving the city's existing street trees.

3. **GOAL 3**: Manage the Urban Forest through coordinated planning, design and maintenance to ensure its long-term health and sustainability.

4. **GOAL 4**: Engage residents, public agencies, community groups and the private sector in caring for the urban forest.

5. **GOAL 5**: Fund the Urban Forest by establishing a long-term funding strategy for the city's trees.

Each goal is accompanied by a series of strategies and actions required to achieve it.
increased fog and can be well suited to regions of
more extreme weather conditions. Here may result in
climate changes. San Francisco may experience

mature trees and those with significant benefits.

- Plan trees with high uptake of carbon including fast-
- Tree species that increase carbon storage potential.
- Tree species that increase carbon storage potential.
- Tree species that increase carbon storage potential.
- High-speed arterial streets that are also priority
- Improve design of new tree wells to allow better infil-
- Improve design of new tree wells to allow better infil-
- Create sidewalk gardens and install sidewalk land-
- Create sidewalk gardens and install sidewalk land-
- Conduct a study to determine which street tree spe-
- Remove impermeable surfaces where possible.
- Conduct a study to determine which street tree spe-
- Remove impermeable surfaces where possible.
- Improve design of new tree wells to allow better infil-
- Improve design of new tree wells to allow better infil-

PUBLIC HEALTH

Areas with higher risk of heat vulnerability

Areas with lower than average tree canopy

Areas with limited access to parks and green

High-speed arterial streets that are also priority

- High-speed arterial streets that are also priority
- By buffering of pedestrians from vehicular
- Trees have pedestrian safety and traffic calming effects
- Mental health and physical activity are supported by
- Mental health and physical activity are supported by
- Areas with increased asthma rates
- Areas with increased asthma rates
- Areas with increased asthma rates
- Areas with increased asthma rates
- Areas with increased asthma rates

CARBON SEQUESTRATION & CLIMATE CHANGE

Maximize carbon storage potential of urban

Areas with higher risk of heat vulnerability

Shading and temperature control can be provided by

Areas with lower than average tree canopy

Areas with limited access to parks and green

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CARBON SEQUESTRATION & CLIMATE CHANGE

Maximize carbon storage potential of urban
Stabilize the urban forest by achieving net zero loss of trees. Aside from growing the urban forest through new planting, one of the biggest steps the City can take is to protect and stabilize our existing urban forestry assets. The urban forest has an estimated 4% annual mortality rate. This means thousands of trees die or are removed each year. Many are lost to age, disease, vandalism and illegal removal without permits. New tree planting in San Francisco has not historically kept pace with these losses resulting in a shrinking urban forest canopy. Efforts should be made to replace lost trees and expand tree planting whenever possible.

Replace all dead or removed trees on streets on a 1:1 basis. To stabilize existing tree resources, the City should plant replacement trees whenever trees are removed. If trees cannot be replaced in the same location, planting should take place in available planting sites elsewhere on other streets.

Improve enforcement of existing codes for tree protection including: Public Works Code (Article 16: Urban Forestry Ordinance) and Planning Code (Sec. 138.1 & 428). See Appendix for list of additional tree codes and policies. The City should continue to enforce and look for ways to improve existing regulations governing tree maintenance, care and planting. The City should regularly track the enforcement of these codes and the agencies responsible for implementing them.

Reduce impacts of development on the urban forest.

Improve care and maintenance of street trees through a comprehensive management program. (See MANAGE chapter). Regular ongoing maintenance of the City's trees is one of the most important ways to protect and ensure their long-term health.

Encourage developers to incorporate existing trees into building and site designs. While street trees and significant trees (within 10' of the public right-of-way) are afforded certain protections, many trees on vacant or redevelopment sites are removed to allow for new development. Consideration should be given during review of building plans to the existing trees on the site, especially "significant" trees (20 ft or more in height, 15 ft or greater canopy width, and/or 12 inches or greater in trunk diameter). If trees are removed, efforts should be made to harvest or re-use the wood if possible.

Explore regulatory devices to increase protection of trees during permitting process for garages, curb cuts and driveways. Installation of parking facilities on public and private development often requires the removal of street trees. These include trees of significant size that provide valuable public benefits and a mature canopy. In such cases, where a tree would be impacted, design alternatives such as offset driveways or denial of a permit may be appropriate where existing trees would be removed or new trees cannot be planted.

Require contractors to carry Tree Protection Bonds during construction projects. Construction activities frequently result in accidental damage or loss of trees - including street trees. Development projects with the potential to disturb existing trees should be required to carry Tree Protection Bonds as insurance. Such bonds would allow recourse in the event that significant damage to trees occurs during the development process through fines, tree replacement or other means.

Improve the process for approving Tree Protection Plans for construction projects. Currently, Tree Protection Plans are collected by the Planning Department. Review of these plans should take place with appropriate urban forestry staff. The inspection and enforcement of these plans should occur at the same time as the development process. The City should fully integrate DPW into the Building Permit and Project Tracking System (PPTS). DPW should be involved in the development review process and held accountable for approving Tree Protection Plans.

Under development of urban forests and the agencies responsible for protecting them. The City should continue to enforce and look for ways to improve existing regulations governing tree maintenance, care and planting. The City should regularly track the enforcement of these codes and the agencies responsible for implementing them.
Maintaining Street Trees

Descriptions, standards, and procedures for maintaining street trees.

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