



# Laurel Heights Improvement Association of San Francisco, Inc.

December 14, 2018

By E-Mail To: California.Jobsopr.ca.gov

Governor's Office of Planning and Research

Re: State Clearinghouse No: 2017092053 - 3333 California Street Project  
Application for Environmental Leadership Development Project

These comments are submitted in relation to the additional analysis and revisions requested by the California Air Resources Board (ARB) as to greenhouse gas emissions from the proposed Project and Project Variant, including GHG emissions from mobile emissions from relocated UCSF employees, childcare staff and visitors.

1. Accurate Data from UCSF Surveys of Employee Commute Origin and Destination Should Have Been Used.

We understand that UCSF has its employees complete an annual commute survey showing trip origin and destination, side trips, and mode approximately every year. The transportation study for the 2014 UCSF LRDP EIR states that UCSF conducts an annual survey of staff and student travel. (Exhibit A, excerpts, pp. 22, 123) From this information, the distance of UCSF employee travel could be determined. CARB should require the applicant to provide the most accurate information as to the distance of UCSF employee travel rather than relying upon projections in UCSF's 2014 LRDP which merely focus on the mode share such as whether they drive rather than the distance of vehicle miles traveled. Many UCSF employees commute long distances to employment locations in San Francisco, such as from the South Bay, East Bay, and Marin County locations.

The applicant's supplemental information ignored information on distance of employee travel "collected by UCSF as part of their ongoing surveys of employees, patients, visitors and residents" that was contained in the 2014 UCSF LRDP EIR. (Ex. A, pp. 134) This Trip Distribution data included "origin/destination data by campus and by specific population group" that showed that over 50 percent of UCSF staff at Mission Bay, Mount Zion and Mission Center commuted from outside of San Francisco or were projected to continue to commute from outside of San Francisco, and 34% of Parnassus employees commuted from outside San Francisco or were projected to continue to commute from outside of San Francisco. (Ex. A, pp. 134-144) These are the locations to which UCSF Laurel Heights employees are to be relocated. For example, in 2015, 33% of UCSF employees commuted to the UCSF Mission Bay campus from the South Bay, 12% from the East Bay and 8% from the North Bay. *Ibid.* To accurately assess the GHG emissions from actual vehicle miles traveled by UCSF staff, the applicant should

be required to provide the information on the distances traveled by UCSF employees as reported on the surveys which UCSF conducts annually.

Instead, the applicant's supplemental information on trip rates focused on mode share, which does not provide information on distances traveled and merely shows the percentage of trips from vehicles, public transit, etc. (See applicant's Tables 1-3 and Appendix A, UCSF Mode Share Comparison) The travel mode share is the relative proportion of LRDP-generated trips to various travel modes. (Ex. A, pp. 131-134.)

The applicant's submission lacks evidence showing that the estimates of GHG emissions from relocated UCSF employee vehicles miles traveled were reliable. Page 2/2 of Applicant's supplemental December 5, 2018 submission states that the trip lengths and types used CalEEMod defaults to be consistent with the existing conditions and Project runs, as shown in Appendix B. However, Appendix B states as to Vehicle Trips: "Trip rates based on data from SF Planning (2018), UCSF LRDP EIR (2014) and Kittelson & Associates (2018). Weekend trip rates estimated using ratio of CalEEMod default weekday to weekend rates. Default trip lengths/types." (Applicant's Appendix B, p. 1) This indicates that CalEEMod default data was not used to estimate weekday trip rates. The other data was not provided. Applicant should be required to provide the other data used to estimate weekday trip rates to verify its supplemental submission.

2. GHG Emissions from Relocated UCSF and Childcare Staff and Visitors Using Transportation Network Companies Should be Included in the Supplemental Analysis.

In addition, the UCSF LRDP projections were made in 2014, but after that time, vehicle miles traveled as a result of use of transportation network companies such as Uber and Lyft substantially increased. According to a UC Davis study, ride-hailing trips are adding 49-61 percent of the travel trips that would not have been made without ride-hailing or would have been made by walking, biking, or transit. (See excerpts in Exhibit B; see also Exhibit F, excerpts from the 2017 San Francisco Transportation Authority, *A Profile of San Francisco Transportation Network Company Activity*, Executive Summary, stating that on a typical day, transportation network companies make over 170,000 vehicle trips within San Francisco) This information shows that people are making more vehicle trips than they would normally make without the ride-hailing transportation network companies. The supplemental data submitted by the applicant is based on outdated information and should be supplemented to include vehicle miles traveled by UCSF employees, childcare staff and visitors using transportation network companies.

As explained in my October 23, submission, which is incorporated herein as a comment on applicant's supplemental submission, the applicant proposed four passenger loading zones around the site that would likely be used for transportation network companies. (Exhibit C) The

vehicles miles traveled from these trips using transportation network companies should be included in the estimates of GHG emissions. The applicant should be required to revise the supplemental information to include them.

Since the data used to estimate weekday trip rates was not provided, applicant has not demonstrated that the GHG emissions from use of transportation network companies was included in the analysis.

3. The Project Applicant Has Not Committed to Measures to Ensure There Will Be No Net Additional GHG Emissions.

The Applicant has not committed to any specific measure to ensure there will be no net increase in GHG emissions or explained exactly what measures he will take to ensure there will be no net increase in GHG emissions. Instead, the Applicant has listed various options which "will continue to be explored as well to the extent feasible, with the following order of preference: (1) project design features/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry." (Ex. D) The "Commitment Approach" also states that prior to issuance of the final Certificate of Occupancy for the first building constructed in each phase of the project that exceeds the existing emissions, the project sponsor or its successor shall enter into one or more contracts to purchase carbon credits. *Ibid.* At this time, it cannot be determined what project design features or on-site reduction measures the Applicant may claim would meet the no-GHG-increase standard in the future or how the responsible agency will evaluate any future claims by the Applicant that the standard has been met. Also, if the Applicant purchases carbon credits, his project would be causing new GHG emissions, but he would be netting the increase against existing GHG emissions through credits. The Applicant should be required to demonstrate that his project would cause no net increase in GHG emissions to qualify for AB 900 streamlining.

4. The Applicant Should Be Required to Evaluate All Net Greenhouse Gas Emissions for the Lifespan of the Project.

This project would cause a substantial amount of concrete and steel to be manufactured for three levels of underground garages and numerous new multiple-unit buildings. Public Resources Code section 21183(c) specifies that the project may not result "in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation." The statute does not limit the GHG emissions to direct emissions from the project. All indirect emissions should also be evaluated, including the GHG emissions that would result from the manufacture of substantial amounts of concrete and steel that would be used to construct the proposed and variant projects. The project proposes to construct 1,372,270 gross square feet of development on the site, which is almost three times the existing 469,000 gross square footage of existing development. Substantial amounts of concrete and steel would

be needed for construction of underground parking garages, which would entail excavation of soils and rock 7-40 feet below existing grade, generating approximately 241,300 net cubic yards of excavated soils. (See Exhibit E - Comments on 3333 California Street Initial Study as to Greenhouse Gas Emissions.)

In addition, the application for Environmental Leadership Development Project states under heading 9 that operational emissions were calculated for 2020 through 2057 to account for an approximately 30-year lifespan of the project following buildout. This estimate seems small and should warrant further inquiry and reanalysis of the expected lifespan of the project following buildout. The buildings and garages could certainly be expected to last for more than 30 years. The existing buildings and garages were first constructed in the mid-1950s.

5. The Application Has Not Demonstrated that the Project Would Create High-Paying Jobs.

The Application should be required to document creation of high-paying jobs. The retail uses and new office building components of the project are not permitted by the existing zoning and may not be approved by the San Francisco Board of Supervisors. In their absence, only construction jobs would be provided and the site use would be primarily residential. Thus, the application has not demonstrated that the project would actually create high-paying jobs.

Laurel Heights Improvement Association of SF, Inc.

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ATTACHMENTS: Exhibits A-F

# **EXHIBIT A**

## **APPENDIX G**

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# **Transportation Impact Study for the UCSF Long Range Development Plan**

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**TABLE 2-1: EXISTING UCSF TDM PROGRAM ELEMENTS**

<b>TDM Strategy</b>	<b>Description</b>
Annual Transportation Survey	Annual employee and student survey to learn more about travel to, from, and within UCSF campus sites
Bicycle Racks	<b>Total of approximately 970 bike stalls distributed throughout campus sites with capacity exceeding demand, with one exception – Parnassus Heights campus site</b>
Showers and Lockers	<b>Showers and lockers are provided at various campus sites, which can be used by bicyclists</b>
Bicycle Permits	Free bicycle permits are provided allowing free access to enclosed bicycle parking facilities; free tire repair kits; bike fix-it stations available at Parnassus and Mission Bay campus sites; <b>discounted SF Bike Coalition membership.</b>
Shuttle	<b>UCSF shuttle system serving all campus sites</b>
Priced Permit Parking	UCSF offers over 30 varieties of parking permits to employees and students. The price of a permit varies between \$40 and \$250 per month. A limited number of permits are issued per year and are distributed based on a prioritization hierarchy
Priced Visitor Parking	UCSF offers short-term visitor parking. Both hourly and daily rates are available
City Carshare	UCSF staff and students <b>qualify for personal memberships at a discounted rate. 18 City Carshare vehicles are available at various campus sites.</b>
Pre-Tax Program	The Pre-Tax program allows employees to reduce their public transit and non-UCSF vanpool costs by about one-third. The program works by allowing participants to deduct up to \$125 per month from their paycheck without paying payroll taxes on this income
Carpool Parking	Preferential parking for UCSF employees with a valid carpool permit
Zimride	UCSF-specific Zimride (ride sharing) website
Emergency Ride Home	Employees who need an emergency ride home can be reimbursed up to \$50 for a transit, taxi or rental car trip
Telecommuting Policy	<b>Eligibility to telecommute determined by job position/requirements and Department</b>
Vanpool Program	The vanpool program requires a minimum of eight participants per vanpool. The driver participates for free and the riders pay about \$240 per month per person. Currently, there are 33 vanpools that travel throughout the Bay Area, and as far as Sacramento.

Source: UCSF Transportation Services, 2013

### 2.2.1 UCSF Shuttle System

The core element of UCSF's TDM plan is the shuttle service that UCSF operates throughout San Francisco. The shuttle system fleet (currently 60 shuttles) provides service between transit facilities, remote parking lots, the various UCSF campus sites, and UCSF-affiliated hospitals/ medical centers within the city. The primary shuttle routes serve the Parnassus Heights, Mission Bay, Mount Zion, Mission Center, SFGH, and Laurel Heights campus sites. Service includes 13 fixed-route lines and two on-demand evening services. Fixed-route shuttle headways are generally between 15 to 25 minutes, and most routes operate between 6:00 AM and 9:00 PM, Monday through Friday. The two on-demand services operate both



UCSF shuttle stop at Parnassus Heights Campus Site

### 3 TRAVEL DEMAND ANALYSIS

This chapter describes the vehicle, pedestrian, bicycle, and transit travel demand that would be generated by the proposed 2014 LRDP, based on factors developed from extensive surveys conducted at existing UCSF facilities over the past few years. The impact of new travel associated with the 2014 LRDP was estimated using a four-step process: trip generation, mode split, trip distribution, and trip assignment.

In the first step, the number of person trips generated by the 2014 LRDP was estimated on a daily, AM and PM peak hour basis. Next, the person trips were assigned to different modes of travel; automobile, transit, UCSF shuttle, bicycles, etc. Then, the geographic distribution of the trip origins and destinations was predicted. Finally, project trips for each mode were assigned to specific streets, UCSF routes and transit lines along the transportation network. The results of this four-step process are described in the following sections. In addition to the travel demand generated by the 2014 LRDP, this chapter also summarizes its expected parking, commercial loading, and construction-related travel demands.

The 2014 LRDP proposes various levels of growth at each campus site through the plan horizon year of 2035. Some known projects, such as Phase Two Medical Center at Mission Bay, are currently projected to occur between 2035 and 2040, after the 2014 LRDP horizon year, but have been incorporated into the travel demand estimates presented in this document. As such, the transportation analysis represents a conservative approach as it includes development five years past the 2014 LRDP horizon, to the year 2040.

**Table 3-1** summarizes the existing and estimated average daily population growth by campus site by 2040. These population assumptions are different than those presented in the 2014 LRDP document. In addition to accounting for the 2035/2040 population increases described above, they include a certain level of population double-counting as well. Faculty and staff that would be present at two campus sites on the same day are counted twice, once at each location, as they would generate trips at both sites. In addition, a 10 percent reduction factor has been applied to all staff, to account for those who might be absent from each campus site due vacation, illness, or working elsewhere.<sup>8</sup>

As shown in **Table 3-1**, each campus site is expected to increase in weekday daily population through the LRDP horizon year/2040 with the highest growth expected at the Mission Bay site. In total, the four campus sites are expected to grow their combined average weekday daily population by approximately 20,250 people, a 71 percent increase.

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<sup>8</sup> The 10 percent average employee absentee rate is based on information provided by UCSF; the 1996 UCSF LRDP estimated an employee absentee rate of 11 percent.

**TABLE 3-1: SUMMARY OF GROWTH IN AVERAGE DAILY POPULATION BY CAMPUS SITE <sup>1</sup>**

<b>Campus Site</b>	<b>Existing (2011/2012)</b>	<b>Future (2035/2040) <sup>2</sup></b>	<b>Growth</b>
Parnassus Heights	17,596	18,662	1,066 (6%)
Mission Bay	5,671	22,839	17,169 (303%)
Mount Zion	4,452	5,990	1,538 (35%)
Mission Center	780	1,260	480 (62%)
<b>Total</b>	<b>28,499</b>	<b>48,752</b>	<b>20,253 (71%)</b>

Notes:

1. Average weekday daily population for the four main campus sites only; includes the following groups: staff, patients and their visitors, other visitors, child care staff and children, and residents. Faculty and staff that would be present at two campus sites on the same day are counted twice, once at each location, as they would generate trips at both sites.
2. The data shown in this table reflects the future average weekday daily population through the LRDP horizon year (2035) for the Parnassus Heights, Mount Zion, and Mission Center campus sites, and year 2040 for the Mission Bay campus site.

Source: UCSF, Adavant Consulting, 2014

Travel demand characteristics and forecasts for the UCSF campus sites were developed by Adavant Consulting and its assumptions have been reviewed by the UCSF Campus Planning staff. **Appendix F** shows detailed tables of the summaries below.

### 3.1 TRIP GENERATION

Travel demand estimates for the four campus sites are based on the current and projected average number of physicians, staff and visitors, child care, residents, etc., at each campus site on a typical weekday. Forecasting the net new travel demand involves estimating the number of trips generated by the LRDP at each campus site, less trips associated with the existing uses on-site.

The following sections describe trip generation resources, person trip generation rates, person trip generation estimates, and the estimation of existing and future person trips at each campus site.

#### 3.1.1 Trip Generation Resources

Medical, academic, and clinical facilities as well as residential housing generate travel demand in unique ways, depending on their location, specialties, and surrounding land uses. In order to forecast travel demand for the campus sites, the following UCSF-specific data sources were obtained and processed:

- UCSF Mount Zion Transportation Surveys, 1992, 1999
- UCSF Parnassus Heights Transportation Surveys, 1992, 1999
- UCSF 1996 LRDP FEIR, 1997
- UCSF 1996 LRDP Amendment #1 FSEIR, 2002
- UCSF Survey of Residents at Aldea and Avenue Housing, 2013
- UCSF Transportation Services, Annual Commuter Surveys for 2012 and 2013

In addition to the UCSF-specific data sources, the following documents were also consulted:

- Institute of Transportation Engineers (ITE), *Trip Generation Report* (9<sup>th</sup> Edition), 2012
- San Francisco Planning Department, *Transportation Impact Analysis Guidelines for Environmental Review*, 2002

Further, the number of persons entering and exiting key UCSF buildings at the Mission Bay and Parnassus Heights campus sites was recorded over a two-day period in October 2013 in order to refine and validate the travel demand assumptions.

### 3.1.2 Population Assumptions and Trip Generation Rates

Typical weekday, as well as weekday AM and PM peak hour person trip generation rates were developed through an iterative process for each population group, based on the number of people arriving and departing each campus site gathered from the surveys. The conditions for the development of these trip rates were:

- Reflect logical travel journeys to/from and within the campus site for each population type (staff, patients and visitors, other visitors, etc.);
- Have the same value across all campus sites for each land use type (hospital, research/office, residential);
- Produce results that are in line with those obtained from the staff, patient and visitor surveys and data collection efforts previously conducted at the campus sites; and
- Result in overall trip generation rates that are comparable to those shown in other transportation studies of similar facilities, from previous UCSF studies, or obtained from other recognized sources.

Estimates for staffing and patient and visitor levels for a typical weekday were provided by UCSF Campus Planning staff and are based on the types and intensities of services proposed to be located at each campus site according to the LRDP. The population groups include the following:

**Staff:** Staff includes faculty, physicians, fellows, residents, nurses, nurse practitioners, postdocs, and students. It also includes "visiting" faculty, physician researchers, etc. who are not based at that specific campus site, but come to it occasionally for teaching, patients' visits, to perform surgery, or to research. The four campus sites currently have approximately 17,000 staff members combined (including some double counting as described above) on a typical weekday. There would be an increase in the total number of staff members of approximately 29,100 individuals on a typical weekday by 2035/2040.

**Patients and Visitors:** The patients and visitors group includes inpatients, visitors to the inpatients, and outpatients and their companions. There are currently a total of approximately 8,000 existing patients and visitors to the Parnassus Heights, Mission Bay and Mount Zion campus sites on a typical weekday. There would be an increase of approximately 13,700 total patients and visitors on a typical weekday by 2035/2040 on a typical weekday.

**Other Visitors:** This population group includes community center visitors (at Parnassus Heights and Mission Bay), staff visitors, vendors, and service providers. There are approximately 1,720 existing visitors

in this group at the four campus sites, which would increase to approximately 2,570 visitors by 2035/2040 on a typical weekday.

**Child care:** This population group at the Parnassus Heights and Mission Bay campus sites includes child care staff and child care children. There are currently approximately 230 child care staff and children, which would increase to approximately 390 through 2035/2040 on a typical weekday. For travel demand purposes, child care children generate person and vehicle trips under the drop-off mode of travel.

**Residential:** The residential population at the Parnassus Heights and Mission Bay campus sites includes on-campus residents (contract holders, spouses, and children), visitors to the residents, vendors and residential service providers. There are approximately 1,540 existing residents at the two campus sites, which would increase to approximately 2,970 residents through 2035/2040 on a typical weekday.

The resultant existing and future average population assumptions for a typical weekday at each campus site are summarized in **Table 3-2** by population group.

**TABLE 3-2: EXISTING AND FUTURE AVERAGE DAILY POPULATION ESTIMATES ON A TYPICAL WEEKDAY BY CAMPUS SITE AND POPULATION GROUP <sup>1</sup>**

<b>Population Group</b>	<b>Existing Population (2012/2013)</b>	<b>Future Population(2035/2040) <sup>1</sup></b>	<b>Growth</b>
<b><i>Parnassus Heights</i></b>			
Staff	10,701	11,161	460
Patients and Visitors	5,269	5,396	127
Other Visitors	920	920	0
Child care	118	143	25
Residential	588	1,043	455
<b>Sub-Total</b>	<b>17,596</b>	<b>18,662</b>	<b>1,066</b>
<b><i>Mission Bay</i></b>			
Staff	3,743	14,297	10,554
Patients and Visitors	260	4,983	4,723
Other Visitors	610	1,390	780
Child care	107	245	138
Residential	951	1,924	973
<b>Sub-Total</b>	<b>5,671</b>	<b>22,839</b>	<b>17,169</b>
<b><i>Mount Zion</i></b>			
Staff	1,845	2,485	640
Patients and Visitors	2,477	3,335	858
Other Visitors <sup>1</sup>	130	170	40
<b>Sub-Total</b>	<b>4,452</b>	<b>5,990</b>	<b>1,538</b>
<b><i>Mission Center</i></b>			
Staff	720	1,170	450
Other Visitors	60	90	30
<b>Sub-Total</b>	<b>780</b>	<b>1,260</b>	<b>480</b>
<b><i>Four Campus Sites</i></b>			
Staff	17,009	29,113	12,104
Patients and Visitors	8,006	13,714	5,708
Other Visitors	1,720	2,570	850
Child care	225	388	163
Residential	1,539	2,967	1,428
<b>Grand Total</b>	<b>28,499</b>	<b>48,752</b>	<b>20,253</b>

Notes:

1. Faculty and staff that would be present at two campus sites on the same day are counted twice, once at each location, as they would generate trips at both sites.
2. The data shown in this table reflects the future average weekday daily population through the LRDP horizon year (2035) for the Parnassus Heights, Mount Zion and Mission Center campus sites, and year 2040 for the Mission Bay campus site.

Source: UCSF, Advant Consulting, 2014

### 3.1.3 Trip Generation Estimates

The daily trip generation rates and additional number of total person trips (including internal to each campus site) expected by 2040 at each campus site are summarized in **Table 3-3**. The daily person trip rates presented in the table for staff patients and visitors were originally developed for the UCSF LRDP FEIR (1997), while the daily person trip rates for the residential uses have been obtained from Table 3-2, (p. 3-12) of the UCSF LRDP Amendment #1 FSEIR (2002). These rates were verified against field video counts taken at representative residential, research and medical office buildings at the Parnassus and Mission Bay campus sites and found to be appropriate for use in the evaluation of the 2014 LRDP. The daily person trip rate for child care represents a weighted average of staff (2.23 daily person trips per employee) and children (2.00 daily person trips per child).

**Table 3-3** shows that in total, the four campus sites are expected to generate approximately 46,000 new person trips on a typical weekday, which represents an increase of approximately 72 percent over current values.

<b>TABLE 3-3: NEW DAILY PERSON TRIPS BY CAMPUS SITE AND POPULATION GROUP</b>			
<b>Population Group</b>	<b>Population Change (Existing through 2035/2040) <sup>1</sup></b>	<b>Daily Person Trip Rate <sup>2</sup></b>	<b>Additional Daily Person Trips (Existing through 2035/2040) <sup>1</sup></b>
<b><i>Parnassus Heights</i></b>			
Staff	460	2.23	1,026
Patients and Visitors	127	2.00	254
Other Visitors	0	2.00	0
Child care	25	2.04	50
Residential	455	3.79	1,725
<b>Sub-Total</b>	<b>1,066</b>	<b>2.86</b>	<b>3,055</b>
<b><i>Mission Bay</i></b>			
Staff	10,554	2.23	23,536
Patients and Visitors	4,723	2.00	9,446
Other Visitors	780	2.00	1,560
Child care	138	2.04	282
Residential	973	3.97	3,864
<b>Sub-Total</b>	<b>17,169</b>	<b>2.25</b>	<b>38,688</b>
<b><i>Mount Zion</i></b>			
Staff	640	2.23	1,427
Patients and Visitors	858	2.00	1,716
Other Visitors	40	2.00	80
Child care	0	-	0
Residential	0	-	0
<b>Sub-Total</b>	<b>1,538</b>	<b>2.10</b>	<b>3,223</b>
<b><i>Mission Center</i></b>			

**TABLE 3-3: NEW DAILY PERSON TRIPS BY CAMPUS SITE AND POPULATION GROUP**

<b>Population Group</b>	<b>Population Change (Existing through 2035/2040) <sup>1</sup></b>	<b>Daily Person Trip Rate <sup>2</sup></b>	<b>Additional Daily Person Trips (Existing through 2035/2040) <sup>1</sup></b>
Staff	450	2.23	1,004
Patients and Visitors	0	-	0
Other Visitors	30	2.00	60
Child care	0	-	0
Residential	0	-	0
<b>Sub-Total</b>	<b>480</b>	<b>2.22</b>	<b>1,064</b>
<b>Four Campus Sites</b>			
Staff	12,104	2.23	26,992
Patients and Visitors	5,708	2.00	11,416
Other Visitors	850	2.00	1,700
Child care	163	2.04	332
Residential	1,428	3.91	5,589
<b>Grand Total</b>	<b>20,253</b>	<b>2.27</b>	<b>46,029</b>

Notes:

1. The data shown reflects the future daily trips through the LRDP horizon year (2035) for the Parnassus Heights, Mount Zion, and Mission Center campus sites, and year 2040 for the Mission Bay campus site. Faculty and staff that would be present at two campus sites on the same day are counted twice, once at each location, as they would generate trips at both sites.
2. The daily person-trip rates shown in this table represent the average value for each population group as a whole. Separate trip generation rate assumptions were developed for each category within the groups (e.g., faculty, physicians, residents etc. within staff), which are shown in **Appendix F**.

Source: Adavant Consulting, 2014

### 3.1.4 Net New External Vehicle Person Trips

As shown in **Table 3-3**, proposed projects at the four campus sites through 2035/2040 would yield approximately 46,000 additional daily person trips. This value reflects the total number of additional person trips that would be generated by the 2014 LRDP; they have not been adjusted to subtract trips associated with the existing land uses at the campus sites and internal trips expected to occur within each campus site. An internal trip is an origin-destination pair within the same site (e.g. a researcher at the Parnassus Heights campus site traveling from her office to the Millberry Union to eat lunch and returning back to her office afterwards).

Thus, the number of internal trips within each campus site needs to be assessed, such that they are subtracted from the total in order to determine the number of net new external person trips that would be generated by each campus site. The proportion of trips occurring within a campus site will be different for each population group. Using information from previous transportation analyses and surveys of UCSF campus sites, it has been assumed that trips internal to each site would represent 10 percent of all the staff (including child care staff) daily trips, 50 percent of the child care children daily trips (i.e. at least half of the children have a parent working on site), and 10 to 70 percent of the residents daily trips (depending on the campus and the resident population type). All patient, visitor, and vendor daily trips are assumed

to be external (one trip end inside and the other outside the campus site). **Appendix F** presents the application of the internal trip rates.

**Table 3-4** summarizes the net new daily trip generation external to each campus as proposed by the 2014 LRDP (Those trips that do not have both trip ends within the same campus site). As shown in the table, conservatively, no internal person trips were assumed to occur within the Mount Zion and Mission Center campus sites given their smaller size.

<b>TABLE 3-4: EXISTING AND FUTURE DAILY INTERNAL AND EXTERNAL PERSON TRIPS</b>						
<b>Population Group</b>	<b>Existing (2012/2013) Daily Person Trips</b>		<b>2035/2040 Daily Person Trips<sup>1</sup></b>		<b>Net New Daily Person Trips</b>	
	<b>Internal</b>	<b>External</b>	<b>Internal</b>	<b>External</b>	<b>Internal</b>	<b>External</b>
<b><i>Parnassus Heights</i></b>						
Staff	2,386	21,477	2,489	22,400	103	923
Patients and Visitors	0	10,538	0	10,792	0	254
Other Visitors	0	1,840	0	1,840	0	0
Child care	104	136	125	165	21	29
Residential	1,085	1,104	2,088	1,825	1,004	722
<b>Sub-Total</b>	<b>3,575</b>	<b>35,095</b>	<b>4,702</b>	<b>37,022</b>	<b>1,127</b>	<b>1,928</b>
<b><i>Mission Bay</i></b>						
Staff	835	7,512	3,188	28,695	2,354	21,182
Patients and Visitors	0	520	0	9,966	0	9,446
Other Visitors	0	1,220	0	2,780	0	1,560
Child care	90	128	210	290	120	162
Residential	667	3,161	3,132	4,560	2,465	1,399
<b>Sub-Total</b>	<b>1,591</b>	<b>12,542</b>	<b>6,530</b>	<b>46,291</b>	<b>4,939</b>	<b>33,749</b>
<b><i>Mount Zion</i></b>						
Staff	0	4,114	0	5,541	0	1,427
Patients and Visitors	0	4,954	0	6,670	0	1,716
Other Visitors	0	260	0	340	0	80
<b>Sub-Total</b>	<b>0</b>	<b>9,328</b>	<b>0</b>	<b>12,551</b>	<b>0</b>	<b>3,223</b>
<b><i>Mission Center</i></b>						
Staff	0	1,606	0	2,609	0	1,004
Other Visitors	0	120	0	180	0	60
<b>Sub-Total</b>	<b>0</b>	<b>1,726</b>	<b>0</b>	<b>2,789</b>	<b>0</b>	<b>1,064</b>
<b><i>Total Campus Sites</i></b>						
Staff	3,221	34,709	5,677	59,245	2,456	24,536
Patients and Visitors	0	16,012	0	27,428	0	11,416
Other Visitors	0	3,440	0	5,140	0	1,700
Child care	194	264	335	455	141	191
Residential	1,752	4,265	5,220	6,385	3,469	2,120

<b>Total</b>	<b>5,167</b>	<b>58,690</b>	<b>11,233</b>	<b>98,654</b>	<b>6,066</b>	<b>39,963</b>
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Note:

1. The data shown reflects the future daily person trips through the LRDP horizon year (2035) for the Parnassus Heights, Mount Zion, and Mission Center campus sites, and year 2040 for the Mission Bay campus site.

Source: Adavant Consulting, 2014

**Table 3-4** shows that the through 2035/2040, the four campus sites would generate about 39,960 net new external person trips per day.

### 3.2 PERSON TRIPS FOR MISSION BAY SITE IN 2015

An interim trip generation assessment was also conducted at the Mission Bay campus site only for the year 2015, when Phase One Medical Center and the Mission Hall projects, currently under construction, are expected to open. The population and person trip increases at the Mission Bay site by 2015 are summarized in **Table 3-5**.

<b>TABLE 3-5: 2012/13 TO 2015 DAILY POPULATION AND PERSON TRIP GROWTH AT THE MISSION BAY CAMPUS SITE BY POPULATION GROUP</b>				
<b>Population Group</b>	<b>Average Daily Population Growth (2012/13 to 2015)</b>	<b>Additional Daily Person Trips by 2015</b>		
		<b>Internal</b>	<b>External</b>	<b>Total</b>
<b>Mission Bay</b>				
Staff	2,405	536	4,826	5,363
Patients and Visitors	2,127	0	4,254	4,254
Other Visitors	170	0	340	340
Child care	0	0	0	0
Residential	0	0	0	0
<b>Total Mission Bay</b>	<b>4,702</b>	<b>536</b>	<b>9,420</b>	<b>9,957</b>

Source: UCSF, Adavant Consulting, 2014

As shown in the table, with the opening of Phase One Medical Center and Mission Hall by 2015, there would be an increase in population of approximately 4,700 individuals, which represents an increase of 9,420 external daily person trips.

### 3.3 TRAVEL MODE SPLIT

Travel mode split is the relative proportioning of LRDP-generated trips to various travel modes. Modes of travel categories include automobile, transit, walking and other, where other includes bicycle, motorcycle, and taxi. An average vehicle occupancy factor was applied to the number of automobile person trips to determine the number of vehicle trips.

Travel mode split and average vehicle occupancy assumptions for each campus site were based on information collected by UCSF and its transportation planning consultants, as described in Section 3.1.1. The methodology estimates the future modal share based on the current modal splits for each campus by population type, which take into account the transit accessibility, UCSF shuttle service, parking availability, and TDM measures being provided at each campus site; this approach is consistent with the travel demand methodologies established by the SF Planning Department.

**Table 3-6** summarizes the external person trips percentages by mode of travel for each campus site. As shown in the table, the majority of Parnassus Heights campus site trips arrive or depart by taking public transit or the UCSF shuttle service. A majority of Mission Bay campus site trips are drive alone, followed by public transit, and the UCSF shuttle service. The majority of Mount Zion and Mission Center campus sites trips arrive or depart by driving alone, followed by travel by public transit.

<b>TABLE 3-6: EXTERNAL TRIPS MODE OF TRAVEL ASSUMPTIONS<sup>1</sup></b>								
<b>Population Group</b>	<b>Drive Alone</b>	<b>Drop-Off/Taxi</b>	<b>Carpool/Vanpool</b>	<b>Public Transit</b>	<b>UCSF Shuttle</b>	<b>Bike / Motorcycle</b>	<b>Walk</b>	<b>All Modes</b>
<b><i>Parnassus Heights</i></b>								
Staff	4%	2%	1%	18%	32%	16%	28%	100%
Patients and Visitors	24%	17%	14%	42%	0%	1%	1%	100%
Other Visitors	54%	8%	4%	20%	0%	1%	13%	100%
Child care	9%	70%	3%	8%	5%	2%	3%	100%
Residential	24%	4%	0%	17%	47%	3%	4%	100%
<b>Total</b>	<b>14%</b>	<b>6%</b>	<b>2%</b>	<b>21%</b>	<b>33%</b>	<b>9%</b>	<b>15%</b>	<b>100%</b>
<b><i>Mission Bay</i></b>								
Staff	33%	2%	6%	22%	22%	8%	8%	100%
Patients and Visitors	45%	5%	14%	26%	2%	1%	7%	100%
Other Visitors	71%	4%	9%	11%	0%	1%	4%	100%
Child care	9%	72%	2%	7%	7%	2%	1%	100%
Residential	37%	0%	1%	15%	36%	5%	7%	100%
<b>Total</b>	<b>38%</b>	<b>3%</b>	<b>8%</b>	<b>22%</b>	<b>16%</b>	<b>5%</b>	<b>8%</b>	<b>100%</b>
<b><i>Mount Zion</i></b>								
Staff	37%	4%	8%	26%	12%	6%	8%	100%
Patients and Visitors	39%	7%	23%	25%	0%	1%	5%	100%
Other Visitors	63%	4%	14%	15%	0%	2%	4%	100%
<b>Total</b>	<b>39%</b>	<b>6%</b>	<b>16%</b>	<b>25%</b>	<b>5%</b>	<b>3%</b>	<b>6%</b>	<b>100%</b>
<b><i>Mission Center</i></b>								
Staff	43%	1%	5%	27%	13%	7%	4%	100%
Other Visitors	100%	0%	0%	0%	0%	0%	0%	100%
<b>Total</b>	<b>46%</b>	<b>1%</b>	<b>5%</b>	<b>26%</b>	<b>13%</b>	<b>6%</b>	<b>3%</b>	<b>100%</b>

Notes:

1. Mode of travel percentages assumed for future travel conditions; percentages might not add up to 100% due to rounding.

Source: Adavant Consulting, 2014

**Table 3-7** shows the external daily person trips by mode of travel as well as the number of daily vehicle trips for each campus site, which have been obtained by applying the percentages shown in **Table 3-7** to the external person trips described in Section 3.1.4.

**TABLE 3-7: NEW DAILY EXTERNAL TRIPS BY MODE OF TRAVEL**

Population Group	Daily Person Trips								Daily Vehicle Trips <sup>1</sup>
	Drive Alone	Drop-Off/Taxi	Carpool / Vanpool	Public Transit	UCSF Shuttle	Bike / Motor cycle	Walk	All Modes	
<b><i>Parnassus Heights</i></b>									
Staff	40	15	9	165	294	146	254	923	93
Patients and Visitors	62	42	36	107	0	3	4	254	17
Other Visitors	0	0	0	0	0	0	0	0	0
Child care	3	20	1	2	1	0	1	29	44
Residential	170	29	2	126	342	21	32	722	251
<b>Total</b>	<b>274</b>	<b>107</b>	<b>48</b>	<b>400</b>	<b>637</b>	<b>171</b>	<b>291</b>	<b>1,928</b>	<b>405</b>
<b><i>Mission Bay (by 2015)</i></b>									
Staff	1,639	57	195	914	874	510	637	4,826	1,893
Patients and Visitors	1,874	213	595	1,147	60	43	323	4,254	1,877
Other Visitors	244	12	29	36	0	5	14	340	280
<b>Total</b>	<b>3,757</b>	<b>282</b>	<b>819</b>	<b>2,097</b>	<b>934</b>	<b>557</b>	<b>974</b>	<b>9,420</b>	<b>4,051</b>
<b><i>Mission Bay (by 2040)</i></b>									
Staff	6,960	340	1,209	4,624	4,601	1,671	1,778	21,182	8,429
Patients and Visitors	4,274	472	1,293	2,462	144	94	706	9,446	4,457
Other Visitors	1,112	56	134	168	0	22	67	1,560	1,282
Child care	14	116	3	12	12	3	2	162	248
Residential	512	4	10	206	499	66	102	1,399	558
<b>Total</b>	<b>12,872</b>	<b>988</b>	<b>2,649</b>	<b>7,472</b>	<b>5,256</b>	<b>1,856</b>	<b>2,656</b>	<b>33,749</b>	<b>14,974</b>

**TABLE 3-7: NEW DAILY EXTERNAL TRIPS BY MODE OF TRAVEL**

Population Group	Daily Person Trips								Daily Vehicle Trips <sup>1</sup>
	Drive Alone	Drop-Off/Taxi	Carpool / Vanpool	Public Transit	UCSF Shuttle	Bike / Motorcycle	Walk	All Modes	
<b>Mount Zion</b>									
Staff	534	54	109	369	165	82	114	1,427	688
Patients and Visitors	662	125	397	429	0	17	86	1,716	544
Other Visitors	50	3	11	12	0	1	3	80	60
<b>Total</b>	<b>1,246</b>	<b>182</b>	<b>516</b>	<b>810</b>	<b>165</b>	<b>100</b>	<b>203</b>	<b>3,223</b>	<b>1,292</b>
<b>Mission Center</b>									
Staff	430	10	49	275	135	68	37	1,004	479
Other Visitors	60	0	0	0	0	0	0	60	60
<b>Total</b>	<b>490</b>	<b>10</b>	<b>49</b>	<b>275</b>	<b>135</b>	<b>68</b>	<b>37</b>	<b>1,064</b>	<b>539</b>

Notes:

1. Vehicle trips are calculated based on the following formula: Drive Alone trips + (Drop-off trips x 2) + (Carpool trips / 2) + (Vanpool trips / 10) + (UCSF Shuttle / 15).

Source: Advant Consulting, 2014

### 3.4 TRIP DISTRIBUTION

Project-generated person trips were assigned to San Francisco and regional origins/destinations, including the four San Francisco Superdistricts (northeast, northwest, southeast, and southwest quadrants of the City), the East Bay, the North Bay, and the South Bay, as well as areas outside the Bay Area region. Information collected by UCSF as part of their ongoing surveys of employees, patients, visitors and residents were used in this analysis.

The information includes origin/destination data by campus and by specific population group, including faculty, medical residents and nurses, students, staff, patients and visitors, vendors and services, and housing residents; the existing geographical trip distribution was used in the travel demand analysis; this approach is consistent with the travel demand methodologies established by the SF Planning Department. The following sections describe the trip distribution percentages by campus site, the detailed trip distributions by population group are presented in **Appendix F**.

#### 3.4.1 Parnassus Heights

**Table 3-4** shows approximately 1,930 new daily external trips to be attracted/generated by the Parnassus Heights campus site. These additional external person trips are distributed locally and regionally as described above. The resulting trip distribution percentages are shown in **Table 3-8**.

**TABLE 3-8: PARNASSUS HEIGHTS CAMPUS SITE – 2040 PEAK HOUR TRIP DISTRIBUTION BY POPULATION GROUP<sup>1</sup>**

<b>Population Group</b>	<b>Staff</b>	<b>Patient and Visitors</b>	<b>Other Visitors<sup>3</sup></b>	<b>Child care</b>	<b>Residential</b>	<b>All Population Groups Combined</b>
<b>San Francisco</b>						
Superdistrict 1 / Northeast Quadrant	11%	43%	0%	11%	24%	19%
Superdistrict 2 / Northwest Quadrant	14%	3%	0%	14%	10%	11%
Superdistrict 3 / Southeast Quadrant	31%	17%	0%	31%	46%	39%
Superdistrict 4 / Southwest Quadrant	10%	4%	0%	10%	11%	10%
<b>Outside of San Francisco</b>						
East Bay	6%	22%	0%	6%	3%	5%
North Bay <sup>2</sup>	-2%	-1%	0%	-2%	2%	0%
South Bay	30%	13%	0%	30%	3%	16%
Out of Region <sup>2</sup>	0%	-1%	0%	0%	1%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Notes:

1. Trip distribution accounts for external trips only.
2. Negative trip distribution percentage occurs because the net peak hour trips origin/destination is less than the existing conditions.
3. No additional "Other Visitor" external trips would be generated/attracted to the Parnassus Heights campus site as part of the LRDP.

Source: Adavant Consulting, 2014

As shown in **Table 3-8**, most staff, patient and visitors, child care and resident trips come from Superdistrict 1, the Northeast quadrant of San Francisco, and Superdistrict 3, the Southeast quadrant. **Figure 3-1** shows general directions of approach and departure of LRDP-generated trips, based on the percentages presented in **Table 3-8**.

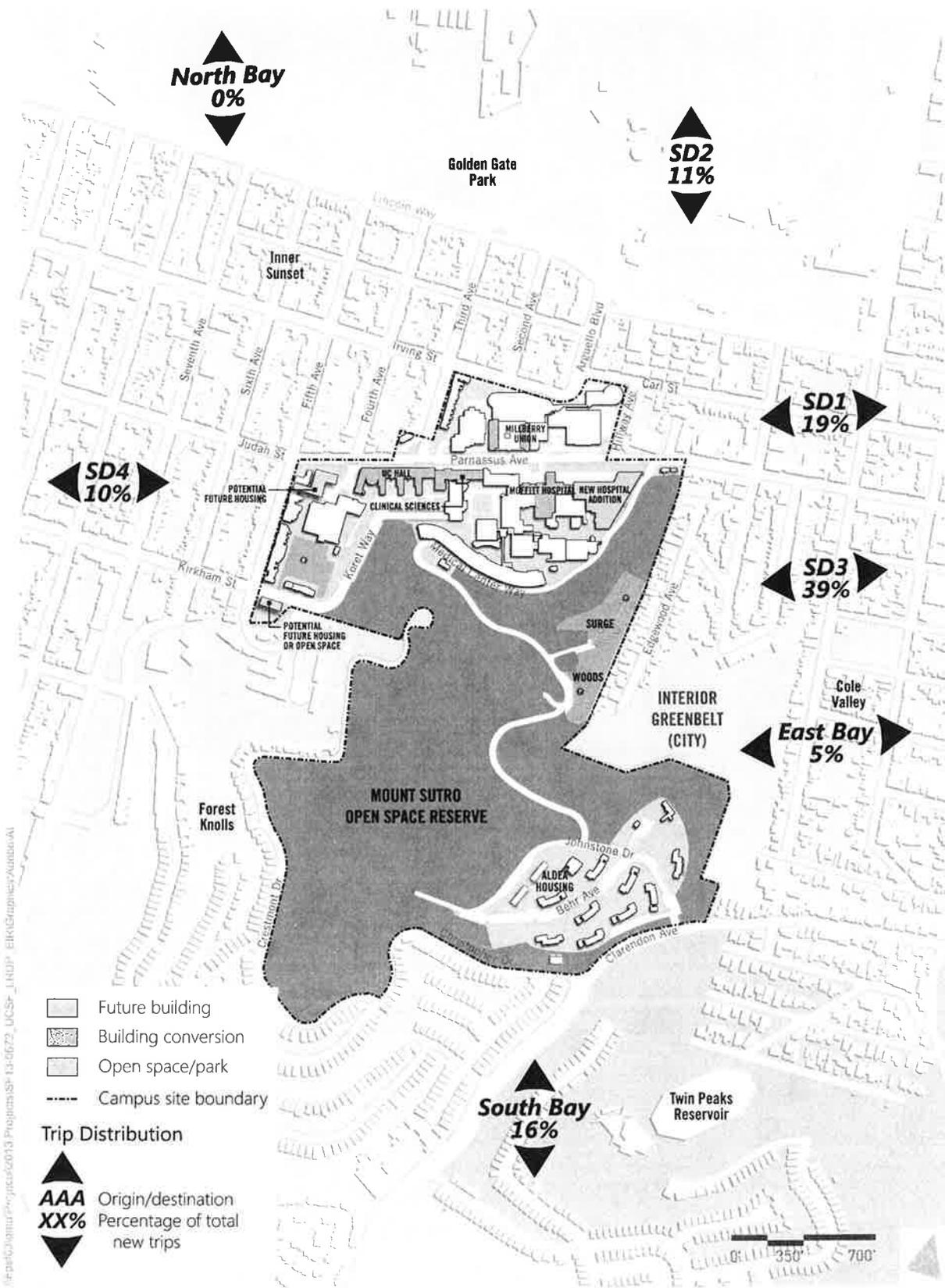


Figure 3-1  
 2040 Net New Trip Distribution-  
 Parnassus Heights

### 3.4.2 Mission Bay

As noted in **Table 3-4**, Phase One Medical Center and the Mission Hall projects at the Mission Bay campus site would generate 9,420 net new external daily person trips. Those trips are distributed regionally, with the resulting trip distribution percentages for the 2015 year are shown below in **Table 3-9**.

<b>TABLE 3-9: MISSION BAY CAMPUS SITE – 2015 PEAK HOUR TRIP DISTRIBUTION BY POPULATION GROUP<sup>1</sup></b>						
<b>Population Group</b>	<b>Staff</b>	<b>Patient and Visitors</b>	<b>Other Visitors</b>	<b>Child care<sup>2</sup></b>	<b>Residential<sup>2</sup></b>	<b>All Population Groups Combined</b>
<b>San Francisco</b>						
Superdistrict 1 / Northeast Quadrant	8%	22%	16%	0%	0%	13%
Superdistrict 2 / Northwest Quadrant	10%	7%	11%	0%	0%	9%
Superdistrict 3 / Southeast Quadrant	22%	9%	11%	0%	0%	17%
Superdistrict 4 / Southwest Quadrant	7%	20%	19%	0%	0%	11%
<b>Outside of San Francisco</b>						
East Bay	12%	15%	14%	0%	0%	13%
North Bay	8%	7%	8%	0%	0%	8%
South Bay	33%	12%	15%	0%	0%	26%
Out of Region	0%	8%	6%	0%	0%	3%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>0%</b>	<b>0%</b>	<b>100%</b>

Notes:

1. Trip distribution accounts for external trips only.
2. No new child care or residential external person trips would be generated by 2015.

Source: Advant Consulting, 2014

As shown above, a majority of net peak hour trips come from the South Bay, while a sizeable portion of staff, patients and visitors, and other visitors come from the Northeast and Southwest quadrants of San Francisco. UCSF staff does not anticipate net new trips generated from child care or residents by 2015. **Figure 3-2** shows general directions of approach and departure of LRDP-generated trips, based on the percentages presented in **Table 3-9**.

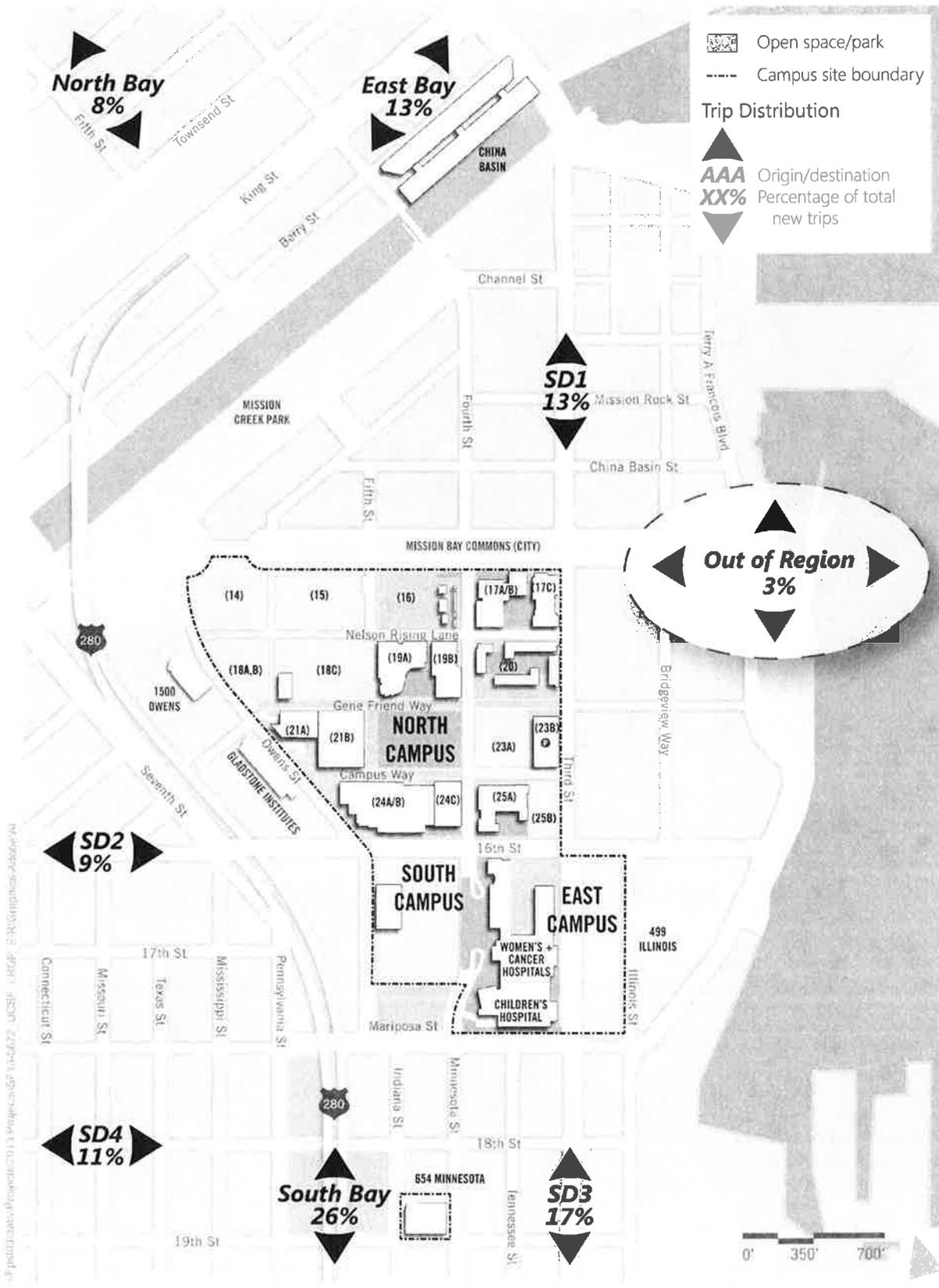


Figure 3-2  
2015 Net New Trip Distribution-  
Mission Bay

**Table 3-4** indicates that the 2014 LRDP would generate approximately 33,750 net new external daily person trips at the Mission Bay site by 2040. Due to the different mix in population growth between 2015 and 2040, the trip distribution for the project trips in 2015 differs slightly from that of year 2040. **Table 3-10** shows the year 2040 trip distribution which includes the net new trips between the existing and year 2040.

<b>TABLE 3-10: MISSION BAY CAMPUS SITE – 2040 PEAK HOUR TRIP DISTRIBUTION BY POPULATION GROUP<sup>1</sup></b>						
<b>Population Group</b>	<b>Staff</b>	<b>Patient and Visitors</b>	<b>Other Visitors</b>	<b>Child care</b>	<b>Residential</b>	<b>All Population Groups Combined</b>
<b>San Francisco</b>						
Superdistrict 1 / Northeast Quadrant	7%	22%	16%	7%	44%	11%
Superdistrict 2 / Northwest Quadrant	8%	7%	11%	8%	5%	8%
Superdistrict 3 / Southeast Quadrant	19%	9%	10%	19%	38%	18%
Superdistrict 4 / Southwest Quadrant	6%	20%	19%	6%	6%	9%
<b>Outside of San Francisco</b>						
East Bay	14%	15%	14%	14%	3%	13%
North Bay	9%	7%	8%	9%	1%	9%
South Bay	37%	12%	15%	37%	3%	30%
Out of Region	0%	8%	7%	0%	0%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Notes:

1. Trip distribution accounts for external trips only.

Source: Adavant Consulting, 2014

As shown in **Table 3-10**, a majority of staff and Child care trips would come to/from the South Bay and Superdistrict 3, the Southeast quadrant of San Francisco. Most patients and visitors and other visitors are from Superdistricts 1 and 4, the Northeast and Southwest quadrants of San Francisco, with a sizeable amount coming from the East Bay and South Bay areas. A majority of residential trips are distributed to Superdistricts 1 and 3, the Northeast and Southeast quadrants of the City, with few residents traveling outside of San Francisco. **Figure 3-3** shows general directions of approach and departure of LRDP-generated trips, based on the percentages presented in **Table 3-10**.



### 3.4.3 Mount Zion

**Table 3-4** shows approximately 3,220 additional external person trips at the Mount Zion campus site by 2040. These new external trips have been distributed regionally as previously described. The resulting trip distribution percentages are shown in **Table 3-11**.

<b>TABLE 3-11: MOUNT ZION CAMPUS SITE – 2040 PEAK HOUR TRIP DISTRIBUTION BY POPULATION GROUP<sup>1</sup></b>				
<b>Population Group</b>	<b>Staff</b>	<b>Patient and Visitors</b>	<b>Other Visitors</b>	<b>All Population Groups Combined</b>
<b>San Francisco</b>				
Superdistrict 1 / Northeast Quadrant	4%	34%	24%	10%
Superdistrict 2 / Northwest Quadrant	18%	25%	20%	19%
Superdistrict 3 / Southeast Quadrant	8%	10%	12%	8%
Superdistrict 4 / Southwest Quadrant	8%	16%	15%	9%
<b>Outside of San Francisco</b>				
East Bay	21%	3%	12%	18%
North Bay	13%	3%	10%	11%
South Bay	28%	10%	3%	25%
Out of Region <sup>2</sup>	0%	-1%	4%	0%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Notes:

1. Trip distribution accounts for external trips only,
2. Negative trip distribution percentage occurs because the net peak hour trips origin/destination is less than the existing conditions.

Source: Advant Consulting, 2014

As shown above, a majority of staff would come from outside of San Francisco, with almost 30-percent arriving from the South Bay. Unlike staff, most patients, visitors and other visitors are distributed within San Francisco. **Figure 3-4** shows general directions of approach and departure of LRDP-generated trips, based on the percentages presented in **Table 3-11**.



### 3.4.4 Mission Center

**Table 3-4** shows 1,064 external trips at the Mission Center campus site. These external trips have been distributed regionally as previously described in the document. The resulting trip distribution percentages are summarized in **Table 3-12**.

<b>TABLE 3-12: MISSION CAMPUS SITE – 2040 PEAK HOUR TRIP DISTRIBUTION BY POPULATION GROUP<sup>1</sup></b>			
<b>Population Group</b>	<b>Staff</b>	<b>Other Visitors</b>	<b>All Population Groups Combined</b>
<b>San Francisco</b>			
Superdistrict 1 / Northeast Quadrant	8%	16%	8%
Superdistrict 2 / Northwest Quadrant	10%	11%	10%
Superdistrict 3 / Southeast Quadrant	22%	11%	22%
Superdistrict 4 / Southwest Quadrant	7%	19%	8%
<b>Outside of San Francisco</b>			
East Bay	16%	14%	16%
North Bay	5%	8%	6%
South Bay	30%	15%	28%
Out of Region	2%	6%	2%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Notes:

1. Trip distribution accounts for external trips only.

Source: Adavant Consulting, 2014

As shown in **Table 3-12** approximately half of the staff and other visitors are distributed in San Francisco while the remaining half is distributed outside of the City. **Figure 3-5** shows general directions of approach and departure of LRDP-generated trips, based on the percentages presented in **Table 3-12**.

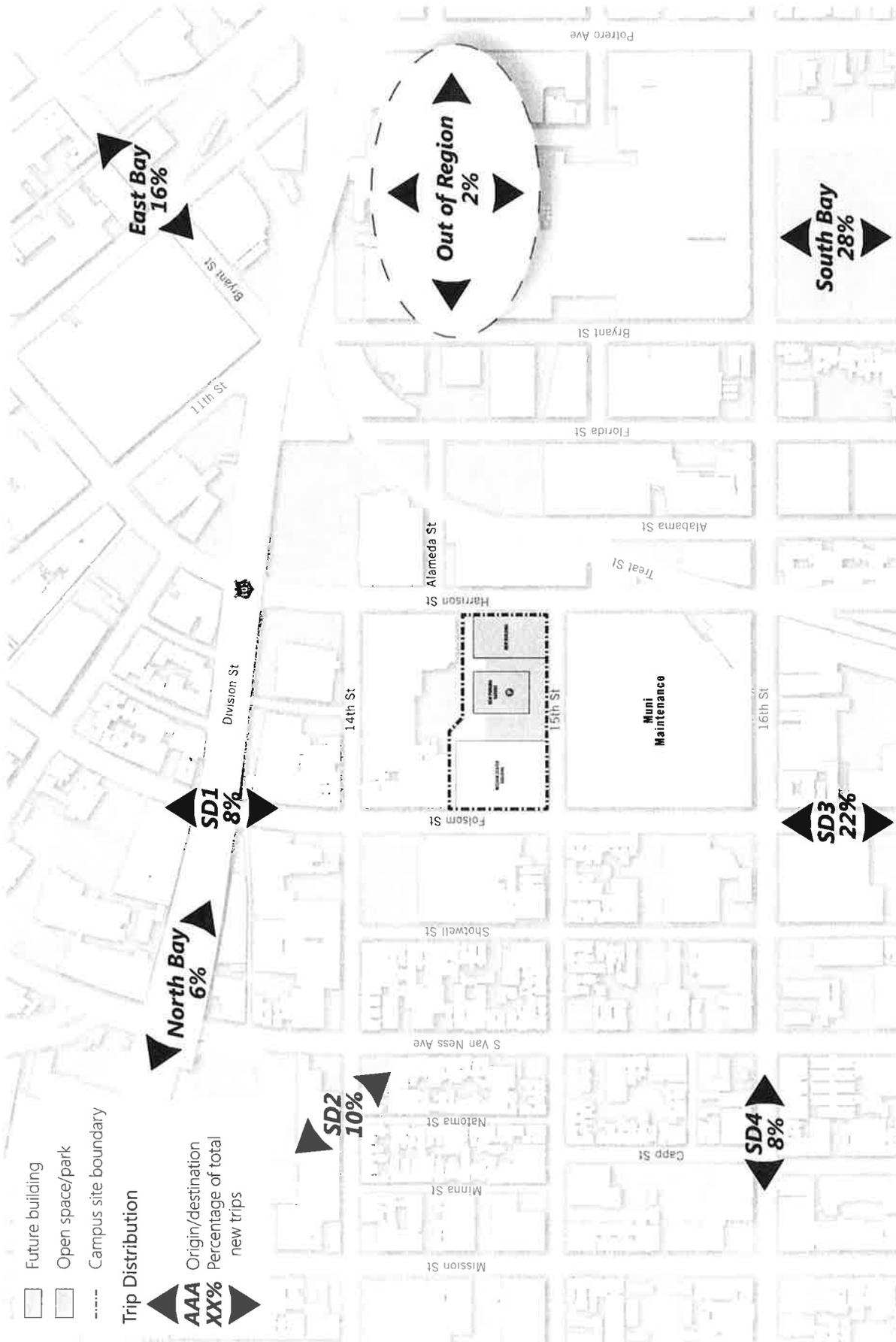


Figure 3-5  
2040 Net New Trip Distribution-  
Mission Center



**EXHIBIT B**

Research Report – UCD-ITS-RR-17-07

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**Disruptive Transportation:  
The Adoption, Utilization, and Impacts of  
Ride-Hailing in the United States**

October 2017

Regina R. Clewlow  
Gouri Shankar Mishra

- 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 C**



# *Laurel Heights Improvement Association of San Francisco, Inc.*

October 23, 2018

By E-Mail To: California.Jobs@opr.ca.gov

Governor's Office of Planning and Research

Re: State Clearinghouse No: 2017092053 - 3333 California Street Project  
Application for Environmental Leadership Development Project

These comments are submitted based on information from CARB yesterday that the above-described application was not complete, as CARB was still waiting for some information that CARB requested of the applicant.

**1. The Project Drawings Submitted with the Application Do Not Show the Proposed New Loading Zones on the Exterior of the Site, and the Analysis of Vehicle Trips Should Include Estimated Vehicle Trips from Drop-Offs and Pick-Ups Including From Transportation Network Companies Such as Uber and Lyft.**

The project drawings submitted with the application do not show the new passenger and commercial loading zones proposed for the exterior of the site, which would be used for pick-ups and drop-offs by passenger and commercial vehicles, including transportation network companies such as Uber and Lyft. These passenger loading zones can be expected to be used by employees working at the site as well as residents and visitors.

Attachment A hereto contains the 8-17-2017 plan sheet C2.02, which shows four (4) new proposed passenger loading zones and one (1) new commercial loading zone marked in red on the exterior of the site. Plan sheet L1.01 shows them marked in blue. (See Attachment A)

The August 30, 2018 email from Dan Safier, project manager, states on page 1 that there would be three (3) separate 60-foot-long white passenger loading zones and one (1) 100-foot-long yellow commercial loading zone on California Street and contains a diagram of the locations following the text. (See Attachment B) The diagram shows the passenger loading zones in blue and the commercial loading zone in yellow. It is not clear whether one of the passenger loading zones proposed in the plans submitted to the Planning Department has been eliminated, as the diagram attached to the email does not indicate that it has been submitted to the Planning Department.

It is my understanding from information provided by the Planning Department that San Francisco's Transportation Analysis Zones were based on data collected from the California household travel behavior survey of 2010-2012 and that transportation network trips have substantially increased since that data was collected. Thus, the Transportation Analysis Zone 709 data used by the applicant does not include the amount of vehicle trips that could be expected from the three or four passenger loading zones on the perimeter of the site under current expectations for transportation network trips. This information should be provided and the analysis of project vehicle trips revised, because the configuration of three to four passenger loading zones on the perimeter of the site can reasonably be expected to attract or serve transportation network companies and add a significant amount of traffic trips to the site.

## **2. Comparable Projects in a Similar TAZ Zone or Location Type Were Not Analyzed in the Transportation Efficiency Analysis.**

The applicant's Transportation Efficiency analysis does not compare project traffic with comparable development in Zone 709 or a comparable TAZ Zone or area. Page 10 of the Transportation Efficiency analysis acknowledges that the comparable projects used in the analysis were *not* required to "have the same characteristics as the proposed and variant project that would lead to trip reductions, such as an urban location near transit, an infill nature, or a Transit Demand Management (TDM) program." Page 10 of the Transportation Efficiency analysis states that the analysis was not based on comparable projects, as follows:

"To analyze the transportation efficiency of the proposed and variant projects, the projects' vehicle trip generation was examined against that of comparable developments. The comparable project is assumed to be a project with similar land use as the proposed project **but vehicle trip generation that is more typical of national averages**. The comparable development's vehicle trip generation was calculated using the standard **national reference**, the Institute of Transportation Engineers' (ITE) *Trip Generation Manual*. The comparable project has the same land uses and quantities (size/number of units) as the proposed and variant projects, **but may not have the same characteristics as the proposed and variant projects that would lead to trip reductions, such as an urban location near transit, an infill nature, or a Transit Demand Management (TDM) program**.

For the proposed project, the ITE trip rates used to calculate the vehicle trip generation of the comparable development originated from the following land use categories: Multifamily Housing - Mid-Rise (ITE 221), Multifamily Housing - Low-Rise (ITE 220), Shopping Center (ITE 820), Quality Restaurant (ITE 931), Coffee-Donut shop without Drive-Through Window (ITE 936), General Office (ITE 710), and Day Care Center (ITE 565). For the comparable project relating to the variant project, the same land use categories were used, with the exception of the General Office category." (Emphasis

added)

Page 1 of the Transportation Efficiency analysis also states that the proposed and variant projects were “analyzed against the trip generation of a comparable project, **which is based on national average characteristics.**” (Emphasis added)

Since the San Francisco Transportation Information Map contains many, very detailed Transportation Analysis Zones, that would have characteristics comparable to the TAZ 709 location and the proposed and variant projects, the analysis should be revised using comparable development in San Francisco that has “the same characteristics as the proposed and variant projects that would lead to trip reductions, such as an urban location near transit, an infill nature, or a Transit Demand Management (TDM) program.” Since the “comparable” projects used in the Transportation Efficiency analysis were not required to have these characteristics, but were based on national average characteristics, the comparison with the other development overstated the degree by which the proposed and variant projects could result in a decrease in total daily vehicle trips. Public Resources Code section 21180 specifies that comparable projects “must be located on an infill site,” but the Transportation Efficiency analysis did not demonstrate that the compared projects were located on an infill site.

Given the well-known fact that San Francisco is the second most dense city in the nation, the comparison of the proposed and variant projects with projects more typical of national averages resulted in misleading and inaccurate information and failed to provide information sufficient to enable the Governor to determine that the project will achieve at least 15 percent greater transportation efficiency, as defined in Public Resources Code section 21180( c) than comparable projects. The Governor's Guidelines for an AB 900 application specify that for “the purposes of this provision, comparable means a project of the same size, capacity and location type.” The comparison used by the applicant failed to use the same location type consisting of an urban location near transit or an infill nature. The applicant should be required to revise the analysis and compare the proposed and variant projects with a development of the same location type consisting of an urban location near transit or an infill site.

**3. The Greenhouse Gas Emissions From Vehicles Expected to Use the Newly Proposed Passenger and Commercial Loading Zones on the Exterior of the Site Should Be Included in the Greenhouse Gas Emissions Analysis.**

The Greenhouse Gas Emissions (GHG) Analysis does not appear to include the GHG emissions from vehicles expected to use the new 3 or 4 passenger and 1 commercial loading zones proposed for the exterior of the site. AB 900 clearly requires analysis of all GHG emissions from vehicle traffic associated with the proposed and variant projects. The application should be revised to include these GHG emissions, especially those that could result from employee, resident and visitor transportation to and from the site.

**4. All Net Greenhouse Gas Emissions Should Be Evaluated For the Lifespan of the Project.**

Public Resources Code section 21183( c) specifies that the project may not result “in any net additional emission of greenhouse gases, including greenhouse gas emissions from employee transportation.” The statute does not limit the GHG emissions to direct emissions from the project. All indirect emissions should also be evaluated, including the GHG emissions that would result from the manufacture of the substantial amounts of concrete and steel that would be used to construct the proposed and variant projects. The project proposes to construct 1,372,270 gross square feet of development on the site, which is almost three times the existing 469,000 gross square footage of development. (See Attachment C, plan sheet G3.02a and excerpt of Initial Study for 3333 California Street Mixed Use Project, p. 9) Substantial amounts of concrete and steel would be needed for construction of underground parking garages, which would entail excavation of soils and rock 7- 40 feet below existing grade, generating approximately 241,300 net cubic yards of excavated soils. (See Attachment C, Initial Study excerpt, p. 207 and plan excerpt G2.08.)

In addition, the application for Environmental Leadership Development Project states under heading 9 that operational emissions were calculated for 2020 through 2057 to account for an approximately 30-year lifespan of the project following buildout. This estimate seems small and should warrant further inquiry and reanalysis of the expected lifespan of the project following buildout. The buildings and garages could certainly be expected to last for more than 30 years. The existing building and garages were first constructed in the mid-1950s.

**5. This is Not an Of-Right Project, and Approval of the San Francisco Board of Supervisors Would Be Required for Substantial Zoning Changes to Permit the Proposed and Variant Project to Proceed, So the Determination of Leadership Status Should be Deferred Until After the Board of Supervisors Considers the Proposed and Variant Project and any Alternatives Proposed by Commenters on the EIR.**

The application does not disclose the fact that substantial zoning changes would have to be approved by the San Francisco Board of Supervisors to allow the proposed and variant project to proceed. As explained by the San Francisco Planning Department's Preliminary Project Assessment, Attachment D hereto, various aspects of the project conflict with both the current RM-1 zoning applicable to the site, as well as with City Planning Commission Resolution No. 4109, which also applies to the site. (Attachment D, pp. 10, 14) Also, various components of the project exceed the current 40-foot height limit, and a height district reclassification of the property must be sought. *Id.* p. 10; see also Attachment C, Initial Study excerpts pp. 85-87.

In addition, the San Francisco Board of Supervisors has not approved any development

agreement for the site. Thus, the statement under heading 9 of the application that the applicant "may choose to develop the project site over a timeframe of up to 15 years" is inaccurate. Applicant Dan Safier has made clear that he is seeking to enter into a development agreement with the City of San Francisco for a term of approximately 15 years. (Attachment F, excerpt of email from Dan Safier)

There is very substantial community opposition to the rezonings requested by the applicant, and the community has presented a petition with approximately 800 signatures against the rezoning to the Supervisor of District 2. The community is preparing an alternative plan that would contain the same number of housing units as the proposed and variant projects but eliminate the new retail uses and new office building.

The Governor should defer the decision on the AB 900 application until after the San Francisco Board of Supervisors votes on whether to grant zoning changes and whether to approve the nature, size and composition of the project.

**6. The Existing Building and Landscaping on the Site are Listed California Historical Resources.**

As explained in Attachment E hereto, the existing building and landscaping are historically significant resources listed on the California Register of Historical Resources. Attachment E contains excerpts of the nomination of the site as a historical resource that was granted. These excerpts explain the character defining features of the existing office building and landscaping and that the design was intended to promote the integration of the architecture and landscape.

The proposed and variant project would materially impair character defining features of the resource including the horizontality of massing and the integrated landscaping. Attachment G, plan sheets A6.00, A6.01 and A1.02)

The community is preparing an alternative that would construct the same number of residential units on the site as the proposed and variant projects but would not materially impair character defining features of the resource.

**Conclusion**

We appreciate your consideration of these comments and hope you will take them into account in evaluating the application and deciding the appropriate time for a determination of whether the application complies with AB 900 standards.

Governor's Office of Planning and Research  
October 23, 2018  
Page 6

Very truly yours,

Laurel Heights Improvement Association of SF, Inc.

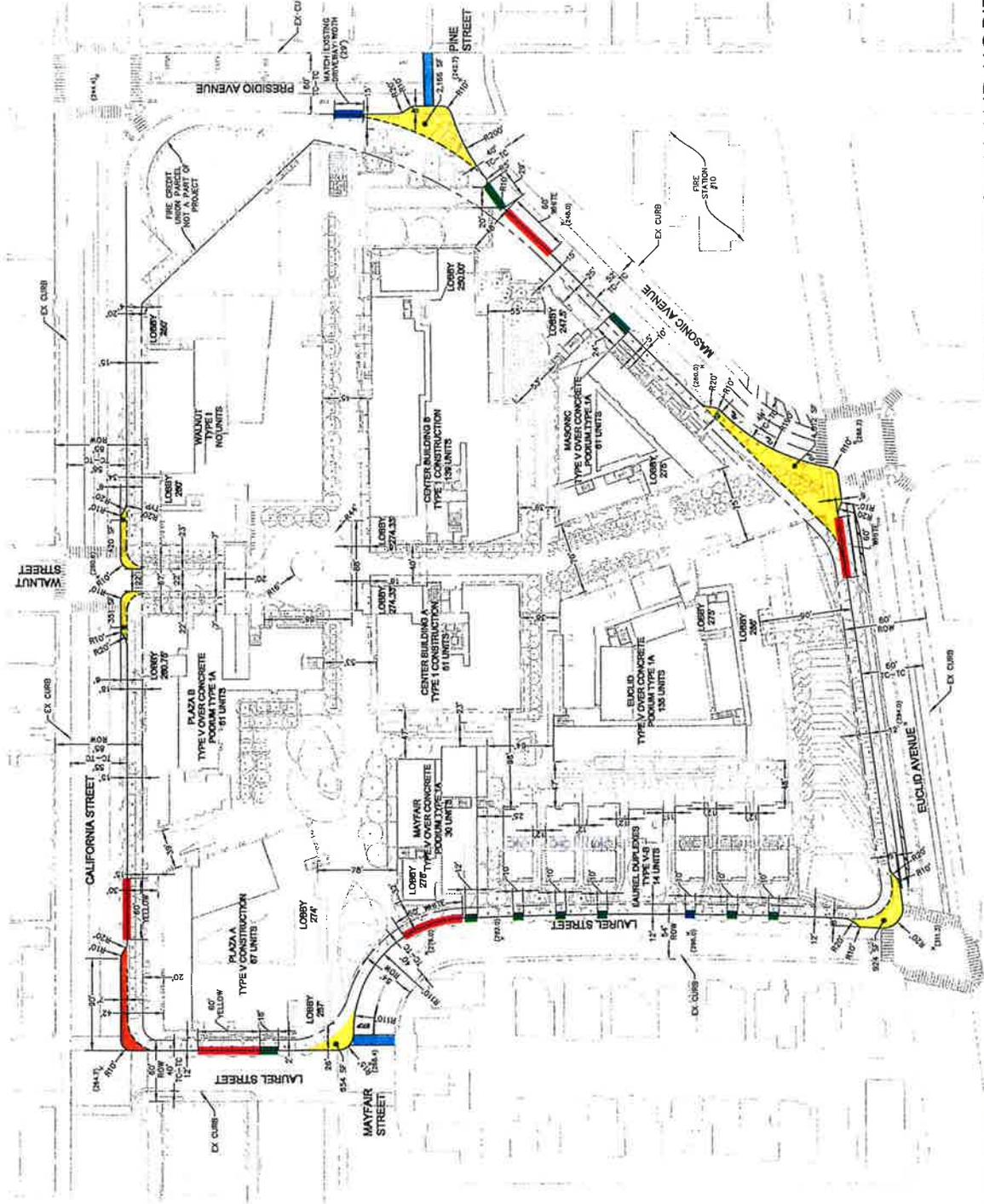
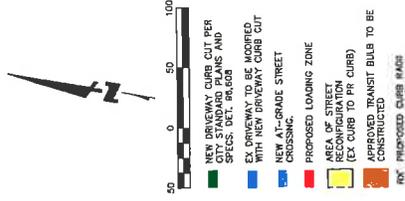
*Kathryn R. Devincenzi*

By: Kathryn R. Devincenzi, President

cc: Scott Morgan, Director, State Clearinghouse  
Chris Ganson, Senior Planner  
Richard Corey, Executive Director CARB  
Heather King, Air Pollution Specialist

Attachments: A through G

**EXHIBIT A**



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08.17.2017  
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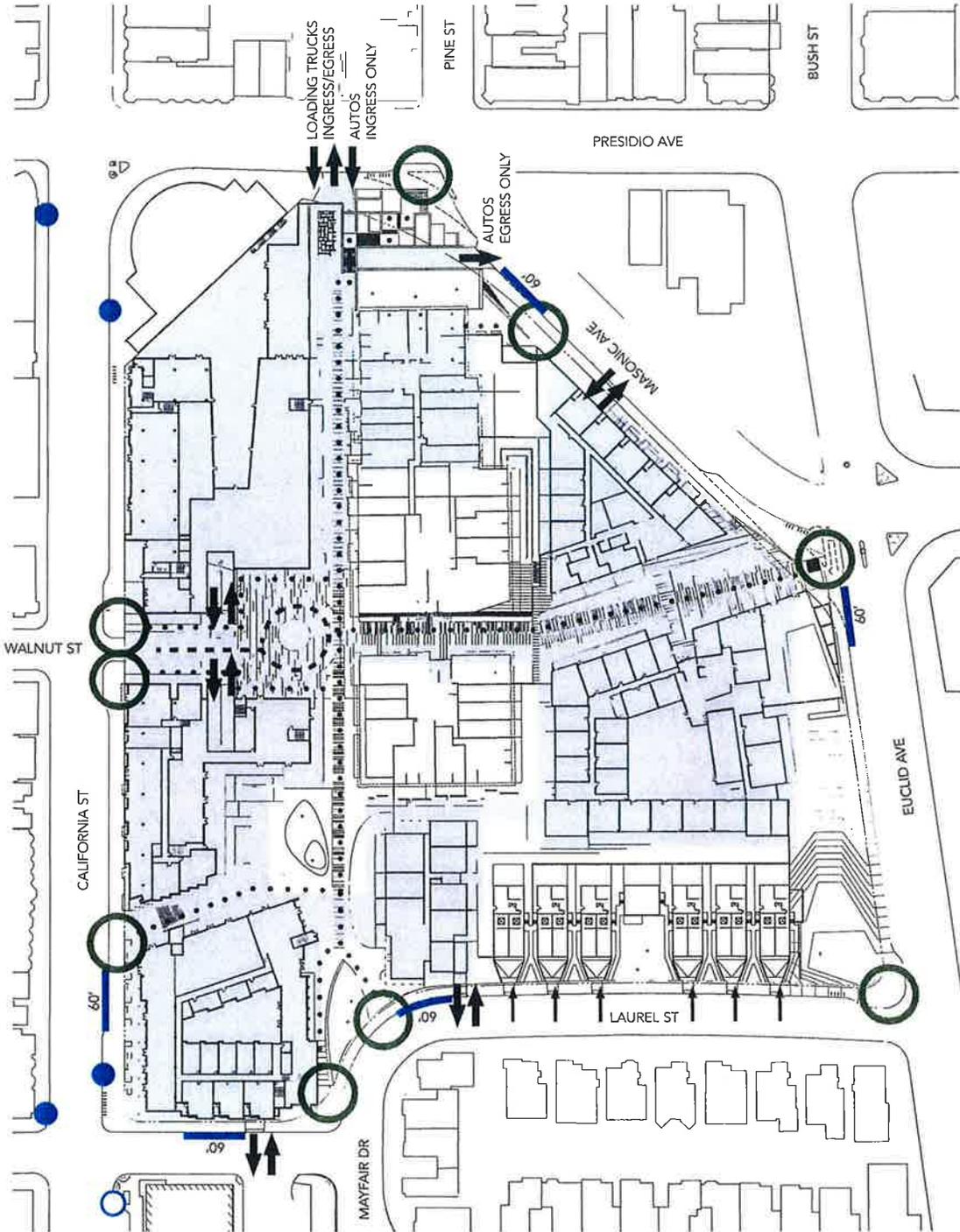
JENSEN SCB architects

ARUP BAR

SKS JAMES CONNER FIELD OPERATIONS

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C2.02



SEE SHEET C2.02 FOR EXISTING AND PROPOSED DRIVEWAY AND BULBOUT DIMENSIONS.

SITE DIAGRAM - SITE ACCESS



08.17.2017  
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ARUP BAR architects

SKS JAMES HENDERSON OPERATIONS



L1.01

**EXHIBIT B**

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**Thank you and Follow-Up**

1 message

**Dan Safier** <dsafier@pradogroup.com>

Thu, Aug 30, 2018 at 11:23 AM

To: "krdevincenzi@gmail.com" <krdevincenzi@gmail.com>, "frfbeagle@gmail.com" <frfbeagle@gmail.com>, "johnrothmann2@yahoo.com" <johnrothmann2@yahoo.com>, "M.J. Thomas" <mjthomas@hill-co.com>  
Cc: Dan Kingsley <dkingsley@sk sre.com>, Cindy Park <cpark@pradogroup.com>, Don Bragg <dbragg@pradogroup.com>, Jing Ng <Jing@pradogroup.com>

Dear Kathy, Dick, John, and M.J.,

We hope this email finds you well.

Please see attached for our responses to your questions from our previous meeting.

As mentioned at the end of our meeting, we thought the discussion was very productive. As we continue to work on refining the Planning Application, we would like offer to schedule a follow-up meeting to further discuss retail or any other topics.

Sincerely,

Dan and Dan



Dan Safier

Prado Group, Inc.

150 Post Street, Suite 320

San Francisco, CA 94108

[dsafier@pradogroup.com](mailto:dsafier@pradogroup.com)

T: 415.857.9312

[www.PradoGroup.com](http://www.PradoGroup.com)

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 **2018.08 PSKS Response to LHIA Questions.pdf**  
2155K

**1. What loading zones are being proposed for the site? What traffic impacts are associated with the locations of the loading zones?**

The project is proposing six (6) off-street and underground freight loading spaces in the California Street and Masonic garages.

In addition to this, the project provides three (3) separate 60-foot-long (white) passenger loading zones and one (1) 100-foot-long (yellow) commercial loading zone. Please see the attached diagram which calls out the passenger loading zones in blue and the commercial loading zone in yellow. The zones are currently located as follows:

- West side of Masonic Avenue (passenger)
- North side of Euclid Avenue (passenger)
- East side of Laurel Street (passenger)
- South side of California Street (commercial), as requested by the City's Streetscape Design Advisory Team (SDAT)

The locations of the on-street passenger loading zones were located for pedestrian and residence convenience and proximity to the lobbies of the proposed buildings in the project. Passenger loading would also occur at the proposed roundabout at the terminus of the Walnut Street extension into the project site.

The potential impacts of the loading zones are currently being studied and evaluated in the transportation section of the Draft EIR. Appropriate mitigation and improvement measures will be introduced as necessary.

**2. Site Access:**

**a. Can cars go in and out on California and Walnut?**

Yes. As shown in the attached diagram, the project is proposing multiple access points from the surrounding streets into underground parking garages to disperse the access around the site. This includes the entry/exit driveway at California and Walnut for the California Street Garages. The traffic flow is being studied in the Draft EIR.

The proposed access points are listed in detail in the Initial Study, including specifically on pages 57 & 58. This list has not changed since the publication of the Initial Study, with the exception of the consolidation of the Mayfair garage entry/exit and the 6 Laurel Townhome driveways into a single access point, as shared with LHIA at our 7/24 meeting. Please see attached for a diagram of the updated site access plan for the Mayfair Garage and Laurel Townhomes.

**b. What are the proposed plans for Presidio Avenue? Is there a vehicular exit on Presidio; if not, can this be added?**

The proposed plans for Presidio Avenue are identified in the initial Study, including Pages 58 and 63.

There is a driveway on Presidio that will include an in and out access for the off-street freight loading area and in-only access to the California Street Garage. The current

design enables exiting vehicles to exit via a new curb cut on Masonic Avenue. The entrance and the exit were separated for traffic management purposes. The Draft EIR will analyze the traffic impacts of the project and driveways in depth, studying potential traffic impacts and circulation through the proposed driveways while putting forward mitigation and improvement measures as necessary.

**c. The Initial Study states that the Mayfair Garage might be connected to the main underground garage. What effect will this have on the traffic on Laurel?**

The Initial Study and DEIR do not currently study the parking garages as connected, which we understand to be the more conservative analysis.

**d. Does the proposal include the retention of the café in existing building?**

The proposal does not currently include the retention of the café in the existing building.

**3. What is your goal for the retail? Is it more of an amenity for the housing or more of a financial driver?**

Our approach has always been to add to and complement Laurel Village and Sacramento Street. We aim to work with our community and the Laurel Village Merchants. The retail plan from our June 13, 2017 community meeting shows how we could divide the spaces on California Street to accommodate smaller shops and a range of neighborhood-serving retail.

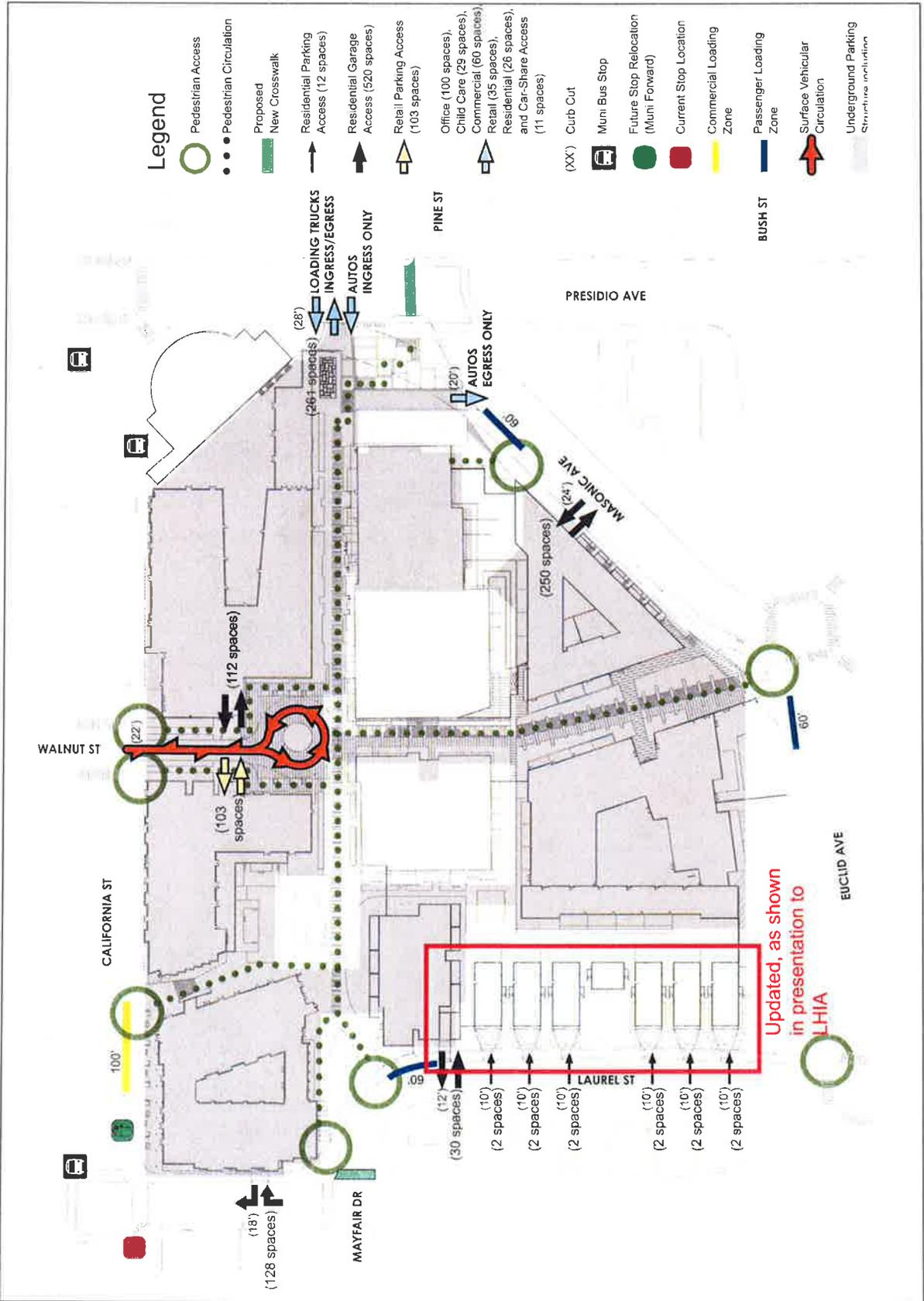
Neighborhood retail brings pedestrians and the watchful eyes that come with them, enhancing the safety of city streets. It also encourages walkability, with residents walking to stores, services, parks and other amenities close by. As such, we believe the retail will be an amenity to our project and the community.

**4. If a SUD were granted, what is the process for amending it? What is the process for amending a DA? Is the public process less involved for the amendments?**

Amendments to a SUD are treated as an amendment to the Planning Code and must be done by ordinance of the Board of Supervisors. This is a lengthy process involving multiple public hearings, CEQA review, and is outlined in Section 302 of the Planning Code; the proposed amendments are subject to approval by the Planning Commission and Board of Supervisors. Any material change to the DA (e.g., any modification that would extend the term, change the permitted uses, decrease the community benefits, or be inconsistent with the SUD) would require Planning Director, Planning Commission and Board of Supervisor's approval.

# PRELIMINARY DESIGN

08/2018



**EXHIBIT C**

Bldg	Residential Gross SF	Retail Gross SF	Office Gross SF	Childcare Gross SF	Garage Gross SF	TOTAL GSF
Plaza A	66,150	14,178	0	0	64,550	144,878
Plaza B	72,220	11,328	0	0	62,070	145,618
Walnut	0	24,324	49,999	14,690	174,440	263,453
Center Bldg A	89,465	0	0	0	0	89,465
Center Bldg B	233,423	0	0	0	19,256	252,681
Masonic	88,906	0	0	0	35,986	124,892
Euclid	177,345	4,287	0	0	51,991	233,623
Laurel Duplexes	54,111	0	0	0	4,728	58,839
Mayfair	43,071	0	0	0	15,750	58,821
<b>Total</b>	<b>824,691</b>	<b>54,117</b>	<b>49,999</b>	<b>14,690</b>	<b>428,773</b>	<b>1,372,270</b>

**PROJECT TOTALS**

**PROJECT AREAS**

Level	JR	1-BED	2-BED	3-BED	4-BED or PH	TOTAL
Plaza A	18	22	23	4	0	67
Plaza B	9	21	26	6	0	61
Walnut	0	0	0	0	0	0
Center Bldg A	0	24	11	10	6	51
Center Bldg B	0	50	51	29	9	139
Masonic	0	27	24	10	0	61
Euclid	0	50	54	31	0	135
Laurel Duplexes	0	0	1	12	0	14
Mayfair	0	14	6	10	0	30
<b>Total</b>	<b>27</b>	<b>208</b>	<b>195</b>	<b>101</b>	<b>27</b>	<b>558</b>

**PROJECT TOTALS**

**UNIT MIX/COUNT**

**PROJECT TOTALS**

**UNIT MIX/COUNT**

Bldg	Residential Parking	Retail Parking *	Office Parking	Childcare Parking	Commercial Parking	Total	Car share	Loading Areas
Plaza A	67	43	0	0	0	0	0	0
Plaza B	61	34	0	0	60	10	0	0
Walnut	0	48	100	29	0	0	0	3
Center Bldg A	51	0	0	0	0	0	0	0
Center Bldg B	139	0	0	0	0	0	0	0
Masonic	61	0	0	0	0	0	0	3
Euclid	137	13	0	0	0	0	0	0
Laurel Duplexes	12	0	0	0	0	0	0	0
Mayfair	30	0	0	0	0	0	0	0
<b>Total</b>	<b>558</b>	<b>138</b>	<b>100</b>	<b>29</b>	<b>60</b>	<b>885</b>	<b>10</b>	<b>6</b>

**PROJECT TOTALS**

**PARKING PROVIDED**

BIKE PARKING (SEC. 155): PROVIDED  
 REQUIRED CLASS ONE: 558 - COMPLIES  
 RES: 100 \* 1/4 DU OVER 100 = 215  
 OFFICE: 1/5,000 GSF = 49,999/5,000 = 10  
 RETAIL: 1/7,500 GSF = 54,117/7,500 = 8  
 CHILD-CARE: 1/20 CHILDREN = 172/20 = 9  
 EXCEEDS

REQUIRED CLASS TWO: PROVIDED  
 RES: 1/20 DU = 558/20 = 28  
 OFFICE: 2 REQ'D IF <50,000 GSF  
 RETAIL: 10 + 1/10,000 >50K GSF = 10  
 FOOD/BEV: 1/750 SF = 16,882/750 = 23  
 CHILD-CARE: 1/20 CHILDREN = 8  
 EXCEEDS

\* Plaza A+B retail parked at 3/10,000, assumed half of area at 2/10,000 "retail general" and half of area 4/10,000 "food and beverage".  
 \* Walnut retail parked at 2/10,000, assumed "retail general".  
 \* Euclid retail parked at 4/10,000, assumed to be "food and beverage" and are located in the California Street garage.  
 \* The parking spaces for the Laurel townhomes without a garage are located in the Euclid garage (2).  
 \* 6 Plaza A Residential spaces are located in the Plaza B parking area

**3333 CALIFORNIA STREET**

SAN FRANCISCO, CA

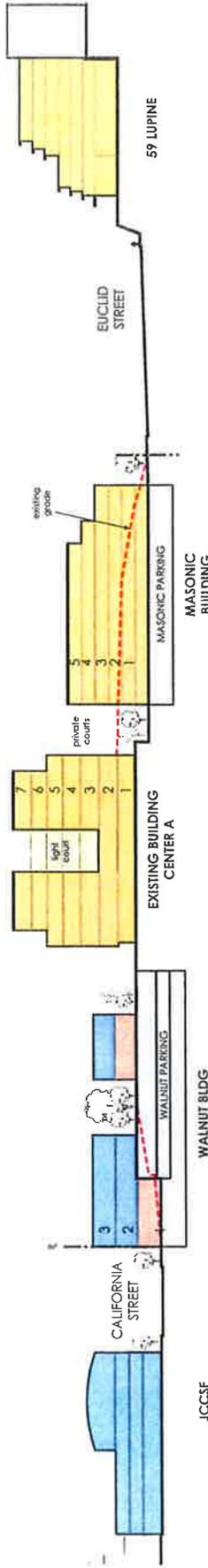
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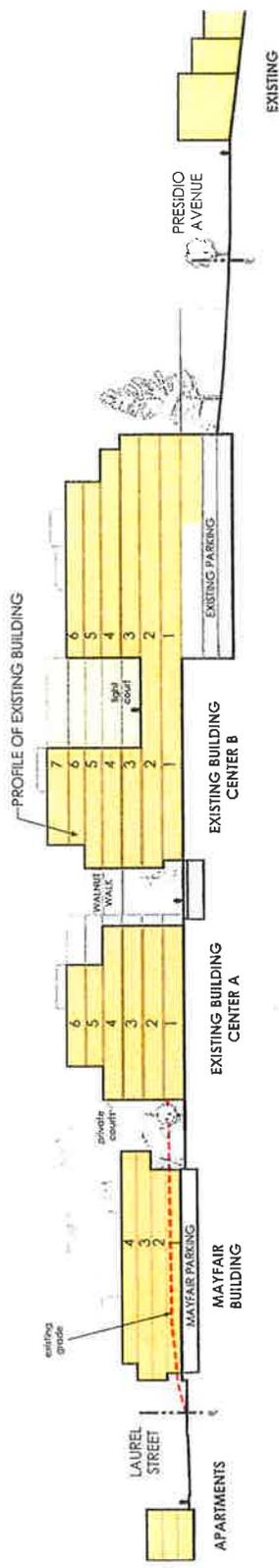
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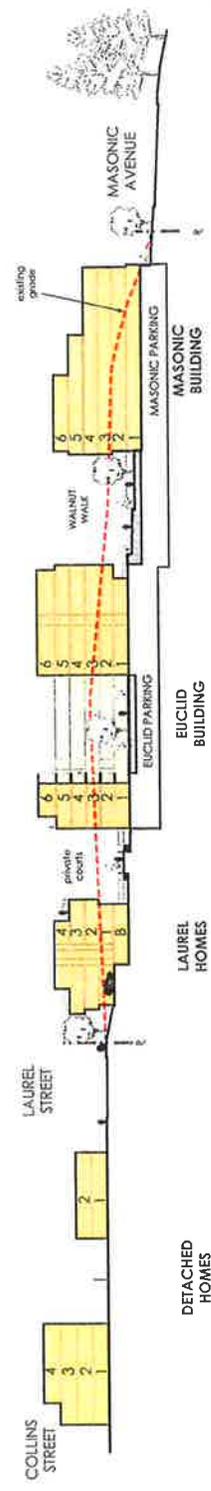
**PROJECT DATA - SUMMARY**



1 NORTH-SOUTH SITE SECTION  
1" = 40'-0"



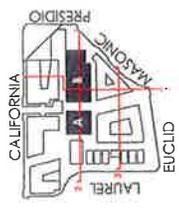
2 EAST-WEST SITE SECTION  
1" = 40'-0"



3 EAST-WEST SITE SECTION  
1" = 40'-0"

- CHICKEN WIRE FENCE
- LANDSCAPED TOOP
- PARKING
- RETAIL USABLE
- RETAIL B.O.H.
- OFFICE CORE
- OFFICE CORE
- RESIDENTIAL HOMES
- RESIDENTIAL CORE

LEGEND INTENDED FOR USE ONLY WHERE PLANS ARE REPRODUCED IN COLOR



PROJECT SITE SECTIONS



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JENSEN SCB

ARUP BAR architects

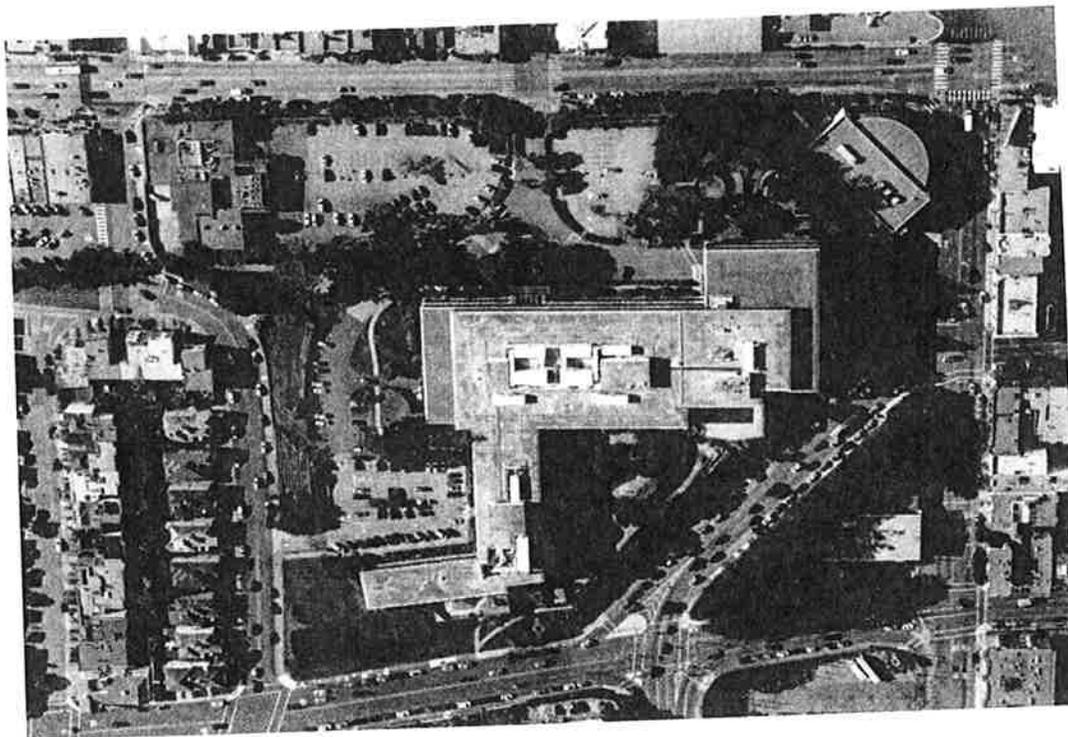
JAMES FIELD OPERATIONS

SJKS

3333 CALIFORNIA STREET SAN FRANCISCO, CA

G2.08

**Initial Study**  
**3333 California Street Mixed Use Project**



Planning Department Case No. 2015-014028ENV  
State Clearinghouse No. 2017092053

April 25, 2018

Written comments should be sent to:

Julie Moore  
Senior Environmental Planner  
San Francisco Planning Department  
1650 Mission Street, Suite 400  
San Francisco, CA 94103  
julie.moore@sfgov.org



**SAN FRANCISCO**  
**PLANNING**  
DEPARTMENT

Use	Existing		Proposed Project	
	Existing Gross Square Footage or Number of Spaces	Location	Proposed Gross Square Footage or Number of Spaces	Proposed Location
On-Street Commercial and Passenger Loading Spaces	0	Not Applicable	4 (conversion of 15 parking spaces)	California Street and Laurel Street (1 commercial space) Masonic Avenue, Euclid Avenue, Laurel Street (3 passenger spaces)
<b>TOTAL GROSS SQUARE FOOTAGE / NUMBER OF SPACES</b>	<b>Existing:</b>  469,000 gsf / 543 spaces		<b>Proposed Project:</b>  1,372,270 gsf / 895 spaces	

*Notes:*

- A With the adaptive reuse of Center Building B, a portion of Basement Level B1 and all of Basement Level B3 under the eastern portion of the existing office building would be retained for parking and integrated with the proposed California Street Garage (under the proposed Plaza A, Plaza B, and Walnut buildings) and, potentially, with the new below-grade parking under the proposed Masonic, Euclid, and Mayfair buildings.
- B There are five existing car-share spaces in Basement Level B1 of the structured parking garage.
- C Parking would include 10 car-share spaces and 26 Americans with Disabilities Act accessible spaces. Pursuant to San Francisco Green Building Code sections 4.106.4 and 5.106.5 up to 8 percent of parking spaces would be developed with electric vehicle charging stations and other spaces would be electric vehicle ready.
- D Open area includes 51,900 square feet of existing privately owned open space. UCSF currently grants public access to the green spaces at the corner of Euclid Avenue and Laurel Street (23,600 square feet) and along Presidio Avenue (10,700 square feet). The internal private open spaces on the south and east sides of the existing office building (a 4,500-square-foot child care play space and a 13,100-square-foot private courtyard) are for UCSF's exclusive use. The remaining approximately 113,300 square feet of open area are inaccessible planted or landscaped areas. Open area does not include existing surface parking lots (approximately 139,000 square feet).
- E Includes all landscaped areas and common open space and private open space for the proposed residential uses. A portion of the common open space would be open to the public. Private and common open space would be provided for each of the proposed new buildings and the renovated Center A and Center B Buildings as part of the development of each of these buildings and as part of the overall open space framework.

*Source:* Laurel Heights Partners, LLC; BAR Architects; SCB; Jensen (August 2017)

The proposed project would amend the San Francisco Planning Code (planning code), adding a new Special Use District (SUD). The SUD would establish land use zoning controls for the project site. The Zoning Maps would be amended to show changes for the project site from the current zoning (Residential, Mixed District, Low Density [RM-1] Zoning District) to the proposed SUD zoning, which would apply. In addition, it would require a waiver or modification of any applicable conditions of Planning Commission Resolution 4109 (Resolution 4109 [described in detail below on pp. 22-23]).<sup>10</sup> Height limits would remain at 40 feet except along California Street, where height limits would be increased from 40 to 45 feet to accommodate higher ceilings for ground-floor retail uses, and at the center of the site (from 40 feet to 80 and 92 feet) for the renovated buildings resulting from the adaptive reuse of the existing office building, which is approximately 55.5 feet tall as measured along the north elevation to the top of the roof (exclusive of the approximately 13-foot-tall mechanical penthouse).

<sup>10</sup> City and County of San Francisco, City Planning Commission Resolution 4109, November 13, 1952.

Overall, 1,476,987 gsf of new and rehabilitated space, comprising 978,611 gsf of residential floor area; 48,593 gsf of ground floor retail spaces; and 14,650 gsf of childcare center space would be developed under the project variant. Up to 971 vehicle parking spaces, including ten car-share spaces, would be provided in multiple garages with up to three subterranean levels totaling 435,133 gsf. Approximately 236,000 square feet of the project site would be retained as open area, including the development of common and private open space throughout the site, the same open space and public access program that would be provided with the proposed project.

Under the project variant the footprints of the other proposed new buildings would not change and the design program would be similar to the one for the proposed project. The preliminary construction phasing plan would also be applicable to the project variant, described in detail on pp. 74-78, with the exception of Phase 3. Under the project variant, Phase 3 would include the development of 153,920 gsf of residential uses (186 units), substituting for 49,999 gsf of office space and 5,524 gsf of retail space in the Walnut Building. Under the project variant, Phase 3 garage space would increase by 6,360 gsf (from 301,060 gsf for the proposed project to 307,420 gsf).

## **REQUIRED APPROVALS**

Implementation of the proposed project or project variant would require changes to existing development controls for the project site through planning code, and zoning map amendments including permitted uses and height and bulk. The project sponsor would seek to create a new Special Use District (SUD) and to modify or waive the requirements of Resolution 4109, which would require a recommendation by the Planning Commission and approval by the Board of Supervisors. The project sponsor would also seek approval of a Conditional Use authorization/Planned Unit Development to permit development of buildings with heights in excess of 50 feet and provide for minor deviations from the provisions for measurement of height, to allow for more residential units than principally permitted in the RM-1 Zoning District, to allow certain planning code exceptions to open space, dwelling unit exposure, rear yard setback requirements, and to allow for commercial uses necessary to serve residents of the immediate vicinity of the RM-1 Zoning District. It is anticipated that the City and the project sponsor would enter into a Development Agreement (which requires approval by the Planning Commission and Board of Supervisors) that, among other terms, could formalize the amount of affordable housing developed as part of the proposed project or project variant, formalize the amount and maintenance of privately owned, common usable open space, and limit the City's ability to rezone the site for a set period of time.

The following is a preliminary list of San Francisco agencies' anticipated approvals for the proposed project and the project variant and is subject to change. These approvals may be reviewed in conjunction with the required environmental review, but may not be granted until after the required environmental review is completed.

### **Actions by the City Planning Commission**

- Certification of Environmental Impact Report (EIR) and adoption of findings under CEQA
- Adoption of Findings of Consistency with the general plan and priority policies of Planning Code section 101.1
- Recommendation to Board of Supervisors to approve planning code and zoning map amendments, approve the Special Use District, and to modify or waive the requirements of Resolution 4109
- Conditional Use/Planned Unit Development authorization to permit development of buildings with height in excess of 50 feet and provide for minor deviations from the provisions for measurement of height, to provide exceptions to open space, dwelling unit exposure, rear yard setback requirements and to allow for commercial uses necessary to serve residents of the immediate vicinity of the RM-1 Zoning District and 40-X Height and Bulk District, and to provide for additional dwelling unit density under the project variant
- Approval of office allocation for up to 49,999 square feet (Planning Code section 321)
- Recommendation to Board of Supervisors to approve Development Agreement
- General plan referral for street vacation/dedication associated with the development of Corner Plaza at Masonic and Euclid avenues and the Pine Street Steps and Plaza at the Masonic/Pine/Presidio intersection; and for sidewalk widening
- Approval of a Transportation Demand Management Plan (Planning Code section 169)

### **Actions by the San Francisco Board of Supervisors**

- Adoption of findings under CEQA
- Adoption of Findings of Consistency with the General Plan and priority policies of Planning Code section 101.1
- Approval of planning code and zoning map amendments, including Special Use District
- Approval of Development Agreement, if applicable
- Approval of street vacation/dedication associated with the development of Corner Plaza at Masonic and Euclid avenues and the Pine Street Steps and Plaza at the Masonic/Pine/Presidio intersection
- Approval of sidewalk widening legislation
- Adoption of resolution to modify or waive Planning Commission Resolution 4109

### **Actions by Other City Departments**

- San Francisco Public Works
  - Approval of Subdivision Map
  - Public hearing and approval of permits to remove and replace street trees on California Street and to remove protected trees on the project site within 10 feet of the public right-of-way
  - Approval of permits for streetscape improvements in the public right-of-way, including new curb cuts on Masonic Avenue (two) and Laurel Street (eight)

- Approval of an encroachment permit for the proposed curb bulb-outs and associated streetscape improvements on the west side of Presidio Avenue at the intersection with Pine Street and Masonic Avenue, on the west side of Masonic Avenue at the intersection with Euclid Avenue, and on the east side of Laurel Street at the intersection with Mayfair Drive
- Approval of a street space permit from the Bureau of Street Use and Mapping if sidewalk(s) are used for construction staging and pedestrian walkways are constructed in the curb lane(s)
- Recommendation to Board of Supervisors to approve legislation for sidewalk widening
- San Francisco Municipal Transportation Agency
  - Approval of request for on-street commercial truck (yellow) and passenger (white) loading zones on Laurel Street, California Street, Masonic Avenue, and Euclid Avenue
  - Approval of a special traffic permit from the Sustainable Streets Division if sidewalk(s) are used for construction staging and pedestrian walkways are constructed in the curb lane(s)
  - Approval of construction within the public right-of-way (e.g., bulbouts and sidewalk extensions) to ensure consistency with the Better Streets Plan
  - Approval of the placement of bicycle racks on the perimeter sidewalks and within the project site
- San Francisco Department of Building Inspection
  - Review and approval of demolition, excavation, and site/building permits
  - Review and approval of construction permit for non-potable water system
  - Approval of a permit for nighttime construction if any night construction work is proposed that would result in noise greater than five dBA above ambient noise levels
  - Review and approval of plumbing plans for non-potable water reuse system per the Non-potable Water Ordinance
- San Francisco Public Utilities Commission
  - Review and approval of Erosion and Sediment Control Plan, in accordance with article 4.1 of the public works code
  - Review and approval of any changes to sewer laterals (connections to the City sewer system)
  - Review and approval of any changes to existing publicly-owned fire hydrants, water service laterals, water meters, and/or water mains
  - Review and approval of the size and location of new fire, standard, and/or irrigation water service laterals
  - Review and approval of post-construction stormwater design guidelines including a Stormwater Control Plan, in accordance with City's 2016 Stormwater Management Requirements and Design Guidelines
  - Review and approval of Landscape Plan per the Water Efficient Irrigation Ordinance

- Approval of the use of dewatering wells per article 12B of the health code (joint approval by the health department)
- Review and approval of documentation for non-potable water reuse system per the Non-potable Water Ordinance
- San Francisco Department of Public Health
  - Review and approval of Site Mitigation Plan, in accordance with San Francisco Health Code article 22A (Maher Ordinance)
  - Review and approval of a Construction Dust Control Plan, in accordance with San Francisco Health Code article 22B (Construction Dust Control Ordinance)
  - Approval of the use of dewatering wells per article 12B of the health code (joint approval by the San Francisco Public Utilities Commission)
  - Review and approval of design and engineering plans for non-potable water reuse system and testing prior to issuance of Permit to Operate

#### **Actions by Other Government Agencies**

- Bay Area Air Quality Management District
  - Approval of any necessary air quality permits for installation, operation, and testing (e.g., Authority to Construct/Permit to Operate) for individual air pollution sources, such as boilers and emergency standby diesel generator
  - Approval of Asbestos Dust Mitigation Plan for construction and grading operations

## **B. PROJECT SETTING**

### **EXISTING SETTING**

The project site is located on Lot 003 of Assessor's Block 1032 at 3333 California Street in the Laurel Heights/Jordan Park area of San Francisco's Presidio Heights neighborhood. The 10.25-acre site is adjacent to the Pacific Heights and Western Addition<sup>44</sup> neighborhoods (to the east) and just north of the Anza Vista area of the Inner Richmond neighborhood (see Figure 1, p. 3). The project site is occupied by the UCSF Laurel Heights Campus and contains two buildings (the existing office and annex buildings), parking (surface and underground) and roadways, and landscaped areas. The two-story building that houses the SF Fire Credit Union, at the southwest corner of California Street and Presidio Avenue, is not part of the project site.

The irregularly shaped 446,490-square-foot lot is bounded by California Street to the north (an approximately 730-foot-long frontage), Presidio Avenue to the east (an approximately 280-foot-long frontage), Masonic Avenue to southeast (an approximately 422-foot-long frontage), Euclid Avenue to the south (an approximately 348-foot-long frontage), and Laurel Street/Maylan Drive to the west (an approximately 742-foot-long frontage). The project site's topography exhibits a generally southwest-to-northeast-trending downslope, with its high point of 308 feet at the

<sup>44</sup> This portion of the Western Addition neighborhood is also referred to as Lower Pacific Heights.

Construction of the proposed project or project variant would require earthwork activities across the entire project site. The depths of excavation would range from 7 to 40 feet below the existing grade (including excavation for the elevators and automobile stacker pits), with a total of approximately 241,300 net cubic yards of excavated soils generated during the approximately 7- to 15-year construction period.<sup>247,248</sup> With the proposed project or project variant, the existing office building at the center of the site would be adaptively reused and rehabilitated for residential use. New foundations (in the form of footings) would be needed where shear walls terminate at the foundation level. At these locations new spread footings would be created by removing the existing subgrade (essentially fractured bedrock) and new concrete footings would be poured. Where the new shear walls terminate on existing footings, new footing extensions would be required to enlarge the existing footing to support the additional seismic loads. The proposed new buildings around the perimeter of the site along California Street, Presidio Avenue, Masonic Avenue, Euclid Avenue, and Laurel Street/Mayfair Drive would be constructed on shallow footings supported by the native soil or bedrock. The depth of excavation on the northern portion of the site along California Street (and specifically on the northwest portion of the site) would be greatest at up to 40 feet for the two to three-level below grade parking garage (California Street Garage) and building foundations for the Plaza A, Plaza B, and Walnut buildings. The depth of excavation on the south and central portion of the project site (for the Masonic and Euclid building's single level below-grade parking garage and foundation) would be shallower with the shallowest depth of excavation occurring along the eastern edge of the existing office building and along the western edge of Laurel Street for the new Laurel Duplexes. Thus excavations on the south and central portions of the project site would encounter bedrock, and it is likely that bedrock would also be encountered at depth along the northern portion of the site. During excavation of the new building parking garages and/or foundations, a soldier-pile-and-wood-lagging system would be used to support the walls of the excavations. For excavations deeper than approximately 12 feet, tiebacks or internal bracings would be installed to provide lateral resistance and limit the likelihood of the walls of the excavation caving in.

The existing parking garage beneath the eastern wing of the main building has three below-grade levels with a maximum depth of approximately 36 feet below ground surface near the central portion of the site. To avoid effects to the underground levels of the garage from excavation for the proposed California Street Garage, which would be adjacent to and integrated with the existing below-grade garage, drilled piers would be installed along adjacent walls of the new garage structure supported by the bedrock below the elevation of the bottom of the existing parking garage. The same construction and excavation technique would apply to the project variant.

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<sup>247</sup> Approximately 3,700 cubic yards of excavated soils would be reused on the project site as fill.

<sup>248</sup> Construction of the proposed project or project variant could extend over a 15-year timeframe, as discussed above in Section A, Project Description, p. 74, with periods of time when no construction would occur, i.e., same development program but over a longer time.

**EXHIBIT D**



# SAN FRANCISCO PLANNING DEPARTMENT

**MEMO**

**DATE:** Thursday, July 14, 2016  
**TO:** Don Bragg  
**FROM:** David Lindsay, Planning Department  
**RE:** PPA Case No. 2015-014028PPA for 3333 California Street

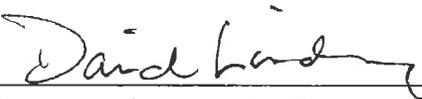
1650 Mission St.  
Suite 400  
San Francisco,  
CA 94103-2479

Reception:  
**415.558.6378**

Fax:  
**415.558.6409**

Planning  
Information:  
**415.558.6377**

Please find the attached Preliminary Project Assessment (PPA) for the address listed above. You may contact the staff contact, Brittany Bendix, at (415) 575-9114 or [Brittany.Bendix@sfgov.org](mailto:Brittany.Bendix@sfgov.org), to answer any questions you may have, or to schedule a follow-up meeting.

  
\_\_\_\_\_  
David Lindsay, Senior Planner



# SAN FRANCISCO PLANNING DEPARTMENT

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## Preliminary Project Assessment

*Date:* Thursday, July 14, 2016  
*Case No.:* **2015-014028PPA**  
*Project Address:* 3333 California Street  
*Block/Lot:* 1032/003  
*Zoning:* RM-1 (Residential, Low-Density)  
40-X  
*Project Sponsor:* Don Bragg c/o Prado Group  
150 Post Street, Suite 320  
San Francisco, CA 94108  
415-857-9324  
*Staff Contact:* Brittany Bendix – 415-575-9114  
[Brittany.bendix@sfgov.org](mailto:Brittany.bendix@sfgov.org)

1650 Mission St  
Suite 400  
San Francisco,  
CA 94103-2479

Reception:  
**415.558.6378**

Fax:  
**415.558.6409**

Planning  
Information:  
**415.558.6377**

### **DISCLAIMERS:**

This Preliminary Project Assessment (PPA) letter provides feedback to the project sponsor from the Planning Department regarding the proposed project described in the PPA application submitted on March 29, 2016, as summarized below. This PPA letter identifies Planning Department review requirements for the proposed project, including those related to environmental review, approvals, neighborhood notification and public outreach, the Planning Code, project design, and other general issues of concern for the project. Please be advised that the PPA application does not constitute an application for development with the Planning Department. The PPA letter also does not represent a complete review of the proposed project, does not grant a project approval of any kind, and does not in any way supersede any required Planning Department approvals listed below.

The Planning Department may provide additional comments regarding the proposed project once the required applications listed below are submitted. While some approvals are granted by the Planning Department, some are at the discretion of other bodies, such as the Planning Commission or Historic Preservation Commission. Additionally, it is likely that the project will require approvals from other City agencies such as the Department of Building Inspection, Public Works, the Municipal Transportation Agency, Department of Public Health, San Francisco Public Utilities Commission, and others. The information included herein is based on the PPA application and plans, the Planning Code, General Plan, Planning Department policies, and local/state/federal regulations as of the date of this document, all of which are subject to change.

filed by the developer of any "major project." A major project is a real estate development project located in the City and County of San Francisco with estimated construction costs exceeding \$1,000,000 where either: (1) The Planning Commission or any other local lead agency certifies an EIR for the project; or (2) The project relies on a program EIR and the Planning Department, Planning Commission, or any other local lead agency adopts any final environmental determination under CEQA. A final environmental determination includes: the issuance of a Community Plan Exemption (CPE); certification of a CPE/EIR; adoption of a CPE/Final Mitigated Negative Declaration; or a project approval by the Planning Commission that adopts CEQA Findings. (In instances where more than one of the preceding determinations occur, the filing requirement shall be triggered by the earliest such determination.) A major project does not include a residential development project with four or fewer dwelling units. The first (or initial) report must be filed within 30 days of the date the Planning Commission (or any other local lead agency) certifies the EIR for that project or, for a major project relying on a program EIR, within 30 days of the date that the Planning Department, Planning Commission, or any other local lead agency adopts a final environmental determination under CEQA. Please submit a Disclosure Report for Developers of Major City Projects to the San Francisco Ethics Commission. This form can be found at the Planning Department or online at <http://www.sfethics.org>.

#### **PLANNING DEPARTMENT APPROVALS:**

The project requires the following Planning Department approvals. These approvals may be reviewed in conjunction with the required environmental review, but may not be granted until after the required environmental review is completed.

1. **Rezoning.** As indicated in the 'Preliminary Project Comments' below, 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.
2. **Height District Reclassification.** As indicated in the 'Preliminary Project Comments' below, 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.
3. **Conditional Use.** Because the project may seek a rezoning to an NC District, the Code analysis below takes into consideration requirements related to the current RM-1 District, in addition to NC-1, NC-2, NC-3 and NC-S Districts. Depending on the applicable zoning, the following elements of the project may require Conditional Use Authorization by the Planning Commission: development of a building

these spaces and the date of their establishment to make that determination. Details relative to the existing and proposed depth of excavation for garages is also needed. Please note that if the spaces are determined to be legally noncomplying, but are otherwise removed or relocated through the elimination of existing surface parking lots or the reconstruction of an existing parking garage, the spaces will then be abandoned pursuant to Planning Code Section 183 and their re-establishment will need to conform to any applicable zoning controls. In NC Districts 'Automobile Parking' as a commercial use is defined in Planning Code Section 790.8 and is principally permitted in NC-S Districts, but requires Conditional Use authorization in NC-1, NC-2, and NC-3 Districts. Please note that any Conditional Use applications for parking exceeding accessory amounts must meet the additional criteria set forth in Planning Code Section 157. Given the Planning Department's concerns regarding the amount of proposed off-street parking referenced in both the 'Environmental Review' and 'Preliminary Design Comments' sections of this letter, you are strongly encouraged to substantially reduce or eliminate any proposed non-accessory commercial parking.

**10. City Planning Commission Resolution 4109.** In 1952, the City Planning Commission adopted Resolution 4109 which approved a rezoning of the subject property to a First Residential District and included additional stipulations subject to future development of the site. 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. As expected, given that there have been more than 60 years of changes to the Planning Code there are some distinctions between the current RM-1 District controls and the stipulations outlined in Resolution 4109. 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.

**a. Residential Uses.** 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.

**11. Residential Density.** 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). In consideration of rezoning the property, please note the following maximum residential densities for each zoning district: NC-1, NC-2 and NC-S Districts, generally, up to one unit per 800 square feet of lot area; and, in NC-3 Districts, generally up to one

**EXHIBIT E**

**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

P.O. BOX 942896  
SACRAMENTO, CA 94296-0001  
(916) 445-7000 Fax: (916) 445-7053  
calshpo@parks.ca.gov



August 31, 2018

John Rothman, President  
Kathryn Devincenzi, Vice President  
Laurel Heights Improvement Association of San Francisco  
22 Iris Avenue  
San Francisco, California 94118

**RE: Fireman's Fund Insurance Company, Determination of Eligibility  
National Register of Historic Places**

Dear Mr. Rothman and Ms. Devincenzi:

I am writing to inform you that on August 29, 2018, Fireman's Fund Insurance Company was determined eligible for the National Register of Historic Places (National Register). As a result of being determined eligible for the National Register, this property has been listed in the California Register of Historical Resources, pursuant to Section 4851(a)(2) of the California Code of Regulations.

There are no restrictions placed upon a private property owner with regard to normal use, maintenance, or sale of a property determined eligible for the National Register. However, a project that may cause substantial adverse changes in the significance of a registered property may require compliance with local ordinances or the California Environmental Quality Act. In addition, registered properties damaged due to a natural disaster may be subject to the provisions of Section 5028 of the Public Resources Code regarding demolition or significant alterations, if imminent threat to life safety does not exist.

If you have any questions or require further information, please contact Jay Correia of the Registration Unit at (916) 445-7008.

Sincerely,

A handwritten signature in black ink, appearing to read "Julianne Polanco".

Julianne Polanco  
State Historic Preservation Officer

Enclosure

**United States Department of the Interior**  
National Park Service

# 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

Fireman's Fund Insurance Company  
Name of Property

San Francisco, CA  
County and State

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.

Fireman's Fund Insurance Company  
Name of Property

San Francisco, CA  
County and State

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 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 owner and 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

Fireman's Fund Insurance Company  
Name of Property

San Francisco, CA  
County and State

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.

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).

Fireman's Fund Insurance Company  
Name of Property

San Francisco, CA  
County and State

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.

Fireman's Fund Insurance Company  
Name of Property

San Francisco, CA  
County and State

## 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.)

- 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.
- 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.

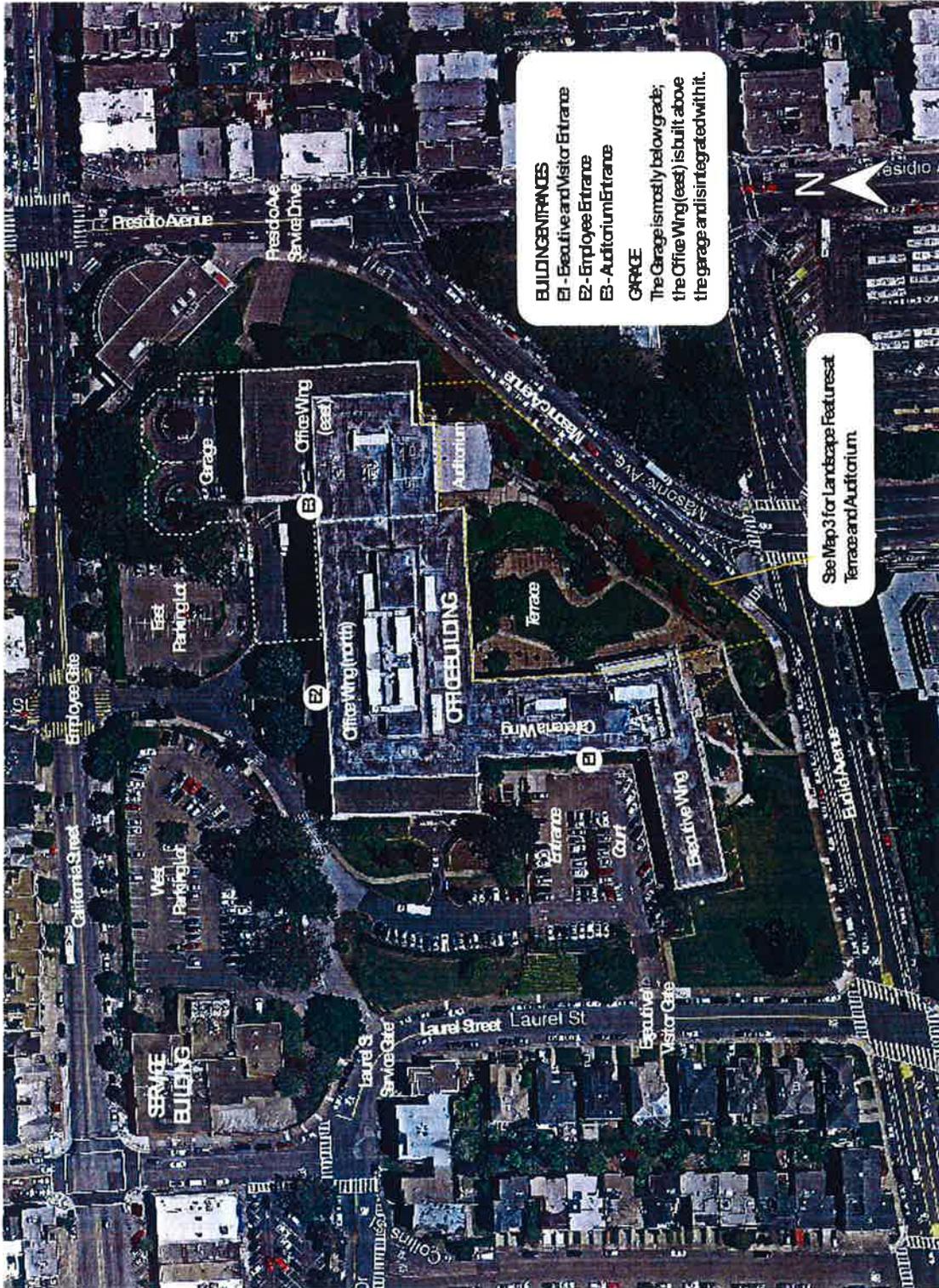
### Criteria Considerations

(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

Fireman's Fund Insurance Company  
Name of Property

San Francisco, CA  
County and State



Map 2. Sketch Map. Source: Google Earth, photo taken April 2016, annotated by Denise Bradley and Michael Corbett

**EXHIBIT F**

John Haffner <dsafier@pradogroup.com>

Thu, Oct 12, 2017 at 3:45 PM

To: John Rothmann <johnrothmann2@yahoo.com>, Dan Kingsley <dkingsley@sksre.com>

Cc: Kathy Devincenzi <krdevincenzi@gmail.com>, Catherine Carr <catherine.a.carr@gmail.com>, "M.J. Thomas" <mjinsf@comcast.net>, Richard Frisbie <frfibeagle@gmail.com>

Dear John, Kathy, Catherine, M.J., and Dick:

First of all John, 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?**

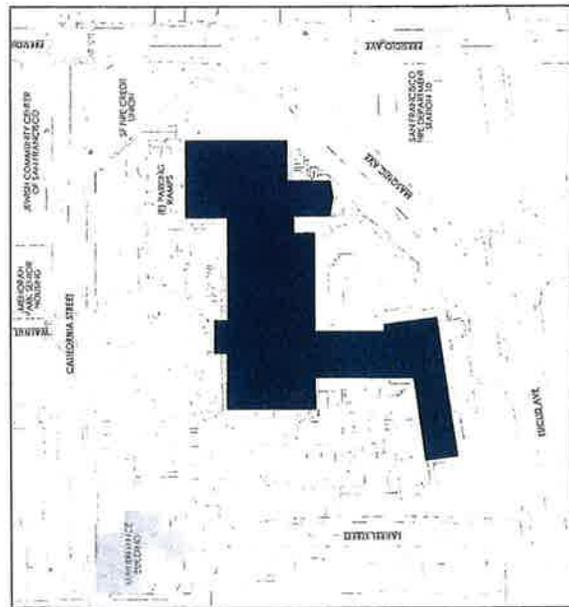
**A:** At this time, we anticipate the following in each phase – Phase 1: Masonic and Euclid buildings; Phase 2: Center Buildings A and B; Phase 3: Plaza A, Plaza B and Walnut buildings; and Phase 4: Mayfair Building and Laurel Duplexes.

**Q: What do you anticipate the total period of time will be during each phase of construction?**

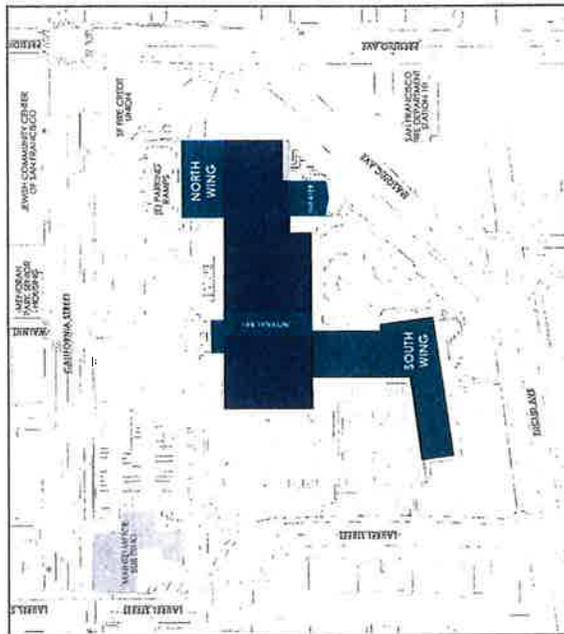
**A:** Our current planning assumes that each phase would overlap, e.g., Phase 2 begins approximately 20 months after Phase 1. Specifically, we think Phase 1 could take 30 months, Phase 2 could take 24 months, Phase 3 could take 36 months, and Phase 4 could take 20 months. Assuming an overlap of phases, from start to finish it could take approximately six to seven years to complete all phases of the construction. This construction phasing and related

**EXHIBIT G**

EXISTING BUILDING  
 362,000 GSF  
 (not including parking or annex)



PROPOSED REMOVAL  
 185,958 GSF REMOVED  
 (not including parking)

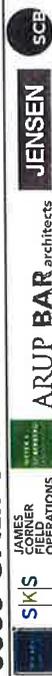


PROPOSED CENTER A & B  
 322,888 GSF  
 (not including parking)



**3333 CALIFORNIA STREET** SAN FRANCISCO, CA

**CENTER A & B: EXISTING CONDITIONS + PROPOSED ADAPTATION**



08.17.2017  
 PLANNING APPLICATION SUBMITTAL

**A6.00**

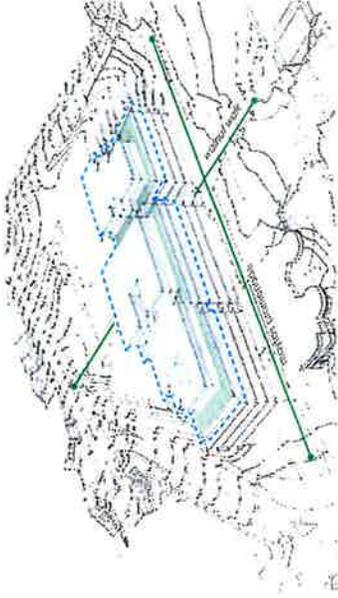
**1** Partial removal of existing structure, freeing up Mayfair Promenade axis.



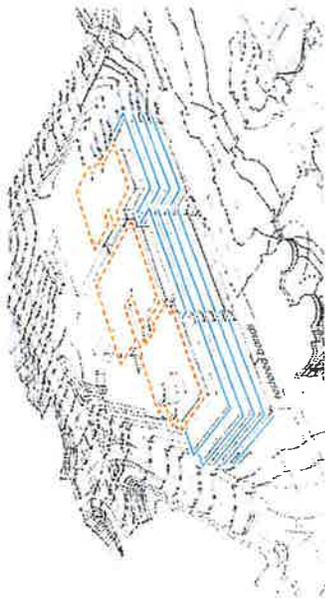
**2** Rebuild and reinforce the existing 4th floor and cut opening for Walnut Walk axis.



**3** Add one and two floors that are set back from the existing building edge.



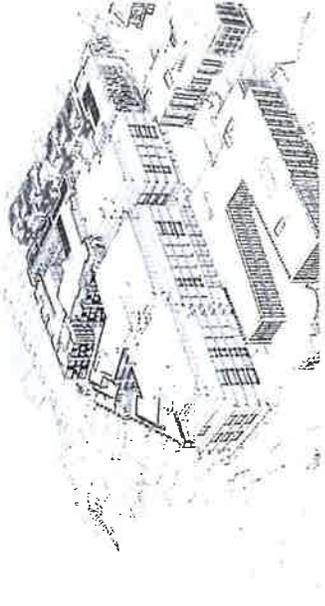
**4** Restore the horizontal bands and add warm soffits to upper floor overhangs.



**5** Articulate the exterior with high-performance glass, reveals at demising walls and bay windows at the bedrooms.



**6** Completed design.



**REMOVALS:** THE SOUTH WING, NORTH WING AND THEATER ARE REMOVED TO REDUCE THE BUILDING BULK AND MASS. AN INTERNAL BAY IS OPENED UP TO CREATE WALNUT WALK.

**RESTORE AND REBUILD:** THE EXISTING HORIZONTAL FLOOR LINES WILL BE RESTORED AND THE UPPER FLOORS WILL BE REBUILT WITH SETBACKS.

**PROPOSED DESIGN:** THE RESIDENTIAL QUALITY OF THE DESIGN IS ENHANCED WITH ARTICULATED BAY WINDOWS AT THE BEDROOMS. THIS MODULATES THE HORIZONTALITY OF THE OVERALL MID-CENTURY COMPOSITION AND RELATES TO THE NEW BUILDINGS AND THE EXISTING NEIGHBORHOOD.

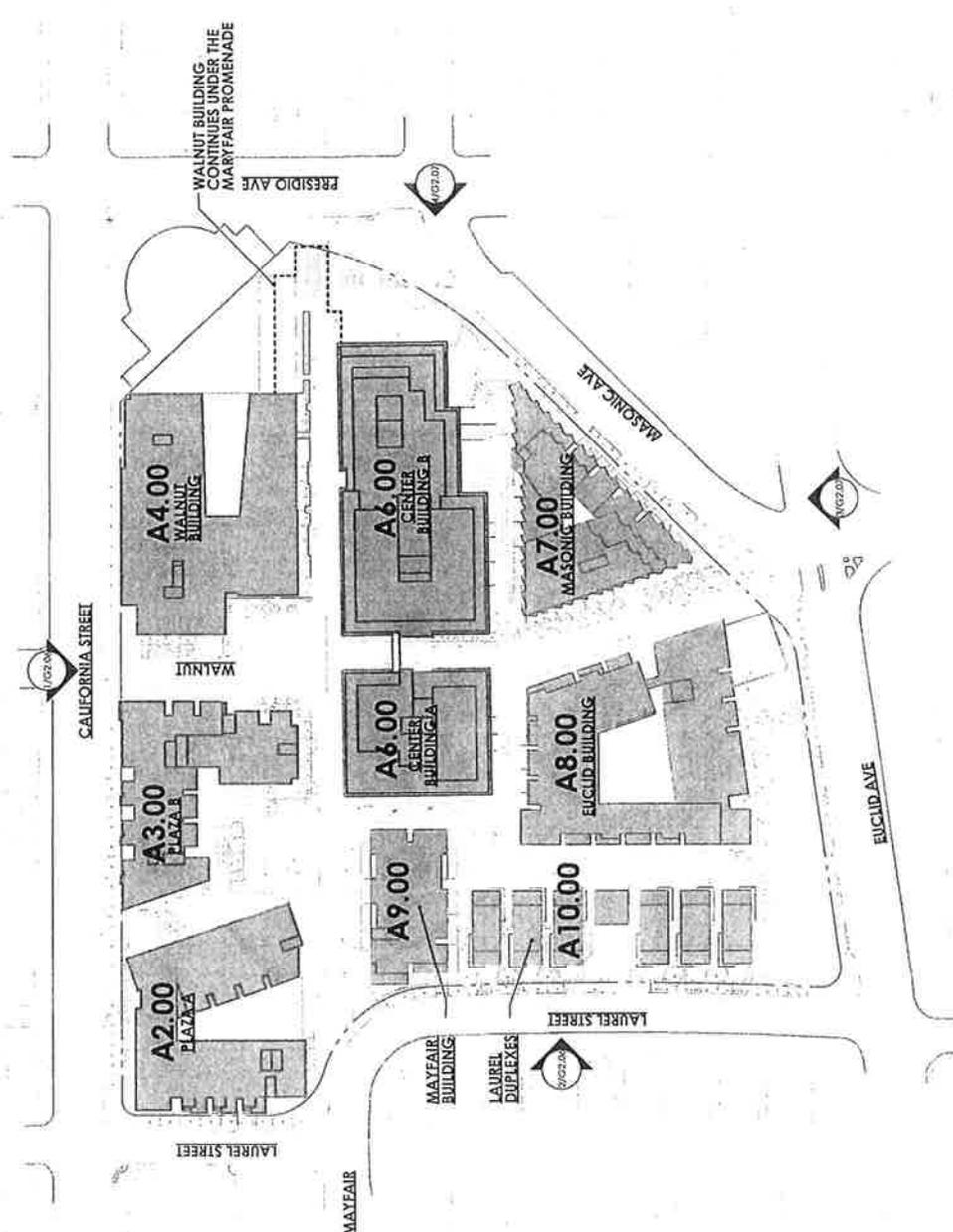
**3333 CALIFORNIA STREET** SAN FRANCISCO, CA



**CENTER A & B: ADAPTIVE REUSE STRATEGY**

08.17.2017  
PLANNING APPLICATION SUBMITTAL

**A6.01**



FOLLOWING THE PFA SUBMITTAL THE "PRESIDIO BUILDING" WAS REMOVED FROM THE PROJECT - AS SERIES IS OMITTED FROM DRAWING SET.

KEYING SITE PLAN - PROPOSED



08.17.2017  
PLANNING APPLICATION SUBMITTAL



JENSEN

ARUP BAR architects

SIXS  
LAWRENCE  
FIELD  
OPERATIONS

3333 CALIFORNIA STREET SAN FRANCISCO, CA



G1.02

**EXHIBIT D**



September 27, 2018

Heather King, AICP  
Air Pollution Specialist  
Sustainable Communities Policy and Planning Section  
Air Quality Planning and Science Division  
California Air Resources Board  
1001 I Street  
P.O. Box 2815  
Sacramento, CA 95812-2815

**Subject: 3333 California Street Mixed-use Project, Case No. 2015-014208ENV  
Greenhouse Gas Emissions Offset Commitment Approach**

Dear Ms. King,

The Applicant submitted the application seeking certification of the Project as an Environmental Leadership Development Project (ELDP) pursuant to AB 900.

The project has committed to meeting the requirements set forth in California Public Resources Code Section 21183 (c), which requires that the Project demonstrate that it will not result in any net greenhouse gas (GHG) emissions and in Public Resources Code Section 21180(b)(1), which requires the Project to achieve a 15 percent greater standard for transportation efficiency than comparable projects. The Applicant has committed to no net increase in construction and operation-related GHG emissions. Consistent with policy recommendations included in CARB's 2017 Climate Change Scoping Plan<sup>1</sup>, while offsets are a potential way to mitigate GHG emissions, other options will continue to be explored as well to the extent feasible, with the following order of preference: (1) project design feature/on-site reduction measures; (2) off-site local reductions; (3) off-site regional reductions, and (4) offset credits issued by a recognized and reputable carbon registry. To the extent offsets are used to mitigate GHG emissions, prior to issuance of the final Certificate of Occupancy for the first building constructed in each phase of the project that exceeds the existing emissions, the project sponsor or its successor shall enter into one or more contracts to purchase carbon credits issued by a recognized and reputable carbon registry, for the operational emissions attributable to that phase, which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the remaining (after implementation of any identified, feasible project design feature/on-site reduction measures, off-site local reductions, or off-site regional reductions) operational emissions attributable to that phase over the analysis horizon of 30 years. The phases noted here are for GHG compliance

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<sup>1</sup> Available at: [https://www.arb.ca.gov/cc/scopingolan/scoping\\_plan\\_2017.pdf](https://www.arb.ca.gov/cc/scopingolan/scoping_plan_2017.pdf).

purposes. Any changes to the actual order and phasing of the project construction would meet the standards for compliance based on the aggregate total phase emissions.

Prior to the issuance of grading permits for construction of each phase of the project, the project sponsor or its successor shall enter into one or more contracts to purchase carbon credits issued by a recognized and reputable carbon registry, for the construction emissions attributable to that phase, which contract, together with any previous contracts, shall evidence the purchase of carbon credits in an amount sufficient to offset the remaining construction emissions attributable to that phase.

Attachment E of the Project's AB 900 application contained a calculation of the net additional construction and operational GHG emissions associated with the Project. Attachment I: Greenhouse Gas Emissions by Phase summarizes the construction and operational emissions by phase. The Applicant will provide documentation to CARB and the Governor's office of any project design features/on-site reduction measures, off-site local reductions, or off-site regional reductions used to mitigate GHG emissions, and shall promptly submit copies of any executed contracts for purchased carbon credits to CARB and to the Governor's office. Any identified project design features/on-site reduction measures, off-site local reductions, or off-site regional reductions used to mitigate GHG emissions and any commitments to enter into contracts to offset net additional GHG emissions will be incorporated as conditions of project approval under the Public Resources Code sec. 21183(e), which shall be binding and enforceable by the lead agency.

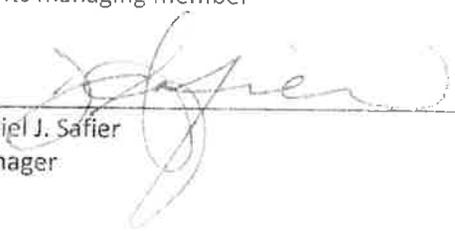
Sincerely,

Laurel Heights Partners LLC  
a Delaware limited liability company

By: 3333 California LP  
a Delaware limited liability partnership  
its managing member

By: PSKS LH LLC  
a Delaware limited liability company  
its general partner

By: Prado LH LLC,  
a California limited liability company  
its managing member

By:   
Daniel J. Safier  
Manager

**EXHIBIT E**

COMMENTS ON 3333 CALIFORNIA STREET INITIAL STUDY DATED APRIL 25, 2018

AND VERSION 2, DATED MAY 14, 2018

GREENHOUSE GAS EMISSIONS (see note 1)

EXECUTIVE SUMMARY

The Initial Study's (Reference 4 to this submission) conclusion on page 146 per the Table, items 7(a) and (b) as well as on page 148 "Impact C-GG-1" that the construction phase of the project will generate "Less than significant" Greenhouse Gases is incomplete, inaccurate, inadequate and invalid.

The approximate 105,500 tons of Greenhouse Gases generated as a consequence of the construction phase of the proposed development plan submitted by PSKS is approximately 3% of San Francisco's Total Citywide goal for the year 2025; hardly a "less than significant" tonnage.

The All Residential(AR) alternative supported by the coalition of neighbors surrounding 3333 will generate less than a third (32,250 tons) of the Greenhouse Gases generated by the PSKS plan as a consequence of their construction phase but will also fully protect all of the historically significant main building and landscaping.

The City has not adequately analyzed the significant and harmful Greenhouse Gases generated as a consequence of the construction phase. This needs addressing in the upcoming EIR study. The facts are overwhelming.

Notes:

(1) This document focuses on the generation and release of Carbon Dioxide generated as a consequence of the construction phase.

However, the other Greenhouse Gases associated with this type of work –methane, nitrous oxide, etc.- although present at much lower levels than carbon dioxide have a GWP (Global Warming Potential) anywhere from 25-300 times greater than carbon dioxide (Reference 11).

This impact has not been taken into account in our numbers but it is assumed that the EIR addresses **ALL** of the harmful Greenhouse Gases generated as a consequence of the construction phase.

**This note applies to ALL Greenhouse Gas tonnages in this document.**

There is no reference made to the type of construction proposed, the material selections made, etc. all of which have profound implications as to the levels of Greenhouse Gases emitted into the atmosphere as a consequence of the construction phase.

I am still awaiting answers to question submitted to Planning on related issues.

It would appear that no analyses have been made, certainly none are presented, as to the Embodied Energy content of the construction methods and materials.

Such analyses would immediately highlight the significant levels of Greenhouse Gases that would be generated as a consequence of the construction phase and highlights the need for mitigation measures.

Due to the absence of data it was necessary to use information listed in the references to develop the approximate levels of Greenhouse Gas tonnages generated as a consequence of the construction phase. Had the Initial Study, which forms the basis for the EIR, carried out some fairly straightforward analyses we could have compared the results to determine where additional work is required.

At such time as the City provides the necessary technical data, such as the energy required to recycle the main building debris (see note 1), volume of concrete and weight of steel required for the re-construction, etc. the estimated Greenhouse Gas tonnages generated as a consequence of the construction phase could be re-calculated accordingly.

**Notes:**

1. There appears to be no calculation or consideration in any of the City's documents that addresses the Greenhouse Gases generated by the recycling of the debris from the main building.  
Recycling steel and concrete is energy intensive and needs to be properly accounted for in the Greenhouse Gases budget.  
The only thing more harmful is to simply dispose of reusable materials in a landfill.

## INTRODUCTION

Reference 4 Section E. 7 - Greenhouse Gas Emission pages 146-150:  
Impact C-AQ-1 (Potentially Significant). "Potential cumulative air quality impacts will be addressed in the EIR."

Table: 7 GREENHOUSE GAS EMISSIONS (page 146)

Would the project:

- (a) "Generate greenhouse gas emissions, either directly or indirectly (underline added), that may have a significant impact on the environment?"  
"Less Than Significant" is checked.
- (b) "Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases?"  
"Less Than Significant" is checked.

Not a single calculation, analysis, compilation or comparison is presented to support these inadequate conclusions of "Less Than Significant."

These conclusions are incomplete, inaccurate, inadequate and invalid in toto.

The project proposed by the developers (PSKS) would generate as a consequence of the construction phase alone approximately

**105,500 TONS OF GREENHOUSE GASES (see Note 1)**

which is approximately 3% of San Francisco's Total Carbon Emissions Goal of 3,721,169 for the year 2025 (Reference 3).

Due to the complete absence of any supporting data, as well as Planning's delayed response to relevant questions, it has been necessary to make some assumptions in analyzing details of the PSKS plans.

By comparison, the All Residential alternative supported by the coalition of neighbors surrounding 3333 would generate Greenhouse Gases at levels **less than a third (32,250 tons)** of the PSKS levels and less than 1% of the City-wide goal for year 2025.

The All Residential alternative represents a 70% mitigation of these harmful gases to our environment.

Thus, without the relevant data and corresponding analyses based on available air emission models, Planning's conclusions have no basis in fact and are incorrect, incomplete, inadequate and invalid.

On page 148, first paragraph, of reference 4, it is stated "The following analysis of the proposed project....."

In reality there is no analysis whatsoever in the referenced document as to the Greenhouse Gases generated as a consequence of the construction phase which, as shown above, produces significant amounts of harmful Greenhouse gases.

Pages 148-150 speak exclusively to the Operational phase of the project while completely omitting even a reference to the construction phase.

## DISCUSSION

The Greenhouse Gases generated as a consequence of the Construction phase will be discussed in the following order:

1. Demolition of portions of main building, service building, parking lots, garage ramps.
2. Removal of Debris generated in 1. Above.
3. Excavation of site for underground parking, building foundations, etc.
4. Removal of Spoils generated in 3. Above.
5. Reconstruction, strengthening and increased height of the main building.
6. Construction of underground parking garages.
7. Construction of Masonic, Euclid and Mayfair buildings.
8. Construction of Plaza A & B and Walnut buildings.
9. Construction of Laurel St. duplexes.

### 1-4: DEMOLITION, EXCAVATION AND REMOVAL OF DEBRIS AND SPOILS.

The first four activities, 1-4, listed above will be looked at together as they basically utilize energy to carry out the activity.

PSKS proposes to demolish approximately 50% of the existing main historic building as well as most of the historic landscaping. In addition, the various parking lots and roadways on the site will be demolished as well as the circular garage ramps. After demolition the debris will be removed and the site will be excavated and the spoils hauled away. Reference 26 shows the approximate amount of fuel, diesel and gasoline, and electricity consumed. Some of this is spread over the construction phase of the building cycle. As items such as the map of the routes selected (Reference 9) have not been made available, but have been requested, it is impossible to judge the reasonableness of some of these calculations.

It should be noted that the 0.05 gallons per horsepower-hour used in the Reference 26 is 10-15% lower than industry data available from multiple sources (see Reference 29, the value 0.056, as an example).

Also of significance, which is not addressed, is the volume of serpentine that could be present and which requires significantly more energy to remove than soils and clays.

The five primary boring sites related to geology are of considerable interest.

Major excavation will take place along Masonic and Euclid and yet no borings were made at any intermediate location along this >600ft segment of the property.

The boring sites appear in Reference 30.

A boring (B-3) was done at Masonic and Presidio where no excavation will take place.

The only other boring on the southern half of the property was taken very near the Euclid-Laurel intersection (B-4) where, again, no excavation will take place.

So, all the excavation for the Masonic and Euclid buildings will be done without any specific first-hand knowledge of the geology at those locations.

And yet it was deemed appropriate to do boring B-5, a site where the Laurel St. duplexes will be constructed and which require significant less critical subsoil information as they do not have underground garages supporting major buildings.

Outcrops of serpentine exist throughout this general area so it is probable that these areas of excavation will encounter significant deposits of serpentine, the excavation of which is far more difficult and energy intensive than for stiff clays etc. as well as posing a health risk which could be of a much greater magnitude than that presented in the Initial Study.

Frankly one could conclude that the boring sites were carefully selected to avoid discovering any controversial conditions that may well underlay the site!

The net result is that the energy discussed in Reference 26 must be considered to be at the very low end of likelihood.

Higher values should be expected and this likelihood should be addressed in the Air Quality and Greenhouse Gas Emissions analyses of the upcoming EIR.

Despite the optimistic view of Reference 26, these phases of the project will still generate approx.

#### **10,500 TONS OF GREENHOUSE GASES**

As noted above in the Introduction, no consideration appears to have been made for the energy associated with the recycling of the reusable components of the debris from the main building.

So, what would be a more realistic estimate?

The All Residential alternative would generate approx. a third of that, **3,750 tons**, of Greenhouse Gases.

#### **5. RECONSTRUCTION, STRENGTHENING AND INCREASED HEIGHT OF MAIN BUILDING**

First, the remaining portions of the historical main building will require strengthening as it was not originally designed or built to accommodate three additional floors and their related infrastructure.

The volumes of concrete and steel involved will result in significant generation of Greenhouse Gases, no mention of which appears anywhere in the Initial Study!

The EIR should disclose the volumes of concrete and/or weight of wood, as well as the weights of steel and glass that would be used in the PSKS proposed development. This information is relevant to the calculation of Greenhouse Gas Emissions.

Projects involving buildings of this size, and larger, have seen savings of 23,000-100,000 tons of Greenhouse Gases saved through re-use of the building as opposed to major demolition and reconstruction.

So, conservatively it can be estimated that this new construction will generate approx.

#### **14,500 TONS OF GREENHOUSE GASES**

Had we been provided with information regarding volumes of concrete and weight of steel required for this rebuild, strengthening and height increases, we could have provided a more specific estimate.

It should be noted that concrete has an Embodied Energy Content of 12.5MJ/kg, Steel 11.0MJ/kg, and Wood 2.0MJ/kg.

Concrete is an energy intensive product and generates its own weight in Greenhouse Gases during its production process so a cubic yard of concrete is responsible for 4,000 lbs. of Greenhouse Gases being released into our atmosphere. See References 16, 17, 18 and 23.

This estimated amount of Greenhouse Gas generated would hardly seem to be compatible with Page 146 and the "Less Than Significant" conclusion by the City, further reinforcing the conclusion that the Initial Study is inaccurate, inadequate, incomplete and invalid.

The All Residential alternative generates **0 tons** of Greenhouse Gas emissions.

There is no demolition of the main building; no additional strengthening or structure for additional floors; no rebuilding of the exterior of the main historic building.

However, to take into account modifications for providing sunlight courts, let's assign a number of 2,000 tons of Greenhouse Gases.

#### 6. CONSTRUCTION OF UNDERGROUND PARKING GARAGES.

The site will underpinned by underground parking garages over approx. 60% of the site.

Along California St. these are two and three levels.

Under Masonic, Euclid and Mayfair these are one level.

Construction is assumed to be steel reinforced concrete designed to support the buildings that are above all the parking garage areas.

The EIR should disclose whether this construction would be of reinforced steel as well as provide the volumes of concrete and weight of steel required.

Concrete's Embodied Energy is 12.5MJ/kg., weighs approx. 2 tons per cubic yard and emits its own weight in Greenhouse Gases during the manufacture and construction processes.

As no volumes of concrete or weight of reinforcing steel has been provided by the City, the calculations of Greenhouse Gases generated as a consequence of the construction phase has used industry standards for parking garages (Reference 25).

These are all above ground garages without any overlying buildings so the calculations should be considered on the low end when applied to an underground complex supporting 4-7 story buildings above.

The average cubic yards of concrete to square foot of structural slab ratio varies from 4.5% to 10% (Reference 25).

My calculations assume a 6% ratio which is conservative due to the nature of the complex AND excludes any consideration of the required reinforcing steel.

When Planning provides the necessary information, these calculations can be updated.

Again, with apparently no information, no calculations, etc. Planning concluded that the

#### 49,500 TONS OF GREENHOUSE GASES

generated as a consequence of the construction of the underground parking garages are "Less Than Significant" on page 146 of the Initial Study.

The All Residential alternative generates approx. **18,000 tons** of greenhouse gases, as it requires only a new single level residential parking garage along California St.

#### 7. CONSTRUCTION OF MASONIC, EUCLID AND MAYFAIR BUILDINGS.

Once again it is necessary to include the following caveat "the Initial Study provides no information as to the construction methodology proposed nor the volumes of concrete and weight of steel required."

However, at public meetings, as well as smaller private ones, it was indicated that reinforced concrete and glass would be the primary components of construction so these assumptions have been adopted herein.

Applying References 16-24 with included references to the proposed buildings for reasonably equivalent sized buildings, the proposed buildings would generate approx.

#### 12,000 TONS OF GREENHOUSE GASES.

If Planning will provide the appropriate information concerning construction methodology, materials, volumes of concrete, weight of steel, etc. we can adjust the calculations accordingly.

The All Residential alternative will generate **ZERO tons** of Greenhouse Gases as we do not intend to destroy these historically significant landscaped areas.

#### 8. CONSTRUCTION OF PLAZA A & B AND WALNUT BUILDINGS.

The same assumptions as to construction methodology applied in 7 above is utilized herein.

These three buildings will generate

#### 18,500 TONS OF GREENHOUSES GASES WITH THE VARIANT PROPOSED.

The All Residential alternative would generate less than **8,500 tons** of greenhouse gases. For details refer to References 16-24 with included references. For consistency I have used a 7 story Walnut Building for this 8,500 tons estimate although the All Residential alternative achieves 558 residential units with a 4 story Walnut Building. The 8,500 tons is therefore a very high number.

#### 9. CONSTRUCTION OF LAUREL ST. DUPLEXES.

It is assumed that these are constructed predominantly of wood should generate less than

#### 500 TONS OF GREENHOUSE GASES.

If this assumption is incorrect the tonnage of greenhouse gases generated would be significantly higher. I await Planning's information on construction methodology.

The All Residential alternative concept will generate **ZERO tons** of Greenhouse Gases as it does not envision destruction of the historic nature of that area.

## REFERENCES

1. FN120a: Executive Order 5-3-05
2. FN122: Executive Order B-30-15
3. San Francisco Planning Department (Planning): "Strategies to Address Greenhouse Gas Emissions, 6 pgs.
4. Initial Study 3333 California St. Mixed Use Project.(3333) Case No. 2015-014028ENV April 28, 2018
5. Version 2 of Reference 4 dated May 14, 2018.
6. FN118: Planning "2017 Green house Gas Reduction Strategy Update" Revised July 2017.
7. FN130: Planning "Compliance Checklist Greenhouse Gas Analysis.
8. FN39: "Cut and Fill Calculation Overall" Webcor Builders dated 4/12/17.
9. FN38: Email series beginning from Brad Denney to Peter Alexander Mye et al Dated October 23, 2017.
10. Email, Pedro Wong to Julie Moore dated May 25, 2018 EIR Scoping Comments.
11. "Fuel Economy Ranges for Light and Heavy Vehicles" Fact 626 DOE dated June 7, 2010.
12. "Greenhouse Gas Emissions from a Typical Passenger Vehicle" EPA-420-F-18-008 dated March 2018.
13. "Calculation Sheet-Combustible Emissions" including all references; EPA.
14. "Greenhouse Gas Benefits of Building Re-Use versus New Construction-A Presentation before the Federal Facilities Council", National Academy of Sciences dated January 29, 2013.
15. "Preserving Historical Buildings: The Most Sustainable Thing is Not to Build New Stuff" The Guardian dated 12 October 2016.
16. "Estimation and Minimization of Embodied Carbon of Buildings-A Review" including all references; published In "Buildings" 4 January 2017.
17. "Carbon dioxide reduction in building life cycle: a critical review" including all references; published as Paper No. 11000005 in The Institute of Civil Engineering, ICE, 31/07/2012.
18. "The Environmental Impact of Concrete" published in "en.n.wikipedia.org including all references.
19. "What Building Material-Wood, Steel, Concrete- has thye Smallest Environmental Impact?"; published as "umass.edu/natsci397a" including all references.
20. "Evaluating the Carbon Footprint of Wood Buildings-Reducing Greenhouse Gases"; published by "reThinkwood.com" March/April 2013 issue of Green Source, including all references.
21. 21. "The Carbon Footprint of a Renovation versus New Construction"; published in "Sustainable Product Design March 18, 2008.
22. "Plyscrapers" published in "futurism.com/plyscrapers " August 26 2017.

23. "Cutting Embodied Carbon in Construction Projects", published by Wrap "Material Change for a Better Environment" including all references.
24. "Energy and CO2 Advantages of Wood for Sustainable Buildings", Andy Buchanan University of Canterbury including all references.
25. "Parking Garages" [www.clevelandcement.com](http://www.clevelandcement.com).
26. FN317 "3333 California Street Mixed Use Development Energy Assessment" prepared by SWCA dated April 12 2018.
27. U.S. Energy Information Administration "How much carbon dioxide is produced per kilowatt of U.S. energy generation?" updated April 5 2018.
28. Pacific Gas and Electric Company "Carbon Footprint Calculator Assumptions" 3 pages.
29. "Diesel engine power to Fuel Consumption" published by Barrington Diesel Club, 10-01-2017
30. FN40 "Site Plan with Boring Locations" from Langan Treadwell Rollo Report.

SUMMARY OF GREENHOUSE GENERATED (tons)

<u>PHASE of PROJECT</u>	<u>GREENHOUSE GASES-TONS</u>	
	PSKS	AR (1)
Demolition of portions of main building, service building, parking lots, garage ramps; Removal of Debris generated above; Excavation of site for underground parking, building foundations, etc.; and Removal of Spoils generated above. References: 26, 27, 28. x	10,500 (2)	3,750
Reconstruction of main building with strengthening and additional floors. References: 14 thru 19.	14,500	2,000
Construction of underground parking garages.	49,500 (3)	18,000
Construction of Masonic, Euclid & Mayfair buildings.	12,000	0
Construction of Plaza A & B and Walnut buildings.	18,500	8,500 (4)
Construction of Laurel St. duplexes.	500	0
<b>TOTALS (5)</b>	<b>105,500</b>	<b>32,250</b>

1. AR: All Residential alternative supported by the coalition of neighbors surrounding the site.
2. The literature indicates that the fuel consumption listed in Reference 26 is approx. 10-15% lower than other industry consumption figures. The lower SWCA (reference 26) number is used.
3. Low estimate: approx. 26,000 cubic yards of concrete; no reinforcing steel included.
4. As noted previously this number is based on a 7 story Walnut Building to be consistent with the PSKS Variant. The All Residential alternative envisions a 4 story Walnut Building which achieves the requisite 558 residential units.
5. At such time as Planning provides all the relevant data associated with the project the Greenhouse Gas tonnage estimates can be revised.

**However, regardless of revisions to the tonnages, the All Residential alternative will always represent a small, less than one third, portion of the PSKE proposed development and the required mitigation measures will have to reflect this.**

COMMENTS TO E 14: HYDROLOGY AND WATER QUALITY; INITIAL STUDY 3333 CALIFORNIA STREET  
MIXED USE PROJECT

Planning Department Case No. 2015-014028ENV April 25, 2018(reference 1)

On page 216 of the Initial Study (IS), reference 1, the IS states that the project could have significant impact if it could:

c) "Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?"

This is restated in Impact HY-3 on page 222 of reference 1.

An underground stream or flow of water is equally as relevant (and potentially more impactful) as a more visible surface stream. There is no indication in the Initial Study that this has been considered. Planning nevertheless checked "Less Than Significant Impact."

d) "Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increased the rate or amount of surface runoff in a manner that would result in flooding on- or off-site?"

This is also restated in Impact HY-3 on page 222.

Again, as noted above, underground flow of water is equally as important and requires equal consideration.

Planning checked "Less Than Significant Impact."

As discussed below these conclusions are not supported by substantial evidence inasmuch as the factual data and analysis upon which they are based are insufficient to support the determination of "no-significant impact."

The City failed to use best efforts to investigate and disclose all that it reasonably can with respect to the project's potential adverse impacts.

The IS's analysis failed to consider the impact of the project on underground flows of water and did not make a finding as to whether the existing underground drainage patterns of the site or area could be affected.

## DISCUSSION

The Preliminary Geotechnical Investigation conducted (FN40) by Langan Treadwell Rollo dated 3 Dec. 2014 (Reference 2), page 5, table 1 shows 5 borings with Depth to Groundwater varying from 18.8 feet to 38.8 feet.

However the Phase I Environmental Site Assessment (FN244) by Langan Treadwell Rollo dated 3 Dec. 2014 (Reference 3) page 8 states "However, two borings at the Firemen's Credit Union site (northeast of the site) encountered groundwater levels as shallow as 13 feet bgs."

The Firemen's Credit Union is immediately adjacent to 3333, and is part of the same block. It is not a separate site geologically or hydrologically.

Reference 3 further states "The direction of groundwater flow is assumed (italics and underlining added) to be to the northeast, based on topography and the groundwater monitoring reports for 3201 California Street; however the site is located near the boundary between the Downtown and Westside Groundwater Basins, so it is possible that the groundwater flow direction varies across the site."

It is clear from the above that Langan Treadwell Rollo, as well as Planning, has not conducted an investigation that would be adequate to assess the hydrology of the site, including the direction to which the groundwater flows.

The IS states that dewatering the groundwater would likely be required during construction because the depth of excavation would be up as much as 40 feet below ground surface and the groundwater level at the project site is "about 18 to 39 feet below ground surface (IS, page 219).

Actually the groundwater is almost certainly much closer to the surface as noted in reference 3 above as well as for reasons that will be discussed in this section.

There is clearly a subsurface flow of this groundwater. What is it, what is its flow rate and in what direction does it flow?

It would appear prudent to better understand the situation before beginning to excavate up to 40 feet bgs as well as essentially building a concrete dam in the form of underground garages that would stretch from Laurel St. to Presidio Ave., and completely block off any flow across the entire site.

At present there is only minimal obstruction, as the underground garage is a very small portion of the Laurel to Presidio distance and the buildings foundations present a minimal barrier to this subsurface flow.

What is the underground water going to do if this project is constructed?

We know the groundwater under the site will be diverted.

It is reasonable (if we had better data it would probably show with certainty) to conclude that the groundwater diverted by the below ground construction will have considerably higher flow velocities and energy at whatever point(s) it departs the site as the flow will be concentrated at the end(s) of the underground concrete barrier (parking garages).

We know that these higher subsurface flow rates and energies will create higher erosion rates and could lead to flooding at a downstream location due to these higher flow rates.

What are these higher erosion rates going to do to the foundations of buildings exposed to an entirely

new flow regime, none of which existed when they were constructed?

What analysis has been done concerning these potential impacts on the buildings along the lower portion of Laurel St and Presidio Ave.?

Unfortunately these are not the only shortcomings of the data presented in the Initial Study.

Nor are they the most damaging to the conclusions reached as to Impact HY-3.

A review of the boring logs indicates the borings were carried out August 20-26, 2014 and generated the groundwater bgs data that appears in table 1, page 5 of FN40, reference 2.

The August 2014 date leaps out like a red flag; as it should have for everyone associated with FN 40 and the Initial Study.

California entered the most severe drought in its history in 2011 and did not exit it until 2017.

August 2014 is the approximate midpoint in this period so any of the FN40 groundwater levels quoted are those determined three years into a prolonged severe drought.

Essentially such data are irrelevant for a normal year(s) and consequentially egregiously understate the hydrological condition of the site.

According to Wikipedia (with additional support in the article's references), "2011-2017 California Drought" (reference 4) page 2: "By February 1, 2014, Felicia Marcus, the chairwoman of the State Water Resources Control Board, claimed the 2014 drought 'is the most serious drought we've faced in modern times.'"

On the same page; "According to NASA, tests published in January 2014 have shown that the twelve months prior to January 2014 were the driest on record, since record-keeping began in 1885."

The references included in this document further reinforce the historic shortfalls of rain during this drought.

Per [weather.com/science/environment/news/california-drought-seconds-20141009](http://weather.com/science/environment/news/california-drought-seconds-20141009) (reference 5) page 1: "As a result, 2013 was California's **driest year ever recorded** (emphasis in the report).

San Francisco, which usually averages 23.65 inches of rain a year, only experienced 5.60." This is approximately 24% of a normal year.

The map on page 16 of "275 California drought maps show deep drought and recovery" LA Times April 7, 2017 (reference 6), included at the end of this document, shows the extent and severity of the drought as of Aug.3, Aug. 12, Aug. 19, Aug. 26, Sept.2 – which is the precise period in which the borings took place.

So, in the midst of a record drought, one that was already three years in extent; after the driest year on record (2013); after a year that produced less than 24% of the normal rainfall; and then after five months of a normal zero rainfall dry season the developer commissioned Langan Treadwell and Rollo to carry out borings with one of the specific objectives to determine the depth of groundwater below surface!

It is inconceivable, literally, to conjure up a more perfect set of circumstances to produce a more misleading series of conclusions more amenable and favorable to the developers' plan.

It is also perplexing that Planning has accepted these results on face value, has done no analysis or

research of its own to validate the reasonableness of these results; and has used these results as the basis for a finding of "Less Than Significant."

As a minimum, the conclusions of Impact HY-3 are inaccurate, inadequate, incomplete and invalid. Due to the total absence of relevant analysis and data, the IS failed to consider the impact on the existing underground drainage patterns of the site. The IS discusses impacts on surface runoff and fails to analyze the impact of the construction of the project on the alteration of the existing drainage pattern of the site, including through the alteration of the course of a subsurface stream or river. The EIR should analyze whether the project could alter the existing drainage pattern of groundwater or alter the course and/or characteristics of the underground water flows. It should also analyze the potential impact on existing buildings in the vicinity of the site as a result of the alterations to underground water flows.

## REFERENCES

1. Initial Study 3333 California Street Mixed Use Project Planning Department Case No. 2015-014028ENV dated April 25, 2018.
2. FN40: Langan Treadwell Rollo "Preliminary Geotechnical Investigation 3333 California Street" dated 3 Dec. 2014.
3. FN244: Langan Treadwell Rollo "Phase I Environmental Site Assessment 3333 California Street" dated 3 Dec. 2014
4. "2011-2017 California Drought" [www.en.wikepeida.org](http://www.en.wikepeida.org) and references.
5. "weather.com/science/environment/news/california-drought-seconds-20141009
6. "275 California drought maps show deep drought and recovery" LA Times April 7, 2017 with data from US Drought Monitor.

**EXHIBIT F**



## 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 (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.

**EXHIBIT E**

COMMENTS ON 3333 CALIFORNIA STREET INITIAL STUDY DATED APRIL 25, 2018

AND VERSION 2, DATED MAY 14, 2018

GREENHOUSE GAS EMISSIONS (see note 1)

EXECUTIVE SUMMARY

The Initial Study's (Reference 4 to this submission) conclusion on page 146 per the Table, items 7(a) and (b) as well as on page 148 "Impact C-GG-1" that the construction phase of the project will generate "Less than significant" Greenhouse Gases is incomplete, inaccurate, inadequate and invalid.

The approximate 42,000 tons of Greenhouse Gases generated as a consequence of the construction phase of the proposed development plan submitted by PSKS is approximately 1.1% of San Francisco's Total Citywide goal for the year 2025; hardly a "less than significant" tonnage.

**The Community Residential alternative supported by the coalition of neighbors surrounding 3333 will generate less than a third (14,500 tons) of the Greenhouse Gases generated by the PSKS plan as a consequence of their construction phase but will also fully protect all of the historically significant main building and landscaping.**

The City has not adequately analyzed the significant and harmful Greenhouse Gases generated as a consequence of the construction phase. This needs addressing in the upcoming EIR study.

Notes:

(1) This document focuses on the generation and release of Carbon Dioxide generated as a consequence of the construction phase.

However, the other Greenhouse Gases associated with this type of work –methane, nitrous oxide, etc.- although present at much lower levels than carbon dioxide have a GWP (Global Warming Potential) anywhere from 25-300 times greater than carbon dioxide (Reference 11).

This impact has not been taken into account in our numbers but it is assumed that the EIR addresses **ALL** of the harmful Greenhouse Gases generated as a consequence of the construction phase.

**This note applies to ALL Greenhouse Gas tonnages in this document.**

INTRODUCTION

Reference 4 Section E. 7 - Greenhouse Gas Emission pages 146-150:

Impact C-AQ-1 (Potentially Significant). "Potential cumulative air quality impacts will be addressed in the EIR."

Table: 7 GREENHOUSE GAS EMISSIONS (page 146)

Would the project:

- (a) "Generate greenhouse gas emissions, either directly or indirectly (underline added), that may have a significant impact on the environment?"  
"Less Than Significant" is checked.
- (b) "Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing emissions of greenhouse gases?"  
"Less Than Significant" is checked.

Not a single calculation, analysis, compilation or comparison is presented to support these inadequate conclusions of "Less Than Significant."

These conclusions are incomplete, inaccurate, inadequate and invalid in toto.

The project proposed by the developers (PSKS) would generate as a consequence of the construction phase alone approximately

**42,000 TONS OF GREENHOUSE GASES (see Note 1)**

which is approximately 1.1% of San Francisco's Total Carbon Emissions Goal of 3,721,169 for the year 2025 (Reference 3).

Due to the complete absence of any supporting data, as well as Planning's delayed response to relevant questions, it has been necessary to make some assumptions in analyzing details of the PSKS plans.

**By comparison, the Community Residential alternative supported by the coalition of neighbors surrounding 3333 would generate Greenhouse Gases at levels less than a third (14,500 tons) of the PSKS levels. The Community Residential alternative represents a 70% mitigation of these harmful gases to our environment.**

Thus, without the relevant data and corresponding analyses based on available air emission models, Planning's conclusions have no basis in fact and are incorrect, incomplete, inadequate and invalid.

On page 148, first paragraph, of reference 4, it is stated "The following analysis of the proposed project....."

In reality there is no analysis whatsoever in the referenced document as to the Greenhouse Gases generated as a consequence of the construction phase which, as shown above, produces significant amounts of harmful Greenhouse gases.

Pages 148-150 speak exclusively to the Operational phase of the project while completely omitting even a reference to the construction phase.

There is no reference made to the type of construction proposed, the material selections made, etc. all of which have profound implications as to the levels of Greenhouse Gases emitted into the atmosphere as a consequence of the construction phase.

I am still awaiting answers to question submitted to Planning on related issues.

It would appear that no analyses have been made, certainly none are presented, as to the Embodied Energy content of the construction methods and materials.

Such analyses would immediately highlight the significant levels of Greenhouse Gases that would be generated as a consequence of the construction phase and highlights the need for mitigation measures.

Due to the absence of data it was necessary to use information listed in the references to develop the approximate levels of Greenhouse Gas tonnages generated as a consequence of the construction phase. Had the Initial Study, which forms the basis for the EIR, carried out some fairly straightforward analyses we could have compared the results to determine where additional work is required.

At such time as the City provides the necessary technical data, such as the energy required to recycle the main building debris (see note 1), volume of concrete and weight of steel required for the re-construction, etc. the estimated Greenhouse Gas tonnages generated as a consequence of the construction phase could be re-calculated accordingly.

Notes:

1. There appears to be no calculation or consideration in any of the City's documents that addresses the Greenhouse Gases generated by the recycling of the debris from the main building.

Recycling steel and concrete is energy intensive and needs to be properly accounted for in the Greenhouse Gases budget.

The only thing more harmful is to simply dispose of reusable materials in a landfill.

DISCUSSION

The Greenhouse Gases generated as a consequence of the Construction phase will be discussed in the following order:

1. Demolition of portions of main building, service building, parking lots, garage ramps.
2. Removal of Debris generated in 1. Above.
3. Excavation of site for underground parking, building foundations, etc.
4. Removal of Spoils generated in 3. Above.
5. Reconstruction, strengthening and increased height of the main building.
6. Construction of underground parking garages.
7. Construction of Masonic, Euclid and Mayfair buildings.
8. Construction of Plaza A & B and Walnut buildings.
9. Construction of Laurel St. duplexes.

#### 1-4: DEMOLITION, EXCAVATION AND REMOVAL OF DEBRIS AND SPOILS.

The first four activities, 1-4, listed above will be looked at together as they basically utilize energy to carry out the activity.

PSKS proposes to demolish approximately 50% of the existing main historic building as well as most of the historic landscaping. In addition, the various parking lots and roadways on the site will be demolished as well as the circular garage ramps. After demolition the debris will be removed and the site will be excavated and the spoils hauled away. Reference 26 shows the approximate amount of fuel, diesel and gasoline, and electricity consumed. Some of this is spread over the construction phase of the building cycle. As items such as the map of the routes selected (Reference 9) have not been made available, but have been requested, it is impossible to judge the reasonableness of some of these calculations.

It should be noted that the 0.05 gallons per horsepower-hour used in the Reference 26 is 10-15% lower than industry data available from multiple sources (see Reference 29, the value 0.056, as an example).

Also of significance, which is not addressed, is the volume of serpentine that could be present and which requires significantly more energy to remove than soils and clays.

The five primary boring sites related to geology are of considerable interest.

Major excavation will take place along Masonic and Euclid and yet no borings were made at any intermediate location along this >600ft segment of the property.

The boring sites appear in Reference 30.

A boring (B-3) was done at Masonic and Presidio where no excavation will take place.

The only other boring on the southern half of the property was taken very near the Euclid-Laurel intersection (B-4) where, again, no excavation will take place.

So, all the excavation for the Masonic and Euclid buildings will be done without any specific first-hand knowledge of the geology at those locations.

And yet it was deemed appropriate to do boring B-5, a site where the Laurel St. duplexes will be constructed and which require significant less critical subsoil information as they do not have underground garages supporting major buildings.

Outcrops of serpentine exist throughout this general area so it is probable that these areas of excavation will encounter significant deposits of serpentine, the excavation of which is far more difficult and energy intensive than for stiff clays etc. as well as posing a health risk which could be of a much greater magnitude than that presented in the Initial Study.

Frankly one could conclude that the boring sites were carefully selected to avoid discovering any controversial conditions that may well underlay the site!

The net result is that the energy discussed in Reference 26 must be considered to be at the very low end of likelihood.

Higher values should be expected and this likelihood should be addressed in the Air Quality and Greenhouse Gas Emissions analyses of the upcoming EIR.

Despite the optimistic view of Reference 26, these phases of the project will still generate approx.

**3,500 TONS OF GREENHOUSE GASES**

As noted above in the Introduction, no consideration appears to have been made for the energy associated with the recycling of the reusable components of the debris from the main building.

So, what would be a more realistic estimate?

**The Community Residential alternative would generate approx. a third of that, 1,000 tons, of Greenhouse Gases.**

**5. RECONSTRUCTION, STRENGTHENING AND INCREASED HEIGHT OF MAIN BUILDING**

First, the remaining portions of the historical main building will require strengthening as it was not originally designed or built to accommodate three additional floors and their related infrastructure.

The volumes of concrete and steel involved will result in significant generation of Greenhouse Gases, no mention of which appears anywhere in the Initial Study!

The EIR should disclose the volumes of concrete and/or weight of wood, as well as the weights of steel and glass that would be used in the PSKS proposed development. This information is relevant to the calculation of Greenhouse Gas Emissions.

Projects involving buildings of this size, and larger, have seen savings of 23,000-100,000 tons of Greenhouse Gases saved through re-use of the building as opposed to major demolition and re-construction.

So, conservatively it can be estimated that this new construction will generate approx.

**10,500 TONS OF GREENHOUSE GASES**

Had we been provided with information regarding volumes of concrete and weight of steel required for this rebuild, strengthening and height increases, we could have provided a more specific estimate.

It should be noted that concrete has an Embodied Energy Content of 12.5MJ/kg, Steel 11.0MJ/kg. and Wood 2.0MJ/kg.

Concrete is an energy intensive product and generates its own weight in Greenhouse Gases during its production process so a cubic yard of concrete is responsible for approximately 2,000 lbs. of Greenhouse Gases being released into our atmosphere. See References 16, 17, 18 and 23.

This estimated amount of Greenhouse Gas generated would hardly seem to be compatible with Page 146 and the "Less Than Significant" conclusion by the City, further reinforcing the conclusion that the Initial Study is inaccurate, inadequate, incomplete and invalid.

**The Community Residential alternative generates 0 tons of Greenhouse Gas emissions.**

**There is no demolition of the main building; no additional strengthening or structure for additional floors; no rebuilding of the exterior of the main historic building.**

**However, to take into account modifications for providing sunlight courts, let's assign a number of 1,000 tons of Greenhouse Gases.**

#### 6. CONSTRUCTION OF UNDERGROUND PARKING GARAGES.

The site will be underpinned by underground parking garages over approx. 60% of the site.

Along California St. these are two and three levels.

Under Masonic, Euclid and Mayfair these are one level.

Construction is assumed to be steel reinforced concrete designed to support the buildings that are above all the parking garage areas.

The EIR should disclose whether this construction would be of reinforced steel as well as provide the volumes of concrete and weight of steel required.

Concrete's Embodied Energy is 12.5MJ/kg., weighs approx. 1 ton per cubic yard and emits its own weight in Greenhouse Gases during the manufacture and construction processes.

As no volumes of concrete or weight of reinforcing steel has been provided by the City, the calculations of Greenhouse Gases generated as a consequence of the construction phase has used industry standards for parking garages (Reference 25).

These are all above ground garages without any overlying buildings so the calculations should be considered on the low end when applied to an underground complex supporting 4-7 story buildings above.

The average cubic yards of concrete to square foot of structural slab ratio varies from 4.5% to 10% (Reference 25).

Assume a 6% ratio which is conservative due to the nature of the complex AND excludes any consideration of the required reinforcing steel.

When Planning provides the necessary information, these calculations can be updated.

Again, with apparently no information, no calculations, etc. Planning concluded that the

#### **14,500 TONS OF GREENHOUSE GASES**

generated as a consequence of the construction of the underground parking garages are "Less Than Significant" on page 146 of the Initial Study.

The Community Residential alternative generates approx. **5,000 tons** of greenhouse gases, as it requires only a new single level residential parking garage along California St.

#### 7. CONSTRUCTION OF MASONIC, EUCLID AND MAYFAIR BUILDINGS.

Once again it is necessary to include the following caveat “the Initial Study provides no information as to the construction methodology proposed nor the volumes of concrete and weight of steel required.”

However, at public meetings, as well as smaller private ones, it was indicated that reinforced concrete and glass would be the primary components of construction so these assumptions have been adopted herein.

Applying References 16-24 with included references to the proposed buildings for reasonably equivalent sized buildings, the proposed buildings would generate approx.

**4,500 TONS OF GREENHOUSE GASES.**

If Planning will provide the appropriate information concerning construction methodology, materials, volumes of concrete, weight of steel, etc. we can adjust the calculations accordingly.

**The All Residential alternative will generate ZERO tons of Greenhouse Gases as we do not intend to destroy these historically significant landscaped areas.**

#### 8. CONSTRUCTION OF PLAZA A & B AND WALNUT BUILDINGS.

The same assumptions as to construction methodology applied in 7 above is utilized herein.

These three buildings will generate

**8,500 TONS OF GREENHOUSES GASES WITH THE VARIANT PROPOSED.**

**The Community Residential alternative would generate less than 6,500 tons of greenhouse gases. For details refer to References 16-24 with included references.**

#### 9. CONSTRUCTION OF LAUREL ST. DUPLEXES.

It is assumed that these are constructed predominantly of wood should generate less than

**500 TONS OF GREENHOUSE GASES.**

If this assumption is incorrect the tonnage of greenhouse gases generated would be significantly higher.

I await Planning’s information on construction methodology.

**The Community Residential alternative concept will generate ZERO tons of Greenhouse Gases as it does not envision destruction of the historic nature of that area.**