Location:	**Parcel generally bounded by Lake Merritt Boulevard to the north, East 12th Street to the east, 2nd Avenue to the south, and a City park/water treatment basin and Lake Merritt Channel to the west. (see map on reverse)**
Assessors Parcel Numbers:	**019-0027-014**
Proposal:	Construction of two buildings over a two-story podium. The northern building is a 26-story residential tower, including the two story podium, which contains 252 market rate units and 18 "work force" units. The southern building includes eight stories, including the 2-story podium, and 90 affordable housing units. The project also includes a 1,476 commercial space and a 2,656 cultural center. Off-site improvements are also proposed to the existing stormwater treatment basin/park located adjacent to the site.
Applicant:	Ronnie Turner, UrbanCore
Owner:	City of Oakland
Planning Permits Required:	Design Review for new construction; Conditional Use Permits to be subject to the requirements of Height Area LM-275 instead of Height Area LM-85; for increased building base height; for reduced loading birth dimensions; for construction over 100,000 square feet, and for improvements to a stormwater treatment facility. Variance for a storefront depth of 28 feet instead of the required 50 feet; All permits are Major because the proposed construction is greater than 100,000 square feet in a D-LM zone.
General Plan:	Urban Residential
Zoning:	D-LM-1 Lake Merritt Station Area District Mixed Residential Zone – 1
Environmental Determination:	The anticipated environmental effects of the project have been evaluated by the Lake Merritt Station Area Plan Final Environmental Impact Report (Final EIR) (certified November 2014). The project is also Categorically Exempt under Section 15332 of the State CEQA Guidelines: In-Fill Development Projects; Section 15183 of the State CEQA Guidelines: Projects consistent with a Community Plan, General Plan or Zoning; and 15183.3 (Streamlining for Infill Projects). These analyses and exemptions satisfy CEQA requirements on a separate and independent basis.
Historic Status:	Empty lot; no historic properties.
Decision to be taken	Decision on proposal based on staff's recommendation
Status	Appealable to the City Council within ten days.
Service Delivery District:	4
City Council District:	2
For further information:	Contact case planner **Neil Gray** at **510-238-3878** or by email: ngray@oaklandnet.com

SUMMARY

The proposed project would develop a site created after the reconfiguration of E 12th Street adjacent to Lake Merritt with a 26-story residential apartment tower on top of a two-story podium (not including an underground garage) with a 1,476 square foot café and 2,656 square foot cultural space. Staff recommends approval of the project for the reasons described in this report.

PROPERTY DESCRIPTION

The site consists of two adjacent parcels: the parcel proposed for new construction ("project site") and a neighboring vegetated area with a bioswale ("passive open space area") proposed for landscape improvements and maintenance. Both sites are currently owned by the City and are on the southeastern edge of the Lake Merritt Specific Plan Area.

The approximately 0.92-acre project site is triangular and generally bounded by Lake Merritt Boulevard to the north, 2nd Avenue, a parcel with an empty building formerly occupied by the Oakland Unified School District (OUSD) to the west, E. 12th Street to the east, and the passive open space area to the north. Lake Merritt is located to the northeast of the project site across Lake Merritt Boulevard. Current uses on the project site include soil stockpiling and staging for nearby construction projects.

The passive open space area is a recently re-vegetated 0.91-acre City stormwater basin installed as part of the East 12th Street Reconstruction Project. It is adjacent to Lake Merritt Boulevard to the northwest, the school site and Lake Merritt Channel to the west, and the project site to the east. This parcel is significantly sloped toward the Channel.

The entire site was uncovered after East 12th Street was realigned as part of the East 12th Street Reconstruction Project, which was funded by Measure DD.

BACKGROUND

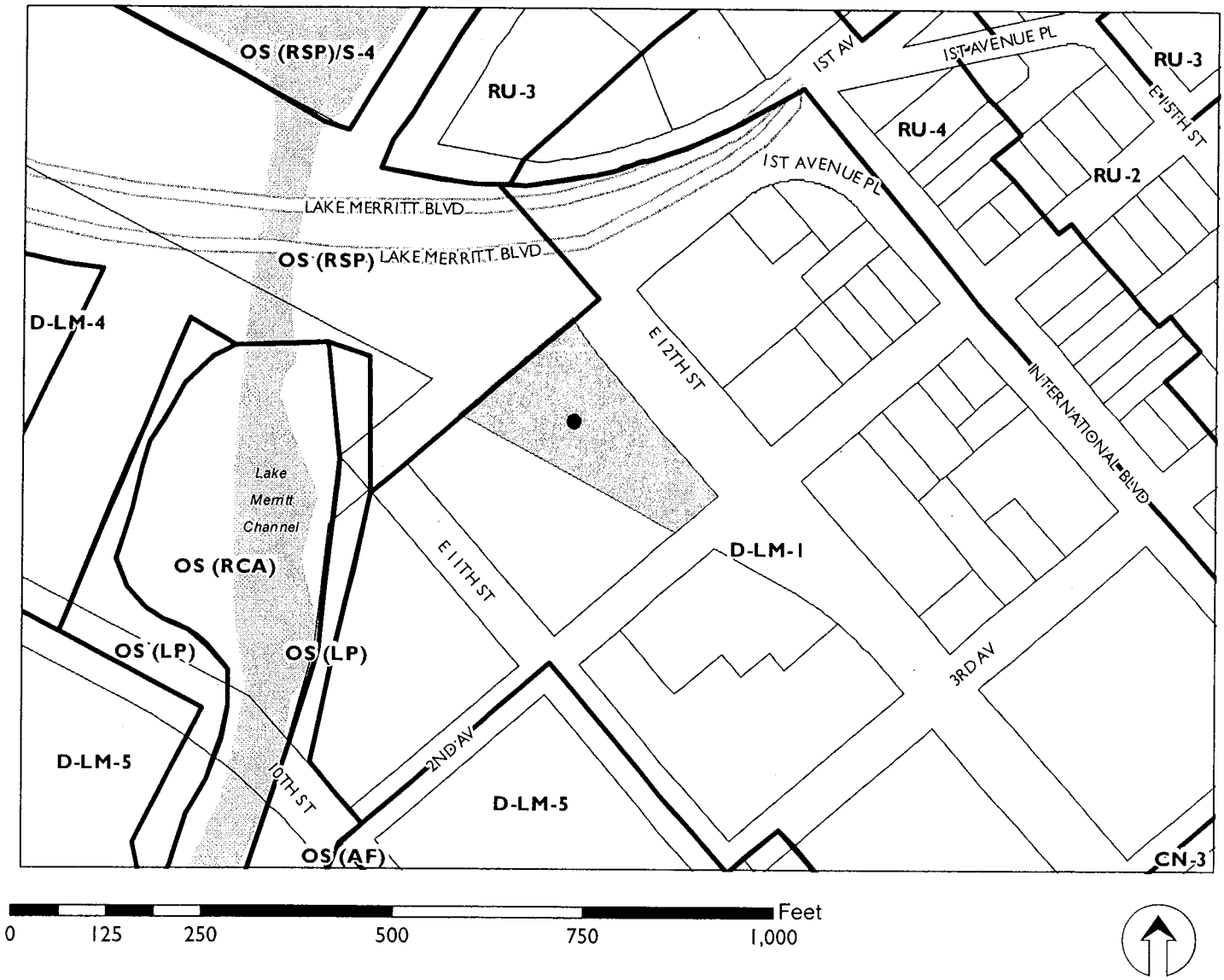
In December 2012, staff issued a Request for Proposals (RFP) to developers who showed interest in purchasing the project site from the City and developing it with market-rate housing. Staff received two development proposals and established a selection committee to evaluate the proposals and interview the two respondents to the RFP.

In July 2013, the City Council authorized the City Administrator to enter into an Exclusive Negotiating Agreement (ENA) with the selected respondent, UrbanCore-Integral Development, LLC (UrbanCore), for the development of the project site. During the 18-month ENA period, staff worked with the developer to refine its project proposal in response to community and staff input.

On April 1st, 2015, the Planning Commission approved construction of a 24-story residential apartment tower at the site. The project included 298 residential units, 2,000 square feet of ground level commercial space, and improvement of the adjacent passive open space area. Several speakers at the meeting commented that the City should have more widely advertised the RFP, the project should include affordable housing, and the project was not consistent with the State Surplus Land Act.

The City Council did not approve a development agreement with UrbanCore and directed staff to issue a "Notice of Offer and Intent to Convey Property" to local public entities and housing sponsors to see if there was further interest in purchasing or leasing the land. On July 14, 2015, the City released the notice. Council further instructed staff that their preference was a proposal

CITY OF OAKLAND PLANNING COMMISSION



Case File: PLN16128
Applicant: Ronnie Turner – Urban Core
Address: Parcel bounded by Lake Merritt Boulevard to N, East 12th Street to E, 2nd Avenue to S and Lake Merritt Channel to W
Zone: D-LM-1

that provided at least 25 percent of the units at below market rate, maximized the total number of units, and maximized community benefits.

On March 15, 2016, the City Council directed staff to negotiate and execute an exclusive negotiating agreement with UrbanCore and their affordable housing partner, the East Bay Asian Local Development Corporation (EBALDC). The proposal currently in front of the Planning Commission is the project proposed by these two entities.

NEIGHBORHOOD DESCRIPTION

The site vicinity consists of public, institutional, residential, and commercial uses. Public and institutional uses, including the Kaiser Center and the Alameda County Courthouse, are among the most visible land uses in the area and are largely concentrated along the Lake Merritt Channel and 13th Street. The Dewey High School campus and the former OUSD administrative offices, which are also planned for redevelopment, are located at the southern border of the project site. This site is also near Laney College campus and sports fields, the Peralta Community College District Administration buildings, the Oakland Museum of California, the Kaiser Auditorium, the County Court and Offices, and the Main Oakland Public Library.

There are several multi-unit apartment buildings ranging from 2 to 23 stories in the neighborhood. These buildings have a variety of architectural styles: The 1200 Lakeshore Apartments, a 23-story residential building on the shore of Lake Merritt, has a post-modern style; the 18-story "Merritt on 3rd" residential building located southeast of the project site has a contemporary style; and the five-story Lakemount Apartment Building across 2nd Avenue from the project site has a traditional architectural style.

PROJECT DESCRIPTION

The project consists of the construction on of two buildings over a two-story podium. The northern building is a 26-story (including the two story podium), 272 foot tall residential tower, which contains 252 market rate and 18 "work force" housing units. The southern building is eight stories (including the 2-story podium) and 85 feet tall and contains 90 affordable housing units. The project also contains a 1,476 square foot commercial space and a 2,656 square-foot cultural and performance center ("central commons"). The project site includes 31,103 square feet of open, cultural, and recreational space; and other amenities and improvements, not including the passive open space area.

The following table describes the unit mix for each building:

	Southern Building	Northern Building
Studios	24	86
One-bedrooms	34	66
Two-bedrooms	22	86
Three-bedrooms	10	22
Penthouse	--	6
Townhouses	--	4
Total	91	270

Off-site landscaping improvements are also proposed to the existing passive open space area located adjacent to the site. The passive open space area would be a visual amenity but not a recreational facility, and would not contain paths or benches.

The project, including a breakdown of affordable and workforce units, is described in more detail below. Architectural plans are contained in Attachment A.

Site Plan

At approximately 123 feet long, and 100 feet wide, the northern building has a small footprint relative to the size of the site and other towers that have been approved in Downtown Oakland. The small footprint of this 275-foot tall tower will accommodate views of Lake Merritt and Downtown from southern portions of the City.

A group open space area defined by the forty-foot space between the two towers on the podium would contain landscaping, a play area for kids, and seating. Other open space amenities on the northern side of the side would surround the tower on the podium level and be located at rooftop terraces.

At approximately 8,800 square feet, the eight-story, 85-foot tall southern building would have a larger footprint than the northern tower. An open space area with an outdoor kitchen and lounge would be defined by the U-shape of the building.

The ground floor façade at E. 12th Street contains three "commons." The main entrance for all residents of the development leads into the central commons. The north and south commons would contain the residential lobbies and elevators for the north and south buildings. A café would be located at the intersection of E. 12th and 2nd Ave (see "Key Issues and Impacts" for a discussion of the location of the café). Stairs adjacent to the passive open space area would connect the sidewalk to a terrace and entrance into the north commons. Four two-story townhouses would face the passive open space area on the northern end of the podium.

A garage entrance would face 2nd Street and lead to parking behind the café and commons space. The application proposes two underground floors of car parking containing an automated puzzle car stacking system, bicycle parking, and utilities. The parking garage would include a total of 320 spaces for cars and 216 spaces for bikes. Two loading berths would be located near the 2nd Street entrance.

Elevations

Building Base. Double story windows on bottom floor of the E. 12th Street façade allow views from the street into the commons, lobbies, and café, and create a prominent building base. The E. 12th Street and northern façades are unified through double story columns and large window systems. The ground floor columns also relate to the historic civic buildings on Lake Merritt Boulevard and 14th Street, such as the Kaiser Convention Center, Alameda County Courthouse, and the Main Branch of the Oakland Public Library. Two-story townhouse units at the northern façade allow views onto the passive open space and the Lake Merritt Channel.

Northern tower design. As mentioned, the 26-story (including the podium) northern building would have a relatively small footprint for a tower of its height. Its northern façade, which faces the Lake, is rounded to allow better views of the East Bay Hills, Downtown Oakland, and Lake Merritt and to create a visually interesting tower shape. Each floor of this northern elevation would contain glazing with a blue-gray tint above curved, horizontal panels. These panels would be articulated to provide depth and visual interest to the façade. The elevations of the other sides of the building include patterns of brown concrete panels and glazing that create a vertical composition to contrast with the northern elevation.

Southern building design. The most visible elevation of this building would be the east (E. 12th Street) side of the building because the rear of the building faces the OUSD future development site. The E. 12th Street elevation is articulated into five bays defined by windows and balconies that reduce the scale of the building and provide a residential style. Columns of hardiboard and windows on the wall would relate to the ground floor façade pattern and other buildings in the neighborhood. This pattern continues on the 2nd Street elevation.

Landscaping

Street trees and other plantings would be located at the ground level where the site borders E. 12th Street and within the podium open space area. Off-site landscaping improvements are proposed to the passive open space located adjacent to the project site. These improvements would include the installation of natural landscaping to the area north and northwest of the project site. The land would function as a passive open space consisting mostly of native plantings, groundcover, shrubs and trees. The groundcover would be low maintenance grasses and wildflowers requiring mowing once or twice a year. Irrigation would be used for two or three years to establish the trees and shrubs. All plantings would adhere to Bay friendly practices and to the State's Water Efficient Landscape Ordinance and the area would continue to function as a stormwater treatment basin. All improvements and maintenance would be funded by the developer. As mentioned, this space would be a visual, not a recreational, amenity.

Affordable Housing

The northern and southern buildings contain 18 "workforce units" and 90 affordable units, respectively. The following table shows the affordability mix of the project:

Affordability	Studios	1-Bedroom	2-Bedroom	3-Bedroom	TOTAL
30% of AMI	6	9	12	2	**29**
40% - 50% AMI	0	5	6	2	**13**
60% of AMI	19	21	2	6	**48**
80% of AMI **	2	1	2	1	**6**
100% of AMI **	2	1	2	1	**6**
120% of AMI **	2	1	2	1	**6**
TOTAL	31	38	26	13	**108**

** Units in the North Tower

GENERAL PLAN ANALYSIS

The intent of the Urban Residential classification is to "create, maintain, and enhance areas of the City that are appropriate for multi-unit, mid-rise, or high-rise residential structures in locations with good access to transportation and other services." A high-rise apartment building clearly meets the intent of this designation. The project is also consistent with the following policies (the policies are in **bold** text; description of how the project conforms to a policy is in *italic*):

Policy D1.9: Planning for the Channel Park Residential Area. The area between the Channel Park Arts, Educational, and Cultural Center and the waterfront should be developed as a walkable urban residential district, incorporating commercial development and open space as appropriate to take advantage of the cultural and recreational amenities provided by the center and the channel to the estuary, and easy transportation by BART. *The proposal is in the location described by this policy and provides residential development, open space, and ground floor commercial space.*

Policy N3.4: Encouraging Infill Development. In order to facilitate the construction of needed housing unit, infill development that is consistent with the General Plan should take place throughout the City of Oakland. *The project is near Downtown Oakland and would be considered a significant infill development.*

Policy N3.9 Orienting Residential Development. Residential development should be encouraged to face the street and to orient their units to desirable sunlight and views, while avoiding unreasonably blocking sunlight and views for neighboring buildings, respecting the privacy needs of residents of the development and surrounding properties, providing for sufficient conveniently located on-site open space, and avoiding undue noise exposure. *The tower has dimensions that maximize views of Lake Merritt from buildings to the southeast and reduce shadow impacts. Open space is conveniently located on the podium level and ground level townhomes will face an attractive passive open space area. Most upper story units are facing the street.*

LAKE MERRITT STATION AREA SPECIFIC PLAN ANALYSIS

Staff believes that the project is consistent with the Lake Merritt Station Area Specific Plan for the following reasons.

The proposal meets the following policies in the Lake Merritt Station Area Specific Plan:

LU-40 City Owned Remainder Site. **Redevelop the City-owned remainder site on Lake Merritt Boulevard with landmark quality design, high density residential, and active ground floor uses that complement the waterfront.** *Staff believes that this high density residential project will have a landmark quality design. The narrow, rounded tower design will be unique in Oakland and be a distinctive element of the skyline. The proposed cultural space in the central commons will be a significant amenity for the neighborhood and the nearby school.*

OS-15 Lake Merritt Channel Edge Setback. **Require a 100-foot setback along the eastern edge of the Lake Merritt Channel to promote new publicly accessible open space. This requirement would impact in particular the new remainder site at the corner of Lake Merritt Boulevard and 12th Street (site 44) and the OUSD administrative buildings (site 43) if they are redeveloped.** *The proposed 192-foot distance from the Lake Merritt Channel to the development is consistent with Policy OS-15. The open space improvements are a first step to eventually create a path that runs through a development at the OUSD site.*

LU-2 High intensity development potential. **Support transit-oriented development and accommodate regional growth projections by promoting high intensity and high density development in the Planning Area.** *The proposal maximizes the residential density allowed under the LM-1/275 zoning designation.*

LU-4 Active ground floor uses. **Encourage active uses in new buildings on key streets in neighborhood hubs in order to transform key streets into activated pedestrian connections over time and expand the vibrancy and activity that already exists in some areas, as shown in Figure 4.2. These active ground floor uses should be located at the street edge, or at the edge of parks, plazas, or other public spaces. Activated neighborhood hubs include:**

- **Chinatown Commercial Core: key streets through this hub include 8th Street, 9th Street, Webster Street, Harrison Street, and portions of Franklin Street, 7th Street, and 10th Street.**
- **Lake Merritt BART Station Area: key streets through this hub include Oak Street, Madison Street (excluding Madison Square Park), 8th Street, and 9th Street**
- **14th Street Corridor: 14th Street**
- **Eastlake Gateway: key streets through this hub include 1st Avenue, East 12th Street, and International Boulevard.**

The proposal includes an active cultural space in the central commons and a café on the edge of E. 12th Street.

LU-39 New Lake Merritt Channel improvements. **Establish an improved greenway along the Lake Merritt Channel, in part by obtaining public easements and requiring new buildings to be set back from the Channel edge in order to establish public access along the eastern edge of the Lake Merritt Channel.** *The proposed 192-foot distance from the Lake Merritt Channel and improvements to the adjacent open space are consistent with this policy.*

The project is also consistent with the Design Guidelines document that was adopted with the Specific Plan. As described in the Guidelines, the tower will be stepped back and balconies,

recesses, windows, reveals, and bay windows will articulate the façade. The apparent building bulk is reduced by segmenting it into smaller masses (two towers and the base) that correspond to the internal function of the structure. The commercial space will have a high ceiling and significant transparency as recommended by the Guidelines. The northern commons space will not be at the sidewalk grade as recommended by the Guidelines due to grade changes; however, the northeast corner of the project site will be connected to the sidewalk through a welcoming outdoor staircase.

ZONING ANALYSIS

The following highlights relevant zoning standards from the LM-1 zone.

Zoning Intent

The intent of the D-LM-1 zone is to create, maintain, and enhance areas of the Lake Merritt Station Area Plan District appropriate for high-density residential development with compatible commercial activities.

Ground Floor Facade Requirements

The following table contains the ground floor façade requirements contained in Chapter 17.101G of the Planning Code.

	Requirement	**Proposed**	**Notes**
Average minimum setback from the Lake Merritt Estuary Channel	60 ft	192 ft	
Minimum ground floor commercial facade transparency	55%	81%	
Minimum height of the ground floor	15 ft	22 ft	
Minimum width of storefronts	15 ft	25 ft	
Minimum depth of storefront bay	50 ft	25 ft for cafe space;	1
Minimum separation between the grade and ground floor living space	2.5 ft	2.5 feet for all units.	

Note:
1. The proposal requires a variance for not meeting minimum requirement for this item. See the Key Issues and Impacts Section, below, for further discussion.

Height, Bulk, Intensity, Open Space, and Tower Standards

The project is in Height Area LM-85 but the applicant has applied for a Conditional Use Permit to be subject to the requirements of Height Area LM-275, as allowed in Table 17.101G.04 of the Planning Code. This Table states that one application in the LM-85 height area can apply for a

height area upgrade to LM-275 and that these applications are reviewed on a first come, first serve basis; the subject property is the first and so far only project to apply for this upgrade.

Staff recommends approval of this Conditional Use Permit (CUP) for the reasons described in the Key Issues and Impacts section of this report. Staff also recommends approval of a CUP required under Section 17.101G.070 for all projects over 100,000 square feet (the project is a total of 251,939 square feet). The following table lists the relevant requirements of Height Area LM-275 and how the project complies with these requirements:

Regulation	Requirement	Proposed	Notes
Building Intensity Requirements			
Maximum density	364 units	360 units	
Maximum Floor Area Ratio (floor area/site area)	12.0	10.6	
Minimum group open space	75 sf per unit	120 sf per unit	
Conditional Use Permit Required	100,000	426,736 (Conditional Use Permit Required)	
Building Base Requirements			
Average minimum setback from the Lake Merritt Estuary Channel	60 ft	192 feet	
Tower Requirements			
Maximum total height	275 ft	272 ft	1
Maximum average per story lot coverage above the base	65 percent (30,203 sf)	31.5 percent (12,679 sf)	1
Maximum building length	150 ft	123'-7"	1, 2
Maximum diagonal length	180 ft	166 sf	1, 3
Parking and Loading Requirements			
Minimum parking spaces	248 (3/4 space per market rate dwelling unit, .5 space per affordable unit)	310	4
Minimum bike spaces	• 19 short term (one per 20 units) • 90 long term spaces (one per four units)	• 19 short term • 91 long term	
Minimum loading births	Two loading births	Two loading births	

Notes:

1. The tower is defined by Section 17.09.040 and 17.101G.050 of the Planning Code as the area above 85 feet.
2. The building length is the length of the longest frontage of a building

3. The diagonal length is the distance between the two most separated points on a floor
4. AB744 states that a local jurisdiction cannot require more than .5 spaces per each affordable housing unit that is within one-half a mile from a transit stop, such as a BART Station. The project is approximately one-third of a mile from the Lake Merritt BART Station.

ENVIRONMENTAL DETERMINATION

The City certified an Environmental Impact Report (LMSAP EIR) for the LMSAP in November 2014, pursuant to the California Environmental Quality Act (CEQA). The LMSAP EIR presented detailed potential development assumptions for certain "Opportunity Sites," which are properties considered "most likely to redevelop." The 12th Street parcel was identified as Opportunity Site #44 in the development program, which considered the development of a 20-story apartment building containing 357 residential units, 20,000 square feet of retail space and 0.13 acres of open space.

The 2014 LMSAP EIR analyzed the environmental impacts of adoption and implementation of the LMSAP. The analysis in the 2014 LMSAP EIR specifically included the proposed project site and provides the basis for use of an Addendum to the LMSAP EIR (per CEQA Guidelines Section 15164). Although the proposed project's building height and unit count are greater than what was set forth in the LMSAP development program, the level of development currently proposed for the site is within the broader development assumptions analyzed in the LMSAP EIR, and therefore providing CEQA clearance through an Addendum would be permissible as discussed throughout this CEQA Analysis document.

Additionally, environmental clearance under CEQA Guidelines Section 15183 also would be permissible as there are a number of separate and independently qualified planning level documents, specifically program-level EIRs that provide a basis for CEQA clearance of the proposed Lakehouse Commons Project. These program-level documents include the City of Oakland's 1998 General Plan Land Use and Transportation Element EIR (1998 LUTE EIR), the 2010 General Plan Housing Element EIR and 2014 Addendum (Housing Element EIR), and the 2011 Central District Urban Renewal Plan Amendments EIR (or "Redevelopment Plan EIR"). These are referred to collectively throughout the analysis in this document as "the Previous CEQA Documents."

In summary, based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR, as well as those of the 1998 LUTE EIR, the 2011 Redevelopment Plan EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element EIR and 2014 Addendum, the potential environmental impacts associated with the Lakehouse Commons Project have been adequately analyzed and covered in the planning-level LMSAP EIR and other Previous CEQA Documents. Therefore, no further review or analysis under CEQA is required.

A detailed CEQA analysis of the project is contained in Attachment B of this report. There are no new significant or substantially more severe environmental effects that would necessitate preparation of any further environmental review.

KEY ISSUES AND IMPACTS

The following addresses the major issues raised by the public during the community outreach process.

Community Benefits

Staff has received input that the City, as owner of the project site, should require the developer to provide more community benefits. The most frequently cited benefit from the public has been including affordable housing in the development. Although there is no requirement in the Planning Code or the Lake Merritt Station Area Plan requiring that the project provide affordable housing, 25 percent of the proposed units are affordable (see Project Description, above) and 5 percent are workforce units. The development will also ease regional housing pressures by maximizing the number of dwelling units at the site. Finally, the developer has agreed to not sell condominium conversion rights from the project site, which will help preserve rental units throughout the city. Another community benefit includes the designing, improvement, and maintenance of the passive open space area adjacent to the project site. Attachment A contains plans showing the proposed improvements.

Location of Café

Staff recommends that the location of the proposed café space be moved from the corner of E. 12th Street and 2nd Avenue to the corner of the parcel nearest Lake Merritt Blvd. Management and leasing offices and part of the north commons, which serves as a lobby area for the northern tower, are currently proposed for that area of the building. Staff proposes this location for the café because it will be convenient to the many pedestrians that walk around the lake, serve as an appropriate gateway into the Eastlake neighborhood, and take advantage the views of Lake Merritt and the improved passive open space. Staff also believes that the café can be moved and leave sufficient space for a lobby serving the north tower. Further, a café at this location will contribute to a future retail node because the LMSAP identifies the motel parking lot across E. 12th Street as an opportunity site for ground floor retail.

The developer argues that the currently proposed site is appropriate because it will be more convenient to the Eastlake neighborhood and staff's proposal would require pedestrians to cross the wide and busy Lake Merritt Blvd to reach the café. They also state that they prefer a larger lobby for the residential tower. Finally, EBALC, which would be operating the café, prefers it to be on the ground floor of the southern building, which they would also operate.

LM-275 Height Area

As mentioned, the project is in Height Area LM-85 but the applicant has applied for a Conditional Use Permit to be subject to the requirements of Height Area LM-275. Staff recommends approval of the Conditional Use Permit because the project meets the criteria for approval contained in Note 2 of Table 17.101G.04 as described below. The criteria are in **bold** and staff's response is in *italic*.

a. The proposal is consistent with the intent and desired land use character identified in the Lake Merritt Station Area Plan and its associated policies;

As described in the Lake Merritt Area Specific Plan Analysis section, above, the project is consistent with Policies in the Plan and its accompanying Design Guidelines.

b. The proposal will promote implementation of the Lake Merritt Station Area Plan;

New construction that is consistent with the policies identified in (a) directly implements the intent of the Plan.

c. The proposal is consistent with the desired visual character described in the Lake Merritt Station Area Plan and Lake Merritt Station Area Design Guidelines, with consideration given to the existing character of the site and surrounding area.

As described in the Lake Merritt Specific Plan Analysis section, above, a residential tower with a ground floor commercial use is consistent with the Plan's Design Guidelines. The building is not in a historic district and the design context of the surrounding area is a mix of varying styles and building heights.

Finally, the impact on views of Lake Merritt will be minimized due to the relatively small footprint of the proposed building.

RECOMMENDATION

(1) Accept staff's environmental determination and findings that (a) anticipated environmental effects of the project have been evaluated by the Lake Merritt Station Area Plan Final Environmental Impact Report (Final EIR) (certified November 2014) and, for the reasons discussed in this report, including Attachment B, no further environmental review is required; and (b) that the project is also exempt from CEQA and further CEQA review as discussed in this report.

(2) Approve the project based upon the attached findings and subject to the attached conditions of approval

Prepared by:

NEIL GRAY
Planner III

Reviewed by:

SCOTT MILLER
Zoning Manager
Bureau of Planning

Reviewed by:

DARIN RANELLETTI
Deputy Director
Bureau of Planning

Approved for forwarding to the
City Planning Commission:

RACHEL FLYNN
Director
Department of Planning and Building

ATTACHMENTS:

A. Project Plans
B. CEQA Analysis

FINDINGS FOR APPROVAL

This proposal meets the required findings under Sections 17.136.050 -- General Design Review Criteria, 17.134.050 -- General Use Permit Criteria, 17.148.050 – General Variance Criteria, Table 17.101G.04, Note 10 -- Use Permit Criteria for Exceptions to Height/Bulk/Intensity Area Standards in the LM Zones. Required findings are shown in **bold** type; explanations as to why these findings can be made are in *italic*.

Section 17.136.050 Regular design review criteria.

A. For Residential Facilities.

1. **That the proposed design will create a building or set of buildings that are well related to the surrounding area in their setting, scale, bulk, height, materials, and textures.**

   There are several multi-unit apartment buildings ranging from 2 to 23 stories in the neighborhood. These buildings have a variety of architectural styles: The 1200 Lakeshore Apartments, a 23-story residential building on the shore of Lake Merritt, has a post-modern style; the 18-story "Merritt on 3rd" residential building located southeast of the project site has a contemporary style; and the five-story Lakemount Apartment Building across 2nd Avenue from the project site has a traditional architectural style.

   The residential style of the proposed materials and openings, such as hardie and concrete panels, balconies, bay windows, and recessed windows, will relate to the other residential buildings in the neighborhood. The E. 12th Street elevation of the southern building is articulated into five bays containing windows and balconies that form a scale that to other buildings in the neighborhood. The proposed setback of the northern and southern building from the two story podium level will also relate to smaller scale buildings in the neighborhood. The ground floor columns will relate the historic civic buildings on Lake Merritt Boulevard and 14th Street, such as the Kaiser Convention Center, Alameda County Courthouse, and the Main Branch of the Oakland Public Library.

2. **That the proposed design will protect, preserve, or enhance desirable neighborhood characteristics;**

   The proposal will protect views of the Lake, which is the neighborhood's most valuable natural asset. Further, improvement of the detention basin will improve the water quality of the lake and provide an attractive landscaped area. The ground floor central commons will build upon existing cultural amenities in the nearby high school, Oakland Museum of California, and the Main Branch of the Oakland Public Library. A ground floor café will provide an important gathering place for the neighborhood. Finally, the development will provide residential units in a predominantly residential neighborhood.

2. **That the proposed design will be sensitive to the topography and landscape.**

There is no significant topography or landscape on the project site. The native plantings and large native trees in the passive open space area have been carefully chosen to be compatible with the lakeside environment and the existing bioswale.

3. **That, if situated on a hill, the design and massing of the proposed building relates to the grade of the hill;**

   There is a small upslope along East 12th Street that creates a separation between the grade and ground floor commercial space at the corner of East 12th Street and Lake Merritt Blvd. The design of the building takes advantage of this by creating an outdoor seating area with a view of the Channel and an attractive entrance feature for the north commons.

4. **That the proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan, or development control map which have been adopted by the Planning Commission or City Council.**

   The project conforms to the Lake Merritt Station Area Plan and the General Plan as described in the Lake Merritt Station Area Plan Analysis and the General Plan Analysis sections of this report.

B. For Nonresidential Facilities and Signs.

1. **That the proposal will help achieve or maintain a group of facilities which are well related to one another and which, when taken together, will result in a well-composed design, with consideration given to site, landscape, bulk, height, arrangement, texture, materials, colors, and appurtenances; the relation of these factors to other facilities in the vicinity; and the relation of the proposal to the total setting as seen from key points in the surrounding area. Only elements of design which have some significant relationship to outside appearance shall be considered, except as otherwise provided in Section 17.136.060;**

   A double height ceiling on the ground floor will create a successful café and cultural space environment. Significant window transparency, awnings, and transom windows will contribute to a visually pleasing ground floor design. The café will be conveniently situated near pedestrian activity.

   The E. 12th Street and northern commercial façades are unified through double story columns and large window systems. The ground floor columns also relate the historic civic buildings on Lake Merritt Boulevard and 14th Street, such as the Kaiser Convention Center, Alameda County Courthouse, and the Main Branch of the Oakland Public Library.

2. **That the proposed design will be of a quality and character which harmonizes with, and serves to protect the value of, private and public investments in the area;**

   The proposal will project the value of investments in the area by providing an attractive café and cultural space to the neighborhood.

3. **That the proposed design conforms in all significant respects with the Oakland General Plan and with any applicable design review guidelines or criteria, district plan, or development control map which have been adopted by the Planning Commission or City Council.**

   The project conforms to the Lake Merritt Station Area Plan and the General Plan as described in the Lake Merritt Station Area Plan Analysis and the General Plan Analysis sections of this report

17.134.050 General Use Permit criteria.

A. That the location, size, design, and operating characteristics of the proposed development will be compatible with and will not adversely affect the livability or appropriate development of abutting properties and the surrounding neighborhood, with consideration to be given to harmony in scale, bulk, coverage, and density; to the availability of civic facilities and utilities; to harmful effect, if any, upon desirable neighborhood character; to the generation of traffic and the capacity of surrounding streets; and to any other relevant impact of the development;

The project fulfills this finding for the following reasons:

- *The relatively small tower footprint will minimize view and solar impacts on the lake from surrounding properties.*
- *The southern building is articulated into bays to reduce the scale of the building. The podium and tower design of the proposal further reduces the perceived bulk of the development.*
- *As conditioned, the proposal will fund stormwater, sidewalk, and other improvements surrounding the development.*
- *A CEQA analysis contained in Attachment B demonstrates that the project, as conditioned, will not have significant impacts on the surrounding streets.*
- *The reduction in the size of the loading berths will not adversely affect the neighborhood because they will be of sufficient size to park a medium sized moving van.*
- *Improvement of the detention basin will improve the water quality of the Lake and provide an attractive open space area.*

B. That the location, design, and site planning of the proposed development will provide a convenient and functional living, working, shopping, or civic environment, and will be as attractive as the nature of the use and its location and setting warrant;

The open space and commons area on the podium will be conveniently accessed by residents and the development will be located near Lake Merritt recreational facilities. Bike and automobile parking will be conveniently located underground and visually buffered behind active spaces. Elevators to the dwelling units will also be conveniently accessed through the pedestrian entrance and two lobbies. The loading dock will be easily accessed adjacent to the entrance of the building

C. That the proposed development will enhance the successful operation of the surrounding area in its basic community functions, or will provide an essential service to the community or region;

The proposal will contribute high quality market rate and affordable residential units to a successful residential neighborhood. The proposed café and cultural space will be valuable amenities to the neighborhood.

D. That the proposal conforms to all applicable regular design review criteria set forth in the regular design review procedure at Section 17.136.050

See Design Review Findings, above.

E. That the proposal conforms in all significant respects with the Oakland General Plan and with any other applicable guidelines or criteria, district plan or development control map which has been adopted by the Planning Commission or City Council.

The project conforms to the Lake Merritt Station Area Plan and the General Plan as described in the Lake Merritt Station Area Plan Analysis and the General Plan Analysis sections of this report.

17.148.050 Variance Findings required.

A. That strict compliance with the specified regulation would result in practical difficulty or unnecessary hardship inconsistent with the purposes of the zoning regulations, due to unique physical or topographic circumstances or conditions of design; or, as an alternative in the case of a minor variance, that such strict compliance would preclude an effective design solution improving livability, operational efficiency, or appearance.

A variance is required because the proposed depth of the café space bay is approximately 28 feet and the cultural space would be 25 feet, while 50 feet is required. Approval of the variance would meet this finding because:

- *28 feet is sufficient depth for a café, which is the intended use for the commercial space;*
- *Space is on the site is confined because of the location of the required parking behind the central commons and the relatively small, wedge shaped lot.*
- *As designed, the central commons would seat approximately 230 people, which is large enough to accommodate the scale of performances and events envisioned by EBALDC, which will be managing the space and the affordable housing units. For performances, the seating would be on either side of a stage that would be located in the middle of the room.*

B. That strict compliance with the regulations would deprive the applicant of privileges enjoyed by owners of similarly zoned property; or, as an alternative in the case of a minor variance, that such strict compliance would preclude an effective design solution fulfilling the basic intent of the applicable regulation.

The basic intent of the applicable regulation is to create a viable and flexible storefront space. As discussed, the proposed depths are sufficient to accommodate the proposed uses and deeper spaces would preclude an effective parking design.

C. That the variance, if granted, will not adversely affect the character, livability, or appropriate development of abutting properties or the surrounding area, and will not be detrimental to the public welfare or contrary to adopted plans or development policy.

Increasing the storefront depth will adversely affect the livability of the area by reducing the number of parking spaces in the development.

D. That the variance will not constitute a grant of special privilege inconsistent with limitations imposed on similarly zoned properties or inconsistent with the purposes of the zoning regulations.

Many commercial facilities in high density residential zones have been constructed with a depth of 28 feet or less.

E. That the elements of the proposal requiring the variance (e.g., elements such as buildings, walls, fences, driveways, garages and carports, etc.) conform with the regular design review criteria set forth in the design review procedure at Section 17.136.050.

The element requiring the variance will not affect the exterior of the building and, therefore, conforms to the Regular Design Review Criteria.

F. That the proposal conforms in all significant respects with the Oakland General Plan and with any other applicable guidelines or criteria, district plan, or development control map which have been adopted by the Planning Commission or City Council.

The project conforms to the Lake Merritt Station Area Plan and the General Plan as described in the Lake Merritt Station Area Plan Analysis and the General Plan Analysis sections of this report.

Table 17.101G.04 -- Note 10: Findings required for the granting of a Conditional Use Permit for Exceptions to Height/Bulk/Intensity Area Standards.

A. The proposal is consistent with the intent and desired land use character identified in the Lake Merritt Station Area Plan and its associated policies;

As described in the Lake Merritt Specific Plan Analysis section, above, a residential tower with a ground floor commercial use is consistent with policies in the plan and its accompanying Design Guidelines.

B. The proposal will promote implementation of the Lake Merritt Station Area Plan;

New construction that is consistent with the policies identified in (a) directly implements the intent of the Plan.

C. The proposal is consistent with the desired visual character described in the Lake Merritt Station Area Plan and Lake Merritt Station Area Design Guidelines, with consideration given to the existing character of the site and surrounding area.

As described in the Lake Merritt Specific Plan Analysis section, above, a residential development with a ground floor commercial use is consistent with the Plan's Design Guidelines. The building is not in a historic district and the design context of the surrounding area is a mix of varying styles and building heights.

CONDITIONS OF APPROVAL

1. **Approved Use**
   Ongoing
   a) The project shall be constructed and operated in accordance with the authorized use as described in the application materials, staff report, and the plans dated 7/6/16 and submitted on 7/6/16, and as amended by the following conditions. Any additional uses or facilities other than those approved with this permit, as described in the project description and the approved plans, will require a separate application and approval. Any deviation from the approved drawings, Conditions of Approval or use shall require prior written approval from the Director of City Planning or designee.
   b) This action by the City Planning Commission ("this Approval") includes the approvals set forth below. This Approval includes: Approval of Conditional Use Permits, Variance, and Design Review for the construction of a Construction of two buildings over a two-story podium and off-site improvements to an existing stormwater treatment basin/park.

2. **Effective Date, Expiration, Extensions and Extinguishment**
   Ongoing
   Unless a different termination date is prescribed, this Approval shall expire two years from the approval date, unless within such period all necessary permits for construction or alteration have been issued, or the authorized activities have commenced in the case of a permit not involving construction or alteration. Upon written request and payment of appropriate fees submitted no later than the expiration date of this permit, the Director of City Planning or designee may grant a one-year extension of this date, with additional extensions subject to approval by the approving body. Expiration of any necessary building permit for this project may invalidate this Approval if the said extension period has also expired.

3. **Scope of This Approval; Major and Minor Changes**
   Ongoing
   The project is approved pursuant to the Planning Code only. Minor changes to approved plans may be approved administratively by the Director of City Planning or designee. Major changes to the approved plans shall be reviewed by the Director of City Planning or designee to determine whether such changes require submittal and approval of a revision to the approved project by the approving body or a new, completely independent permit.

4. **Conformance with other Requirements**
   Prior to issuance of a demolition, grading, P-job, or other construction related permit
   a) The project applicant shall comply with all other applicable federal, state, regional and/or local laws/codes, requirements, regulations, and guidelines, including but not limited to those imposed by the City's Building Services Division, the City's Fire Marshal, and the City's Public Works Agency. Compliance with other applicable requirements may require changes to the approved use and/or plans. These changes shall be processed in accordance with the procedures contained in Condition of Approval 3.

a) The applicant shall submit approved building plans for project-specific needs related to fire protection to the Fire Services Division for review and approval, including, but not limited to automatic extinguishing systems, water supply improvements and hydrants, fire department access, and vegetation management for preventing fires and soil erosion.

5. **Conformance to Approved Plans; Modification of Conditions or Revocation**
Ongoing

a) Site shall be kept in a blight/nuisance-free condition. Any existing blight or nuisance shall be abated within 60-90 days of approval, unless an earlier date is specified elsewhere.

b) The City of Oakland reserves the right at any time during construction to require certification by a licensed professional that the as-built project conforms to all applicable zoning requirements, including but not limited to approved maximum heights and minimum setbacks. Failure to construct the project in accordance with approved plans may result in remedial reconstruction, permit revocation, permit modification, stop work, permit suspension or other corrective action.

c) Violation of any term, Conditions or project description relating to the Approvals is unlawful, prohibited, and a violation of the Oakland Municipal Code. The City of Oakland reserves the right to initiate civil and/or criminal enforcement and/or abatement proceedings, or after notice and public hearing, to revoke the Approvals or alter these Conditions if it is found that there is violation of any of the Conditions or the provisions of the Planning Code or Municipal Code, or the project operates as or causes a public nuisance. This provision is not intended to, nor does it, limit in any manner whatsoever the ability of the City to take appropriate enforcement actions. The project applicant shall be responsible for paying fees in accordance with the City's Master Fee Schedule for inspections conducted by the City or a City-designated third-party to investigate alleged violations of the Conditions of Approval.

6. **Signed Copy of the Conditions**
With submittal of a demolition, grading, and building permit

A copy of the approval letter and Conditions shall be signed by the property owner, notarized, and submitted with each set of permit plans to the appropriate City agency for this project.

7. **Indemnification**
Ongoing

a) To the maximum extent permitted by law, the applicant shall defend (with counsel acceptable to the City), indemnify, and hold harmless the City of Oakland, the Oakland City Council, the City of Oakland Redevelopment Agency, the Oakland City Planning Commission and its respective agents, officers, and employees (hereafter collectively called City) from any liability, damages, claim, judgment, loss (direct or indirect)action, causes of action, or proceeding (including legal costs, attorneys' fees, expert witness or consultant fees, City Attorney or staff time, expenses or costs) (collectively called "Action") against the City to attack, set aside, void or annul, (1) an approval by the City relating to a development-related application or subdivision or (2) implementation of an approved development-related project. The City may elect, in its sole discretion, to

participate in the defense of said Action and the applicant shall reimburse the City for its reasonable legal costs and attorneys' fees.

b) Within ten (10) calendar days of the filing of any Action as specified in subsection A above, the applicant shall execute a Letter Agreement with the City, acceptable to the Office of the City Attorney, which memorializes the above obligations. These obligations and the Letter of Agreement shall survive termination, extinguishment or invalidation of the approval. Failure to timely execute the Letter Agreement does not relieve the applicant of any of the obligations contained in this condition or other requirements or conditions of approval that may be imposed by the City.

8. **Compliance with Conditions of Approval**
Ongoing
The project applicant shall be responsible for compliance with the recommendations in any submitted and approved technical report and all the Conditions of Approval set forth below at its sole cost and expense, and subject to review and approval of the City of Oakland.

9. **Severability**
Ongoing
Approval of the project would not have been granted but for the applicability and validity of each and every one of the specified conditions, and if one or more of such conditions is found to be invalid by a court of competent jurisdiction this Approval would not have been granted without requiring other valid conditions consistent with achieving the same purpose and intent of such Approval.

10. **Job Site Plans**
Ongoing throughout demolition, grading, and/or construction
At least one (1) copy of the stamped approved plans, along with the Approval Letter and Conditions of Approval, shall be available for review at the job site at all times.

11. **Special Inspector/Inspections, Independent Technical Review, Project Coordination and Management**
Prior to issuance of a demolition, grading, and/or construction permit
The project applicant may be required to pay for on-call third-party special inspector(s)/inspections as needed during the times of extensive or specialized plancheck review or construction. The project applicant may also be required to cover the full costs of independent technical review and other types of peer review, monitoring and inspection, including without limitation, third party plan check fees, including inspections of violations of Conditions of Approval. The project applicant shall establish a deposit with the Building Services Division, as directed by the Building Official, Director of City Planning or designee.

12. **Required Landscape Plan for New Construction and Certain Additions to Residential Facilities**
Prior to issuance of a building permit
Submittal and approval of a landscape plan for the entire site is required for the establishment of a new residential unit (excluding secondary units of five hundred (500) square feet or less),

and for additions to Residential Facilities of over five hundred (500) square feet. The landscape plan and the plant materials installed pursuant to the approved plan shall conform to all provisions of Chapter 17.124 of the Oakland Planning Code, including the following:

a) Landscape plan shall include a detailed planting schedule showing the proposed location, sizes, quantities, and specific common botanical names of plant species.

b) Landscape plans for projects involving grading, rear walls on downslope lots requiring conformity with the screening requirements in Section 17.124.040, or vegetation management prescriptions in the S-11 zone, shall show proposed landscape treatments for all graded areas, rear wall treatments, and vegetation management prescriptions.

c) Landscape plan shall incorporate pest-resistant and drought-tolerant landscaping practices. Within the portions of Oakland northeast of the line formed by State Highway 13 and continued southerly by Interstate 580, south of its intersection with State Highway 13, all plant materials on submitted landscape plans shall be fire-resistant The City Planning and Zoning Division shall maintain lists of plant materials and landscaping practices considered pest-resistant, fire-resistant, and drought-tolerant.

d) All landscape plans shall show proposed methods of irrigation. The methods shall ensure adequate irrigation of all plant materials for at least one growing season.

13. Landscape Requirements for Street Frontages.

Prior to issuance of a final inspection of the building permit

a) All areas between a primary Residential Facility and abutting street lines shall be fully landscaped, plus any unpaved areas of abutting rights-of-way of improved streets or alleys, provided, however, on streets without sidewalks, an unplanted strip of land five (5) feet in width shall be provided within the right-of-way along the edge of the pavement or face of curb, whichever is applicable. Existing plant materials may be incorporated into the proposed landscaping if approved by the Director of City Planning.

b) In addition to the general landscaping requirements set forth in Chapter 17.124, a minimum of one (1) fifteen-gallon tree, or substantially equivalent landscaping consistent with city policy and as approved by the Director of City Planning, shall be provided for every twenty-five (25) feet of street frontage. On streets with sidewalks where the distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet, the trees to be provided shall include street trees to the satisfaction of the Director of Parks and Recreation.

14. Assurance of Landscaping Completion.

Prior to issuance of a final inspection of the building permit

The trees, shrubs and landscape materials required by the conditions of approval attached to this project shall be planted before the certificate of occupancy will be issued; or a bond, cash, deposit, or letter of credit, acceptable to the City, shall be provided for the planting of the required landscaping. The amount of such bond, cash, deposit, or letter of credit shall equal the greater of two thousand five hundred dollars ($2,500.00) or the estimated cost of the required landscaping, based on a licensed contractor's bid.

15. Landscape Requirements for Street Frontages.

Prior to issuance of a final inspection of the building permit
On streets with sidewalks where the distance from the face of the curb to the outer edge of the sidewalk is at least six and one-half (6 ½) feet and does not interfere with access requirements, a minimum of one (1) twenty-four (24) inch box tree shall be provided for every twenty-five (25) feet of street frontage, unless a smaller size is recommended by the City arborist. The trees to be provided shall include species acceptable to the Tree Services Division.

16. Landscape Maintenance.
Ongoing
All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. All required irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced.

17. Underground Utilities
Prior to issuance of a building permit
The project applicant shall submit plans for review and approval by the Building Services Division and the Public Works Agency, and other relevant agencies as appropriate, that show all new electric and telephone facilities; fire alarm conduits; street light wiring; and other wiring, conduits, and similar facilities placed underground. The new facilities shall be placed underground along the project applicant's street frontage and from the project applicant's structures to the point of service. The plans shall show all electric, telephone, water service, fire water service, cable, and fire alarm facilities installed in accordance with standard specifications of the serving utilities.

18. Improvements in the Public Right-of-Way
Approved prior to the issuance of a P-job or building permit
a) The project applicant shall submit Public Improvement Plans to Building Services Division for adjacent public rights-of-way (ROW) showing all proposed improvements and compliance with the conditions and City requirements including but not limited to curbs, gutters, sewer laterals, storm drains, street trees, paving details, locations of transformers and other above ground utility structures, the design specifications and locations of facilities required by the East Bay Municipal Utility District (EBMUD), street lighting, on-street parking and accessibility improvements compliant with applicable standards and any other improvements or requirements for the project as provided for in this Approval. Encroachment permits shall be obtained as necessary for any applicable improvements- located within the public ROW.
b) Review and confirmation of the street trees by the City's Tree Services Division is required as part of this condition.
c) The Planning and Zoning Division and the Public Works Agency will review and approve designs and specifications for the improvements. Improvements shall be completed prior to the issuance of the final building permit.

d) The Fire Services Division will review and approve fire crew and apparatus access, water supply availability and distribution to current codes and standards.

19. Improvements in the Public Right-of Way (Specific)

Approved prior to the issuance of a grading or building permit

Final building and public improvement plans submitted to the Building Services Division may include the following components:

a) Remove and replace any existing driveway that will not be used for access to the property with new concrete sidewalk, curb and gutter.

b) Reconstruct drainage facility to current City standards.

c) Provide separation between sanitary sewer and water lines to comply with current City of Oakland and Alameda Health Department standards.

d) Construct wheelchair ramps that comply with Americans with Disability Act requirements and current City Standards.

e) Remove and replace deficient concrete sidewalk, curb and gutter within property frontage.

f) Provide adequate fire department access and water supply, including, but not limited to currently adopted fire codes and standards.

20. Payment for Public Improvements

Prior to issuance of a final inspection of the building permit.

The project applicant shall pay for and install public improvements made necessary by the project including damage caused by construction activity.

21. Compliance Matrix

Prior to issuance of a demolition, grading, or building permit

The project applicant shall submit to the Planning and Zoning Division and the Building Services Division a Conditions compliance matrix that lists each condition of approval, the City agency or division responsible for review, and how/when the project applicant has met or intends to meet the conditions. The applicant will sign the Conditions of Approval attached to the approval letter and submit that with the compliance matrix for review and approval. The compliance matrix shall be organized per step in the plancheck/construction process unless another format is acceptable to the Planning and Zoning Division and the Building Services Division. The project applicant shall update the compliance matrix and provide it with each item submittal.

22. Construction Management Plan

Prior to issuance of a demolition, grading, or building permit

The project applicant shall submit to the Planning and Zoning Division and the Building Services Division for review and approval a construction management plan that identifies the conditions of approval related to construction impacts of the project and explains how the project applicant will comply with these construction-related conditions of approval.

23. Parking and Transportation Demand Management

Prior to issuance of a final inspection of the building permit.
The applicant shall submit for review and approval by the Planning and Zoning Division a Transportation Demand Management (TDM) plan containing strategies to reduce on-site parking demand and single occupancy vehicle travel. The applicant shall implement the approved TDM plan. The TDM shall include strategies to increase bicycle, pedestrian, transit, and carpools/vanpool use. All four modes of travel shall be considered. Strategies to consider include the following:

a) Inclusion of additional bicycle parking, shower, and locker facilities that exceed the requirement
b) Construction of bike lanes per the Bicycle Master Plan; Priority Bikeway Projects
c) Signage and striping onsite to encourage bike safety
d) Installation of safety elements per the Pedestrian Master Plan (such as cross walk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient crossing at arterials
e) Installation of amenities such as lighting, street trees, trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan
f) Direct transit sales or subsidized transit passes
g) Guaranteed ride home program
h) Pre-tax commuter benefits (checks)
i) On-site car-sharing program (such as City Car Share, Zip Car, etc.)
j) On-site carpooling program
k) Distribution of information concerning alternative transportation options
l) Parking spaces sold/leased separately
m) Parking management strategies; including attendant/valet parking and shared parking spaces

24. <u>Construction-Related Air Pollution Controls (Dust and Equipment Emissions)</u>
Ongoing throughout demolition, grading, and/or construction
During construction, the project applicant shall require the construction contractor to implement all of the following applicable measures recommended by the Bay Area Air Quality Management District (BAAQMD):

a) Water all exposed surfaces of active construction areas at least twice daily (using reclaimed water if possible). Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever possible.
b) Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer).
c) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

d) Pave all roadways, driveways, sidewalks, etc. as soon as feasible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

e) Enclose, cover, water twice daily or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.).

f) Limit vehicle speeds on unpaved roads to 15 miles per hour.

g) Idling times shall be minimized either by shutting equipment off when not is use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations. Clear signage to this effect shall be provided for construction workers at all access points.

h) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.

i) Post a publicly visible sign that includes the contractor's name and telephone number to contact regarding dust complaints. When contacted, the contractor shall respond and take corrective action within 48 hours. The telephone numbers of contacts at the City and the BAAQMD shall also be visible. This information may be posted on other required on-site signage.

j) All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe.

k) All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph.

l) Install sandbags or other erosion control measures to prevent silt runoff to public roadways.

m) Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more).

n) Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress.

o) Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind blown dust. Wind breaks must have a maximum 50 percent air porosity.

p) Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.

q) The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.

r) All trucks and equipment, including tires, shall be washed off prior to leaving the site.

s) Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel.

t) Minimize the idling time of diesel-powered construction equipment to two minutes.

u) The project applicant shall develop a plan demonstrating that the off-road equipment (more than 50 horsepower) to be used in the construction project (i.e., owned, leased, and subcontractor vehicles) would achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate matter (PM) reduction compared to the most recent California Air Resources Board (CARB) fleet average. Acceptable options for reducing emissions include the use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, add-on devices such as particulate filters, and/or other options as they become available.

v) Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings).

w) All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM.

x) Off-road heavy diesel engines shall meet the CARB's most recent certification standard.

25. <u>Days/Hours of Construction Operation</u>

Ongoing throughout demolition, grading, and/or construction

The project applicant shall require construction contractors to limit standard construction activities as follows:

a) Construction activities are limited to between 7:00 AM and 7:00 PM Monday through Friday, except that pile driving and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. Monday through Friday.

b) Any construction activity proposed to occur outside of the standard hours of 7:00 am to 7:00 pm Monday through Friday for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened and such construction activities shall only be allowed with the prior written authorization of the Building Services Division.

c) Construction activity shall not occur on Saturdays, with the following possible exceptions:

   i. Prior to the building being enclosed, requests for Saturday construction for special activities (such as concrete pouring which may require more continuous amounts of time), shall be evaluated on a case by case basis, with criteria including the proximity of residential uses and a consideration of resident's preferences for whether the activity is acceptable if the overall duration of construction is shortened. Such construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division.

   ii. After the building is enclosed, requests for Saturday construction activities shall only be allowed on Saturdays with the prior written authorization of the Building Services Division, and only then within the interior of the building with the doors and windows closed.

d) No extreme noise generating activities (greater than 90 dBA) shall be allowed on Saturdays, with no exceptions.

e) No construction activity shall take place on Sundays or Federal holidays.

f) Construction activities include but are not limited to: truck idling, moving equipment (including trucks, elevators, etc) or materials, deliveries, and construction meetings held on-site in a non-enclosed area.

g) Applicant shall use temporary power poles instead of generators where feasible.

26. Noise Control

Ongoing throughout demolition, grading, and/or construction

To reduce noise impacts due to construction, the project applicant shall require construction contractors to implement a site-specific noise reduction program, subject to the Planning and Zoning Division and the Building Services Division review and approval, which includes the following measures:

a) Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible).

b) Except as provided herein, Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures.

c) Stationary noise sources shall be located as far from adjacent receptors as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction.

d) The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented.

27. Noise Complaint Procedures

Ongoing throughout demolition, grading, and/or construction

Prior to the issuance of each building permit, along with the submission of construction documents, the project applicant shall submit to the Building Services Division a list of measures to respond to and track complaints pertaining to construction noise. These measures shall include:

a) A procedure and phone numbers for notifying the Building Services Division staff and Oakland Police Department; (during regular construction hours and off-hours);

b) A sign posted on-site pertaining with permitted construction days and hours and complaint procedures and who to notify in the event of a problem. The sign shall also

include a listing of both the City and construction contractor's telephone numbers (during regular construction hours and off-hours);

c) The designation of an on-site construction complaint and enforcement manager for the project;

d) Notification of neighbors and occupants within 300 feet of the project construction area at least 30 days in advance of extreme noise generating activities about the estimated duration of the activity; and

e) A preconstruction meeting shall be held with the job inspectors and the general contractor/on-site project manager to confirm that noise measures and practices (including construction hours, neighborhood notification, posted signs, etc.) are completed.

28. Interior Noise

Prior to issuance of a building permit and Certificate of Occupancy

If necessary to comply with the interior noise requirements of the City of Oakland's General Plan Noise Element and achieve an acceptable interior noise level, noise reduction in the form of sound-rated assemblies (i.e., windows, exterior doors, and walls), and/or other appropriate features/measures, shall be incorporated into project building design, based upon recommendations of a qualified acoustical engineer and submitted to the Building Services Division for review and approval prior to issuance of building permit. Final recommendations for sound-rated assemblies, and/or other appropriate features/measures, will depend on the specific building designs and layout of buildings on the site and shall be determined during the design phases. Written confirmation by the acoustical consultant, HVAC or HERS specialist, shall be submitted for City review and approval, prior to Certificate of Occupancy (or equivalent) that:

a) Quality control was exercised during construction to ensure all air-gaps and penetrations of the building shell are controlled and sealed; and

b) Demonstrates compliance with interior noise standards based upon performance testing of a sample unit.

c) Inclusion of a Statement of Disclosure Notice in the CC&R's on the lease or title to all new tenants or owners of the units acknowledging the noise generating activity and the single event noise occurrences. Potential features/measures to reduce interior noise could include, but are not limited to, the following:

   i. Installation of an alternative form of ventilation in all units identified in the acoustical analysis as not being able to meet the interior noise requirements due to adjacency to a noise generating activity, filtration of ambient make-up air in each unit and analysis of ventilation noise if ventilation is included in the recommendations by the acoustical analysis.

   ii. Prohibition of Z-duct construction.

29. Operational Noise-General

Ongoing

Noise levels from the activity, property, or any mechanical equipment on site shall comply with the performance standards of Section 17.120 of the Oakland Planning Code and Section

8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the Planning and Zoning Division and Building Services.

30. Construction Traffic and Parking

Prior to the issuance of a demolition, grading or building permit

The project applicant and construction contractor shall meet with appropriate City of Oakland agencies to determine traffic management strategies to reduce, to the maximum extent feasible, traffic congestion and the effects of parking demand by construction workers during construction of this project and other nearby projects that could be simultaneously under construction. The project applicant shall develop a construction management plan for review and approval by the Planning and Zoning Division, the Building Services Division, and the Transportation Services Division. The plan shall include at least the following items and requirements:

a) A set of comprehensive traffic control measures, including scheduling of major truck trips and deliveries to avoid peak traffic hours, detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes.

b) Notification procedures for adjacent property owners and public safety personnel regarding when major deliveries, detours, and lane closures will occur.

c) Location of construction staging areas for materials, equipment, and vehicles at an approved location.

d) A process for responding to, and tracking, complaints pertaining to construction activity, including identification of an onsite complaint manager. The manager shall determine the cause of the complaints and shall take prompt action to correct the problem. Planning and Zoning shall be informed who the Manager is prior to the issuance of the first permit issued by Building Services.

e) Provision for accommodation of pedestrian flow.

f) Provision for parking management and spaces for all construction workers to ensure that construction workers do not park in on-street spaces.

g) Any damage to the street caused by heavy equipment, or as a result of this construction, shall be repaired, at the applicant's expense, within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to issuance of a final inspection of the building permit. All damage that is a threat to public health or safety shall be repaired immediately. The street shall be restored to its condition prior to the new construction as established by the City Building Inspector and/or photo documentation, at the applicant's expense, before the issuance of a Certificate of Occupancy.

h) Any heavy equipment brought to the construction site shall be transported by truck, where feasible.

i) No materials or equipment shall be stored on the traveled roadway at any time.

j) Prior to construction, a portable toilet facility and a debris box shall be installed on the site, and properly maintained through project completion.

k) All equipment shall be equipped with mufflers.

l) Prior to the end of each work day during construction, the contractor or contractors shall pick up and properly dispose of all litter resulting from or related to the project, whether located on the property, within the public rights-of-way, or properties of adjacent or nearby neighbors.

31. Hazards Best Management Practices

Prior to commencement of demolition, grading, or construction

The project applicant and construction contractor shall ensure that construction of Best Management Practices (BMPs) are implemented as part of construction to minimize the potential negative effects to groundwater and soils. These shall include the following:

a) Follow manufacture's recommendations on use, storage, and disposal of chemical products used in construction;

b) Avoid overtopping construction equipment fuel gas tanks;

c) During routine maintenance of construction equipment, properly contain and remove grease and oils;

d) Properly dispose of discarded containers of fuels and other chemicals.

e) Ensure that construction would not have a significant impact on the environment or pose a substantial health risk to construction workers and the occupants of the proposed development. Soil sampling and chemical analyses of samples shall be performed to determine the extent of potential contamination beneath all UST's, elevator shafts, clarifiers, and subsurface hydraulic lifts when on-site demolition, or construction activities would potentially affect a particular development or building.

f) If soil, groundwater or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notification of regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate.

32. Waste Reduction and Recycling

The project applicant will submit a Construction & Demolition Waste Reduction and Recycling Plan (WRRP) and an Operational Diversion Plan (ODP) for review and approval by the Public Works Agency.

Prior to issuance of demolition, grading, or building permit

Chapter 15.34 of the Oakland Municipal Code outlines requirements for reducing waste and optimizing construction and demolition (C&D) recycling. Affected projects include all new construction, renovations/alterations/modifications with construction values of $50,000 or

more (except R-3), and all demolition (including soft demo).The WRRP must specify the methods by which the development will divert C&D debris waste generated by the proposed project from landfill disposal in accordance with current City requirements. Current standards, FAQs, and forms are available at www.oaklandpw.com/Page39.aspx or in the Green Building Resource Center. After approval of the plan, the project applicant shall implement the plan.

Ongoing

The ODP will identify how the project complies with the Recycling Space Allocation Ordinance, (Chapter 17.118 of the Oakland Municipal Code), including capacity calculations, and specify the methods by which the development will meet the current diversion of solid waste generated by operation of the proposed project from landfill disposal in accordance with current City requirements. The proposed program shall be in implemented and maintained for the duration of the proposed activity or facility. Changes to the plan may be re-submitted to the Environmental Services Division of the Public Works Agency for review and approval. Any incentive programs shall remain fully operational as long as residents and businesses exist at the project site.

33. Pile Driving and Other Extreme Noise Generators

Ongoing throughout demolition, grading, and/or construction

To further reduce potential pier drilling, pile driving and/or other extreme noise generating construction impacts greater than 90dBA, a set of site-specific noise attenuation measures shall be completed under the supervision of a qualified acoustical consultant. Prior to commencing construction, a plan for such measures shall be submitted for review and approval by the Planning and Zoning Division and the Building Services Division to ensure that maximum feasible noise attenuation will be achieved. This plan shall be based on the final design of the project. A third-party peer review, paid for by the project applicant, may be required to assist the City in evaluating the feasibility and effectiveness of the noise reduction plan submitted by the project applicant. The criterion for approving the plan shall be a determination that maximum feasible noise attenuation will be achieved. A special inspection deposit is required to ensure compliance with the noise reduction plan. The amount of the deposit shall be determined by the Building Official, and the deposit shall be submitted by the project applicant concurrent with submittal of the noise reduction plan. The noise reduction plan shall include, but not be limited to, an evaluation of implementing the following measures. These attenuation measures shall include as many of the following control strategies as applicable to the site and construction activity:

a) Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings;

b) Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions;

c) Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site;

d) Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example

and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and

e) Monitor the effectiveness of noise attenuation measures by taking noise measurements.

34. Lighting Plan

Prior to the issuance of an electrical or building permit

The proposed lighting fixtures shall be adequately shielded to a point below the light bulb and reflector and that prevent unnecessary glare onto adjacent properties. Plans shall be submitted to the Planning and Zoning Division and the Electrical Services Division of the Public Works Agency for review and approval. All lighting shall be architecturally integrated into the site.

35. Archaeological Resources

Ongoing throughout demolition, grading, and/or construction

a) Pursuant to CEQA Guidelines section 15064.5 (f), "provisions for historical or unique archaeological resources accidentally discovered during construction" should be instituted. Therefore, in the event that any prehistoric or historic subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant and/or lead agency shall consult with a qualified archaeologist or paleontologist to assess the significance of the find. If any find is determined to be significant, representatives of the project proponent and/or lead agency and the qualified archaeologist would meet to determine the appropriate avoidance measures or other appropriate measure, with the ultimate determination to be made by the City of Oakland. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and a report prepared by the qualified archaeologist according to current professional standards.

b) In considering any suggested measure proposed by the consulting archaeologist in order to mitigate impacts to historical resources or unique archaeological resources, the project applicant shall determine whether avoidance is necessary and feasible in light of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery) shall be instituted. Work may proceed on other parts of the project site while measure for historical resources or unique archaeological resources is carried out.

c) Should an archaeological artifact or feature be discovered on-site during project construction, all activities within a 50-foot radius of the find would be halted until the findings can be fully investigated by a qualified archaeologist to evaluate the find and assess the significance of the find according to the CEQA definition of a historical or unique archaeological resource. If the deposit is determined to be significant, the project applicant and the qualified archaeologist shall meet to determine the appropriate avoidance measures or other appropriate measure, subject to approval by the City of Oakland, which shall assure implementation of appropriate measure measures recommended by the archaeologist. Should archaeologically-significant materials be recovered, the qualified archaeologist shall recommend appropriate analysis and

treatment, and shall prepare a report on the findings for submittal to the Northwest Information Center.

36. Human Remains

Ongoing throughout demolition, grading, and/or construction

In the event that human skeletal remains are uncovered at the project site during construction or ground-breaking activities, all work shall immediately halt and the Alameda County Coroner shall be contacted to evaluate the remains, and following the procedures and protocols pursuant to Section 15064.5 (e)(1) of the CEQA Guidelines. If the County Coroner determines that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of Section 7050.5 of the Health and Safety Code, and all excavation and site preparation activities shall cease within a 50-foot radius of the find until appropriate arrangements are made. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance and avoidance measures (if applicable) shall be completed expeditiously.

37. Paleontological Resources

Ongoing throughout demolition, grading, and/or construction

In the event of an unanticipated discovery of a paleontological resource during construction, excavations within 50 feet of the find shall be temporarily halted or diverted until the discovery is examined by a qualified paleontologist (per Society of Vertebrate Paleontology standards (SVP 1995,1996)). The qualified paleontologist shall document the discovery as needed, evaluate the potential resource, and assess the significance of the find. The paleontologist shall notify the appropriate agencies to determine procedures that would be followed before construction is allowed to resume at the location of the find. If the City determines that avoidance is not feasible, the paleontologist shall prepare an excavation plan for mitigating the effect of the project on the qualities that make the resource important, and such plan shall be implemented. The plan shall be submitted to the City for review and approval.

38. Erosion and Sedimentation Control Plan

Prior to any grading activities

a) The project applicant shall obtain a grading permit if required by the Oakland Grading Regulations pursuant to Section 15.04.660 of the Oakland Municipal Code. The grading permit application shall include an erosion and sedimentation control plan for review and approval by the Building Services Division. The erosion and sedimentation control plan shall include all necessary measures to be taken to prevent excessive stormwater runoff or carrying by stormwater runoff of solid materials on to lands of adjacent property owners, public streets, or to creeks as a result of conditions created by grading operations. The plan shall include, but not be limited to, such measures as short-term erosion control planting, waterproof slope covering, check dams, interceptor ditches, benches, storm drains, dissipation structures, diversion dikes, retarding berms and barriers, devices to trap, store and filter out sediment, and stormwater retention basins. Off-site work by the

project applicant may be necessary. The project applicant shall obtain permission or easements necessary for off-site work. There shall be a clear notation that the plan is subject to changes as changing conditions occur. Calculations of anticipated stormwater runoff and sediment volumes shall be included, if required by the Director of Development or designee. The plan shall specify that, after construction is complete, the project applicant shall ensure that the storm drain system shall be inspected and that the project applicant shall clear the system of any debris or sediment.

Ongoing throughout grading and construction activities

b) The project applicant shall implement the approved erosion and sedimentation plan. No grading shall occur during the wet weather season (October 15 through April 15) unless specifically authorized in writing by the Building Services Division.

39. <u>Post-Construction Stormwater Management Plan</u>

Prior to issuance of building permit (or other construction-related permit)

The applicant shall comply with the requirements of Provision C.3 of the National Pollutant Discharge Elimination System (NPDES) permit issued to the Alameda Countywide Clean Water Program. The applicant shall submit with the application for a building permit (or other construction-related permit) a completed Construction-Permit-Phase Stormwater Supplemental Form to the Building Services Division. The project drawings submitted for the building permit (or other construction-related permit) shall contain a stormwater management plan, for review and approval by the City, to manage stormwater run-off and to limit the discharge of pollutants in stormwater after construction of the project to the maximum extent practicable.

a) The post-construction stormwater management plan shall include and identify the following:
   i. All proposed impervious surface on the site;
   ii. Anticipated directional flows of on-site stormwater runoff; and
   iii. Site design measures to reduce the amount of impervious surface area and directly connected impervious surfaces; and
   iv. Source control measures to limit the potential for stormwater pollution;
   v. Stormwater treatment measures to remove pollutants from stormwater runoff; and
   vi. Hydromodification management measures so that post-project stormwater runoff does not exceed the flow and duration of pre-project runoff, if required under the NPDES permit.

b) The following additional information shall be submitted with the post-construction stormwater management plan:
   i. Detailed hydraulic sizing calculations for each stormwater treatment measure proposed; and
   ii. Pollutant removal information demonstrating that any proposed manufactured/mechanical (i.e. non-landscape-based) stormwater treatment measure, when not used in combination with a landscape-based treatment measure, is capable or removing the range of pollutants typically removed by landscape-based treatment measures and/or the range of pollutants expected to be generated by the project.

All proposed stormwater treatment measures shall incorporate appropriate planting materials for stormwater treatment (for landscape-based treatment measures) and shall be designed with considerations for vector/mosquito control. Proposed planting materials for all proposed landscape-based stormwater treatment measures shall be included on the landscape and irrigation plan for the project. The applicant is not required to include on-site stormwater treatment measures in the post-construction stormwater management plan if he or she secures approval from Planning and Zoning of a proposal that demonstrates compliance with the requirements of the City's Alternative Compliance Program.

Prior to final permit inspection

The applicant shall implement the approved stormwater management plan.

40. Maintenance Agreement for Stormwater Treatment Measures

Prior to final zoning inspection

For projects incorporating stormwater treatment measures, the applicant shall enter into the "Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement," in accordance with Provision C.3.e of the NPDES permit, which provides, in part, for the following:

a) The applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and

b) Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The agreement shall be recorded at the County Recorder's Office at the applicant's expense.

41. Stormwater and Sewer

Prior to completing the final design for the project's sewer service

Confirmation of the capacity of the City's surrounding stormwater and sanitary sewer system and state of repair shall be completed by a qualified civil engineer with funding from the project applicant. The project applicant shall be responsible for the necessary stormwater and sanitary sewer infrastructure improvements to accommodate the proposed project. In addition, the applicant shall be required to pay additional fees to improve sanitary sewer infrastructure if required by the Sewer and Stormwater Division. Improvements to the existing sanitary sewer collection system shall specifically include, but are not limited to, mechanisms to control or minimize increases in infiltration/inflow to offset sanitary sewer increases associated with the proposed project. To the maximum extent practicable, the applicant will be required to implement Best Management Practices to reduce the peak stormwater runoff from the project site. Additionally, the project applicant shall be responsible for payment of the required installation or hook-up fees to the affected service providers.

42. Exposure to Air Pollution (Toxic Air Contaminants: Particulate Matter)

Prior to issuance of a demolition, grading, or building permit

A. Indoor Air Quality: In accordance with the recommendations of the California Air Resources Board (CARB) and the Bay Area Air Quality Management District, appropriate measures shall be incorporated into the project design in order to reduce the potential health risk due to exposure to diesel particulate matter to achieve an acceptable interior air quality level for sensitive receptors. The appropriate measures shall include **one** of the following methods:

1) The project applicant shall retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with the CARB and the Office of Environmental Health and Hazard Assessment requirements to determine the exposure of project residents/occupants/users to air polluters prior to issuance of a demolition, grading, or building permit. The HRA shall be submitted to the Planning and Zoning Division for review and approval. The applicant shall implement the approved HRA recommendations, if any. If the HRA concludes that the air quality risks from nearby sources are at or below acceptable levels, then additional measures are not required.

2) The applicant shall implement all of the following features that have been found to reduce the air quality risk to sensitive receptors and shall be included in the project construction plans. These features shall be submitted to the Planning and Zoning Division and the Building Services Division for review and approval prior to the issuance of a demolition, grading, or building permit and shall be maintained on an ongoing basis during operation of the project.
   i. Redesign the site layout to locate sensitive receptors as far as possible from any freeways, major roadways, or other sources of air pollution (e.g., loading docks, parking lots).
   ii. Do not locate sensitive receptors near distribution center's entry and exit points.
   iii. Incorporate tiered plantings of trees (redwood, deodar cedar, live oak, and/or oleander) to the maximum extent feasible between the sources of pollution and the sensitive receptors.
   iv. Install, operate and maintain in good working order a central heating and ventilation (HV) system or other air take system in the building, or in each individual residential unit, that meets or exceeds an efficiency standard of MERV 13. The HV system shall include the following features: Installation of a high efficiency filter and/or carbon filter to filter particulates and other chemical matter from entering the building. Either HEPA filters or ASHRAE 85% supply filters shall be used.
   v. Retain a qualified HV consultant or HERS rater during the design phase of the project to locate the HV system based on exposure modeling from the pollutant sources.
   vi. Install indoor air quality monitoring units in buildings.
   vii. Project applicant shall maintain, repair and/or replace HV system on an ongoing and as needed basis or shall prepare an operation and maintenance manual for the HV system and the filter. The manual shall include the operating instructions and

the maintenance and replacement schedule. This manual shall be included in the CC&Rs for residential projects and distributed to the building maintenance staff. In addition, the applicant shall prepare a separate homeowners manual. The manual shall contain the operating instructions and the maintenance and replacement schedule for the HV system and the filters.

B. Outdoor Air Quality: To the maximum extent practicable, individual and common exterior open space, including playgrounds, patios, and decks, shall either be shielded from the source of air pollution by buildings or otherwise buffered to further reduce air pollution for project occupants.

43. <u>Exposure to Air Pollution (Toxic Air Contaminants: Gaseous Emissions)</u>
Prior to issuance of a demolition, grading, or building permit

A. Indoor Air Quality: In accordance with the recommendations of the California Air Resources Board (CARB) and the Bay Area Air Quality Management District, appropriate measures shall be incorporated into the project design in order to reduce the potential risk due to exposure to toxic air contaminants to achieve an acceptable interior air quality level for sensitive receptors. The project applicant shall retain a qualified air quality consultant to prepare a health risk assessment (HRA) in accordance with the CARB and the Office of Environmental Health and Hazard Assessment requirements to determine the exposure of project residents/occupants/users to air polluters prior to issuance of a demolition, grading, or building permit. The HRA shall be submitted to the Planning and Zoning Division for review and approval. The applicant shall implement the approved HRA recommendations, if any. If the HRA concludes that the air quality risks from nearby sources are at or below acceptable levels, then additional measures are not required.

B. Exterior Air Quality: To the maximum extent practicable, individual and common exterior open space, including playgrounds, patios, and decks, shall either be shielded from the source of air pollution by buildings or otherwise buffered to further reduce air pollution for project occupants.

44. <u>Bird Collision Reduction</u>
Prior to issuance of a building permit and ongoing

A. The project applicant, or his or her successor, including the building manager or homeowners' association, shall submit plans to the Planning and Zoning Division, for review and approval, indicating how they intend to reduce potential bird collisions to the maximum feasible extent. The applicant shall implement the approved plan, including all mandatory measures, as well as applicable and specific project Best Management Practice (BMP) strategies to reduce bird strike impacts to the maximum feasible extent.

1. Mandatory measures include all of the following:
   i. Comply with federal aviation safety regulations for large buildings by installing minimum intensity white strobe lighting with three second flash instead of blinking red or rotating lights.

ii. Minimize the number of and co-locate rooftop-antennas and other rooftop structures.
iii. Monopole structures or antennas shall not include guy wires.
iv. Avoid the use of mirrors in landscape design.
v. Avoid placement of bird-friendly attractants (i.e. landscaped areas, vegetated roofs, water features) near glass.

2. Additional BMP strategies to consider include the following:
   i. Make clear or reflective glass visible to birds using visual noise techniques. Examples include:
      1. Use of opaque or transparent glass in window panes instead of reflective glass.
      2. Uniformly cover the outside clear glass surface with patterns (e.g., dots, decals, images, abstract patterns). Patterns must be separated by a minimum 10 centimeters (cm).
      3. Apply striping on glass surface. If the striping is less than 2 cm wide it must be applied vertically at a maximum of 10 cm apart (or 1 cm wide strips at 5 cm distance).
      4. Install paned glass with fenestration patterns with vertical and horizontal mullions of 10 cm or less.
      5. Place decorative grilles or louvers with spacing of 10 cm or less.
      6. Apply one-way transparent film laminates to outside glass surface to make the window appear opaque on the outside.
      7. Install internal screens through non-reflective glass (as close to the glass as possible) for birds to perceive windows as solid objects.
      8. Install windows which have the screen on the outside of the glass.
      9. Use UV-reflective glass. Most birds can see ultraviolet light, which is invisible to humans.
      10. If it is not possible to apply glass treatments to the entire building, the treatment should be applied to windows at the top of the surrounding tree canopy or the anticipated height of the surrounding vegetation at maturity.
   ii. Mute reflections in glass. Examples include:
      1. Angle glass panes toward ground or sky so that the reflection is not in a direct line-of-sight (minimum angle of 20 degrees with optimum angle of 40 degrees).
      2. Awnings, overhangs, and sunshades provide birds a visual indication of a barrier and may reduce image reflections on glass, but do not entirely eliminate reflections.
   iii. Reduce Light Pollution. Examples include:
      1. Turn off all unnecessary interior lights from 11 p.m. to sunrise.
      2. Install motion-sensitive lighting in lobbies, work stations, walkways, and corridors, or any area visible from the exterior and retrofitting operation systems that automatically turn lights off during after-work hours.
      3. Reduce perimeter lighting whenever possible.
   iv. Institute a building operation and management manual that promotes bird safety. Example text in the manual includes:

1. Donation of discovered dead bird specimens to authorized bird conservation organization or museums to aid in species identification and to benefit scientific study, as per all federal, state and local laws.
2. Production of educational materials on bird-safe practices for the building occupants.
3. Asking employees to turn off task lighting at their work stations and draw office blinds or curtains at end of work day.
4. Schedule nightly maintenance during the day or to conclude before 11 p.m., if possible.

45. Greenhouse Gas (GHG) Reduction Plan

Prior to issuance of a construction-related permit and ongoing as specified

The project applicant shall retain a qualified air quality consultant to develop a Greenhouse Gas (GHG) Reduction Plan for City review and approval. The applicant shall implement the approved GHG Reduction Plan.

The goal of the GHG Reduction Plan shall be to increase energy efficiency and reduce GHG emissions to below 1,100 metric tons of CO_2e per year or 4.6 metric tons of CO_2e per year per service population to help achieve the City's goal of reducing GHG emissions. The GHG Reduction Plan shall include, at a minimum, (a) a detailed GHG emissions inventory for the project under a "business-as-usual" scenario with no consideration of project design features, or other energy efficiencies, (b) an "adjusted" baseline GHG emissions inventory for the project, taking into consideration energy efficiencies included as part of the project (including the City's Standard Conditions of Approval, proposed mitigation measures, project design features, and other City requirements), (c) a comprehensive set of quantified additional GHG reduction measures available to further reduce GHG emissions beyond the adjusted GHG emissions, and (d) requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented. If the project is to be constructed in phases, the GHG Reduction Plan shall provide GHG emission scenarios by phase.

Specifically, the applicant/sponsor shall adhere to the following:

a) ***GHG Reduction Measures Program.*** Prepare and submit to the City Planning Director or his/her designee for review and approval a GHG Reduction Plan that specifies and quantifies GHG reduction measures that the project will implement by phase.

Potential GHG reduction measures to be considered include, but are not be limited to, measures recommended in BAAQMD's latest CEQA Air Quality Guidelines, the California Air Resources Board Scoping Plan (December 2008, as may be revised), the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures Document (August 2010, as may be revised), the California Attorney General's website, and Reference Guides on Leadership in Energy and Environmental Design (LEED) published by the U.S. Green Building Council.

The proposed GHG reduction measures must be reviewed and approved by the City Planning Director or his/her designee. The types of allowable GHG reduction measures include the following (listed in order of City preference): (1) physical design features; (2) operational features; and (3) the payment of fees to fund GHG-reducing programs (i.e., the purchase of "offset carbon credits," pursuant to item "b" below).

The allowable locations of the GHG reduction measures include the following (listed in order of City preference): (1) the project site; (2) off-site within the City of Oakland; (3) off-site within the San Francisco Bay Area Air Basin; (4) off-site within the State of California; then (5) elsewhere in the United States.

b) ***Offset Carbon Credits Guidelines.*** For GHG reduction measures involving the purchase of offset carbon credits, evidence of the payment/purchase shall be submitted to the City Planning Director or his/her designee for review and approval prior to completion of the project (or prior to completion of the project phase, if the project includes more one phase).

As with preferred locations for the implementation of all GHG reductions measures, the preference for offset carbon credit purchases include those that can be achieved as follows (listed in order of City preference): (1) within the City of Oakland; (2) within the San Francisco Bay Area Air Basin; (3) within the State of California; then (4) elsewhere in the United States. The cost of offset carbon credit purchases shall be based on current market value at the time purchased and shall be based on the Project's operational emissions estimated in the GHG Reduction Plan or subsequent approved emissions inventory, which may result in emissions that are higher or lower than those estimated in the GHG Reduction Plan.

c) ***Plan Implementation and Documentation.*** For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be included on the drawings submitted for construction-related permits. For operational GHG reduction measures to be incorporated into the project, the measures shall be implemented on an indefinite and ongoing basis beginning at the time of project completion (or at the completion of the project phase for phased projects).

For physical GHG reduction measures to be incorporated into off-site projects, the measures shall be included on drawings and submitted to the City Planning Director or his/her designee for review and approval and then installed prior to completion of the subject project (or prior to completion of the project phase for phased projects). For operational GHG reduction measures to be incorporated into off-site projects, the measures shall be implemented on an indefinite and ongoing basis beginning at the time of completion of the subject project (or at the completion of the project phase for phased projects).

d) ***Compliance, Monitoring and Reporting.*** Upon City review and approval of the GHG Reduction Plan program by phase, the applicant/sponsor shall satisfy the following

requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented. The GHG Reduction Plan requires regular periodic evaluation over the life of the Project (generally estimated to be at least 40 years) to determine how the Plan is achieving required GHG emissions reductions over time, as well as the efficacy of the specific additional GHG reduction measures identified in the Plan.

Implementation of the GHG reduction measures and related requirements shall be ensured through the project applicant/sponsor's compliance with Conditions of Approval adopted for the project. Generally, starting two years after the City issues the first Certificate of Occupancy for the project, the project applicant/sponsor shall prepare each year of the useful life of the project an Annual GHG Emissions Reduction Report (Annual Report), subject to the City Planning Director or his/her designee for review and approval. The Annual Report shall be submitted to an independent reviewer of the City Planning Director's or his/her designee's choosing, to be paid for by the project applicant/sponsor (see *Funding*, below), within two months of the anniversary of the Certificate of Occupancy.

The Annual Report shall summarize the project's implementation of GHG reduction measures over the preceding year, intended upcoming changes, compliance with the conditions of the Plan, and include a brief summary of the previous year's Annual Report results (starting the second year). The Annual Report shall include a comparison of annual project emissions to the baseline emissions reported in the GHG Plan.

The GHG Reduction Plan shall be considered fully attained when project emissions are less than either applicable numeric BAAQMD CEQA Thresholds, as confirmed by the City Planning Director or his/her designee through an established monitoring program. Monitoring and reporting activities will continue at the City's discretion, as discussed below.

e) ***Funding.*** Within two months after the Certificate of Occupancy, the project applicant/sponsor shall fund an escrow-type account or endowment fund to be used exclusively for preparation of Annual Reports and review and evaluation by the City Planning Director or his/her designee, or its selected peer reviewers. The escrow-type account shall be initially funded by the project applicant/sponsor in an amount determined by the City Planning Director or his/her designee and shall be replenished by the project applicant/sponsor so that the amount does not fall below an amount determined by the City Planning Director or his/her designee. The mechanism of this account shall be mutually agreed upon by the project applicant/sponsor and the City Planning Director or his/her designee, including the ability of the City to access the funds if the project applicant/sponsor is not complying with the GHG Reduction Plan requirements, and/or to reimburse the City for its monitoring and enforcement costs.

f) ***Corrective Procedure.*** If the third Annual Report, or any report thereafter, indicates that, in spite of the implementation of the GHG Reduction Plan, the project is not achieving

the GHG reduction goal, the project applicant/sponsor shall prepare a report for City review and approval, which proposes additional or revised GHG measures to better achieve the GHG emissions reduction goals, including without limitation, a discussion on the feasibility and effectiveness of the menu of other additional measures (Corrective GHG Action Plan). The project applicant/sponsor shall then implement the approved Corrective GHG Action Plan.

If, one year after the Corrective GHG Action Plan is implemented, the required GHG emissions reduction target is still not being achieved, or if the project applicant/owner fails to submit a report at the times described above, or if the reports do not meet City requirements outlined above, the City Planning Director or his/her designee may, in addition to its other remedies, (a) assess the project applicant/sponsor a financial penalty based upon actual percentage reduction in GHG emissions as compared to the percent reduction in GHG emissions established in the GHG Reduction Plan; or (b) refer the matter to the City Planning Commission for scheduling of a compliance hearing to determine whether the project's approvals should be revoked, altered or additional conditions of approval imposed.

The penalty as described in (a) above shall be determined by the City Planning Director or his/her designee and be commensurate with the percentage GHG emissions reduction not achieved (compared to the applicable numeric significance thresholds) or required percentage reduction from the "adjusted" baseline.

In determining whether a financial penalty or other remedy is appropriate, the City shall not impose a penalty if the project applicant/sponsor has made a good faith effort to comply with the GHG Reduction Plan.

The City would only have the ability to impose a monetary penalty after a reasonable cure period and in accordance with the enforcement process outlined in Planning Code Chapter 17.152. If a financial penalty is imposed, such penalty sums shall be used by the City solely toward the implementation of the GHG Reduction Plan.

g) ***Timeline Discretion and Summary.*** The City Planning Director or his/her designee shall have the discretion to reasonably modify the timing of reporting, with reasonable notice and opportunity to comment by the applicant, to coincide with other related monitoring and reporting required for the project.
- *Fund Escrow-type Account for City Review*: Certificate of Occupancy plus 2 months
- *Submit Baseline Inventory of "Actual Adjusted Emissions"*: Certificate of Occupancy plus 1 year
- *Submit Annual Report #1*: Certificate of Occupancy plus 2 years
- *Submit Corrective GHG Action Plan* (if needed): Certificate of Occupancy plus 4 years (based on findings of Annual Report #3)
- *Post Attainment Annual Reports*: Minimum every 3 years and at the City Planning Director's or his/her designee's reasonable discretion

46. Bird Collision Reduction

Prior to issuance of a building permit and ongoing

The project applicant, or his or her successor, including the building manager or homeowners' association, shall submit plans to the Planning and Zoning Division, for review and approval, indicating how they intend to reduce potential bird collisions to the maximum feasible extent. The applicant shall implement the approved plan, including all mandatory measures, as well as applicable and specific project Best Management Practice (BMP) strategies to reduce bird strike impacts to the maximum feasible extent.

a) Mandatory measures include **all** of the following:

vi. Comply with federal aviation safety regulations for large buildings by installing minimum intensity white strobe lighting with three second flash instead of blinking red or rotating lights.

vii. Minimize the number of and co-locate rooftop-antennas and other rooftop structures.

viii. Monopole structures or antennas shall not include guy wires.

ix. Avoid the use of mirrors in landscape design.

x. Avoid placement of bird-friendly attractants (i.e. landscaped areas, vegetated roofs, water features) near glass.

b) Additional BMP strategies to consider include the following:

ii. Make clear or reflective glass visible to birds using visual noise techniques. Examples include:

1. Use of opaque or transparent glass in window panes instead of reflective glass.
2. Uniformly cover the outside clear glass surface with patterns (e.g., dots, decals, images, abstract patterns). Patterns must be separated by a minimum 10 centimeters (cm).
3. Apply striping on glass surface.

47. Car Parking

Ongoing

a) Off-street parking spaces shall be leased or sold separately from the rental or purchase of dwelling units for the life of the dwelling units, such that potential renters or buyers shall have the option of renting or buying a residential unit at a price lower than would be the case if there were a single price for both the residential unit and the parking space(s). It is acceptable to accomplish this by the developer marketing the units with rents that include on parking space per unit and if the resident does not desire to use the space, the rent amount will reduced accordingly.

b) Parking spaces shall be offered only to residents of the dwelling units served by the off-street parking, except that any surplus spaces that are not rented or sold may be rented to non-residents with the provision that such spaces must be vacated on 30 days' notice if requested by residents to be made available to them.

Prior to Issuance of Building Permit

c) A parking in-lieu fee shall be paid to the City as set forth in the Master Fee Schedule. A parking in-lieu fee may be refunded, without interest, to the person who made such

payment, or his assignee or designee, if additional off-street parking spaces are provided for such building or use by others than the City so as to satisfy the parking requirement for which the in-lieu payment was made. To obtain a refund, the required off-street parking spaces must be in place prior to issuance of a certificate of occupancy and before funds are spent or committed by the City.

48. Public Art for Private Development

Prior to issuance of Final Certificate of Occupancy and Ongoing

The project is subject to the City's Public Art Requirements for Private Development, adopted by Ordinance No. 13275 C.M.S. ("Ordinance"). The public art contribution requirements are equivalent to one-half percent (0.5%) for the "residential" building development costs, and one percent (1.0%) for the "non-residential" building development costs. The contribution requirement can be met through the commission or acquisition and installation of publicly accessible art fund, or satisfaction of alternative compliance methods described in the Ordinance. The applicant shall provide proof of full payment of the in-lieu contribution, or provide proof of installation of artwork on the development site prior to the City's issuance of a final certificate of occupancy for each phase unless a separate, legal binding instrument is executed ensuring compliance within a timely manner subject to City approval. On-site art installation shall be designed by independent artists, or artists working in conjunction with arts or community organizations that are verified by the City to either hold a valid Oakland business license and/or be an Oakland-based 501(c) (3) tax designated organization in good standing.

49. Café Location

Prior to Issuance of Building Permit

Plans shall be submitted for review and approval of the Planning Director or his/her designee showing the location of the proposed café at or near the corner of the parcel nearest to the intersection of E. 12th Street and Lake Merritt Blvd.

LAKEHOUSE COMMONS

ENTITLEMENT SUBMITTAL

PROJECT DESCRIPTION AND DATA

The project sponsors, UrbanCore and EBALDC, propose to construct two buildings sitting on a concrete podium garage. The podium includes 2 levels above grade and 2 levels below grade, containing parking at all levels and community and retail functions at grade facing East 12th St and Lake Merritt Boulevard. One building is a 26-story residential tower that is approximately 272' to the roof above the average grade of the site which is 21' above sea level; the other building is an 8 story mid-rise that is approximately 80' to its roof above grade.

The site (.92 acres) is on the west side of East 12th Street, between Second Avenue and Lake Merritt Boulevard (address to be determined).

The proposed project will include:

- 361 dwelling units, including 270 units in the market rate Lakehouse Commons North, 252 market rate units and 18 workforce units, as well as 91 flats in the mid-rise in the Lakehouse Commons South. Lakehouse Commons North contains 260 flats,
- 6 penthouses at the top level, and 4 two-story townhomes at the ground level.

The North Commons is set back from the park on the north side by an average of 10', from E 12th St by 10', and from the west property line by a range of 7' to 30'. The South Commons is built to the property line along E 12th St and 2nd Avenue,

and is set back from the west property line by a minimum of 5'.

The distance between the North Commons and South Commons is 41'.

There is a 4-level parking garage (two below grade, two above grade) with 218 auto parking stalls and 210 bike parking stalls. The area of the parking garage is 102,149 SF.

Off-site improvements include enhancement of a City park (.92 acres) with natural landscaping to the north/northwest of the site and streetscape improvements per the LMSP.

The proposed project will also include the following floor area uses, shown below in gross square footages.

AMENITIES	
BIKE ROOMS	5,984 SF
CAFE	1,476 SF
CENTRAL COMMONS	2,656 SF
FITNESS CENTER	1,926 SF
LOBBY - NORTH COMMONS	2,055 SF
LOBBY - SOUTH COMMON	1,062 SF
ROOF TERRACE COMMUNITY ROOMS	2,350 SF
CIRCULATION	
CIRCULATION - NORTH COMMONS	49,574 SF
CIRCULATION - SOUTH COMMONS	11,915 SF
COURTYARDS	
CENTRAL COURTYARD	5,324 SF
NORTH COURTYARD	3,579 SF
SOUTH COURTYARD	2,249 SF
GARAGE	
PARKING GARAGE	102,234 SF
PROPERTY MANAGEMENT	
ADMINISTRATION - NORTH COMMONS	1,423 SF
ADMINISTRATION - SOUTH COMMONS	779 SF
RESIDENTIAL	
RESIDENTIAL - NORTH COMMONS	237,307 SF
RESIDENTIAL - SOUTH COMMONS	67,959 SF
ROOF DECK	
ROOF DECK - NORTH COMMONS	6,563 SF
ROOF DECK - SOUTH COMMONS	747 SF
SERVICE/STORAGE	
SERVICE	11,508 SF
SERVICE - NORTH COMMONS	8,589 SF
SERVICE - SOUTH COMMONS	1,733 SF
TOTAL GROSS SF PROVIDED	528,992 SF

ZONING CODE SUMMARY

CASE NUMBER

PROJECT SITE AREA +/- 40,276 SF (0.92 ACRES)

PROJECT TYPE PERMANENT RESIDENTIAL ACTIVITY, MULTI-FAMILY DWELLING
COMMERCIAL ACTIVITY
ACCESSORY OFF-STREET PARKING

ZONING

PARCEL NO. APM 19-27-14
BOUND BY EAST 12TH STREET, SECOND AVENUE AND LAKE MERRITT BOULEVARD

ADDRESS (ADDRESS TO BE DETERMINED) - OAKLAND, CA 94612

ZONE D-LM-1 (MIXED RESIDENTIAL)
LAKE MERRITT STATION AREA PLAN

HEIGHT LIMIT PER TABLE 17.101C.04
85 FT. (MID-HIGH) / 275 FT. (TOWER FOR 3 BLDGS.) CUP
45 FT. BASE

PROPOSED CONSTRUCTION PODIUM BUILDING - TYPE I-A CONSTRUCTION (4 STORIES)

NORTH COMMONS - TYPE I-A CONSTRUCTION (24 STORIES)
SOUTH COMMONS - TYPE II-A CONSTRUCTION (6 STORIES)
HEIGHT INCREASES ASSUMED WITH FULLY-SPRINKLERED BUILDINGS

ZONING

This project has been designed to conform with the recommendations of the Lake Merritt Station Area Plan:

Land Use Character: according to the Plan, the site is in an area called Urban Residential Zone, "appropriate… for high-rise residential structures" and "allows a variety of ground floor uses compatible with a residential area'. The project fits this definition.

Active Ground Floor Uses: the Plan calls for activating the park side and East 12th St frontage. This development activates East 12th St with a café (1,476 SF), residential lobbies with lounges (3,117 Total SF), and a cultural center for performing arts, exhibitions and festivals (2,656 SF). The park side is activated by town homes and a public terrace at the corner of E12th St and Lake Merritt Boulevard.

Height and Massing Concepts: the site is located in an area designated by the Lake Merritt Specific Plan to have a Base Height at 45' and a Tower Height of 275' total with the base. This development proposes a Base Height along East 12th Street that varies between 20'-25' above grade, varying with the slope of the street. The South Commons building will be 63' above the podium, or about 83' above grade. The North Commons building extends 23 floors (253') above the podium plaza, which is 20'-25' above grade, depending on its location relative to the sloping street. So the South Commons building extends about 273' above the average grade, within the overall Tower plus Base Height of 275' allowed in the Plan.

CAR AND BICYCLE PARKING REQUIREMENTS

RESIDENTIAL PARKING (17.101G.080.A / CHAPTER 17.116)
REQUIRED: 270 UNITS * 0.75 (SPACES PER UNIT) = 203 SPACES
91 AFFORDABLE UNITS * 0.50 (SPACES PER UNIT) = 46 SPACES
TOTAL REQUIRED = 249 SPACES

PROVIDED: 218 SPACES
24 TANDEM
242 TOTAL (0.67 SPACES PER UNIT)

RETAIL PARKING (17.116.080): DL
NO SPACES REQUIRED FOR RESTAURANTS /
GENERAL FOOD SALES, GENERAL RETAIL SALES, CONSUMER SERVICE

NO RETAIL PARKING PROVIDED

LOADING BERTHS:
2 OFF-STREET LOADING BERTHS REQUIRED FOR RESIDENTIAL USES

PROVIDED:
2 OFF-STREET LOADING BERTHS
PROVIDED FOR RESIDENTIAL USES

PARKING SPACE TYPE	COUNT
ADA STANDARD (9' x 18')	9
TANDEM STANDARD (9' x 18')	24
SMALL (8' x 15')	52
STANDARD (9' x 18')	133
Grand total: 218	

The parking design includes the option of puzzle stackers at Levels B1 and B2, increasing the total parking count to 320 spaces".

BIKE PARKING (17.101G.080.B / CHAPTER 17.117)

RESIDENTIAL:
REQUIRED: 91 (1 PER 4 UNITS) (LONG TERM)
19 (1 PER 20 UNITS) (SHORT TERM)
110 TOTAL REQUIRED

PROVIDED: 173 SPACES (0.47 SPACES PER UNIT)

SHEET INDEX

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T0.02	SITE CONTEXT
T0.03	RENDERINGS
T0.05	PERSPECTIVE VIEWS
T0.06	PERSPECTIVE VIEWS
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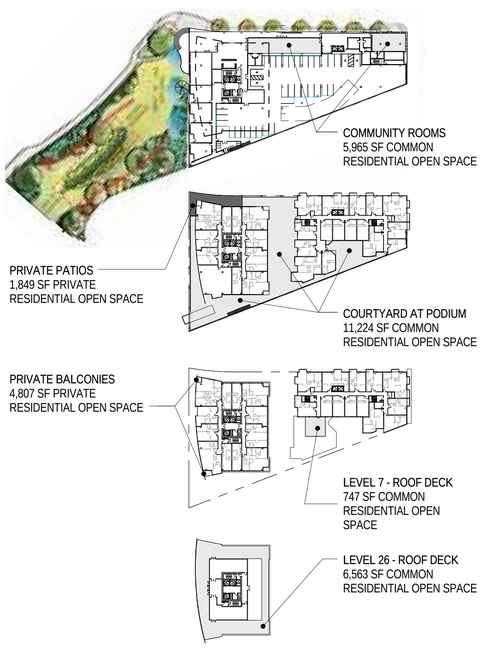
SURVEY 1/2	BOUNDARY AND TOPOGRAPHIC SURVEY
SURVEY 2/2	BOUNDARY AND TOPOGRAPHIC SURVEY
L0.01	LANDSCAPE - PLAN SITE
L0.02	LANDSCAPE - PLAN PODIUM
L0.03	LANDSCAPE PODIUM MATERIALS
L0.04	LANDSCAOE PARK MATERIALS
L0.05	LANDSCAPE STORMWATER CALCULATIONS
AL0.01	LIGHTING FLOOR PLANS AND ELEVATIONS
AL0.02	LIGHTING FLOOR PLANS AND ELEVATIONS
AL0.03	LIGHTING FLOOR PLANS AND ELEVATIONS
A1.00	SITE PLAN
A1.01	BUILDING PLAN - LEVEL B2
A1.02	BUILDING PLAN - LEVEL B1
A1.03	BUILDING PLAN - LEVEL 1
A1.04	BUILDING PLAN - LEVEL 2
A1.05	BUILDING PLAN - LEVEL 3 AND 4
A1.06	BUILDING PLAN - LEVEL 5 AND 6
A1.07	BUILDING PLAN - LEVEL 7 AND 8
A1.08	BUILDING PLAN - LEVEL 9 THROUGH 24
A1.09	BUILDING PLANS - LEVELS 25 AND 26
A2.01a	ENLARGED BUILDING PLAN - LEVEL 3 - NORTH COMMONS
A2.01b	ENLARGED BUILDING PLAN - LEVEL 3 - SOUTH COMMONS
A2.02a	ENLARGED BUILDING PLAN - LEVEL 5 - NORTH COMMONS
A2.02b	ENLARGED BUILDING PLAN - LEVEL 5 - SOUTH COMMONS
A2.03b	ENLARGED BUILDING PLAN - LEVEL 7 - SOUTH COMMONS
A2.04a	ENLARGED BUILDING PLAN - LEVEL 25 - NORTH COMMONS
A2.05a	ENLARGED BUILDING PLAN - LEVEL 26 - NORTH COMMONS
A3.01	BUILDING ELEVATIONS
A3.02	BUILDING ELEVATIONS
A3.03	ENLARGED STREET LEVEL
A3.04	BUILDING SECTION
A4.01	WALL SECTIONS
A4.02	WALL SECTIONS
A5.01	MATERIALS BOARD

PERSPECTIVE VIEW

PROPOSED EXCAVATION

The project includes the proposed excavation of 25' below current grade.
Resulting in the excavation of 1,006,900 SF of earth from the 40,276 SF site

OPEN SPACE REQUIREMENTS



USABLE OPEN SPACE (TABLE 17.101G.05)

REQUIRED: 252 MARKET RATE UNITS * MIN. 75 SF PER RESIDENTIAL DWELLING UNIT = 18,900 SF
18 WORK FORCE UNITS * MIN .60 SF PER RESIDENTIAL DWELLING UNIT = 1,080 SF
91 AFFORDABLE UNITS * MIN. 60 SF PER RESIDENTIAL DWELLING UNIT = 5,460 SF

TOTAL = 25,440 SF

MINIMUM DIMENSIONS OF OPEN SPACE AREAS:
PUBLIC PLAZA - 10 FT.
ROOFTOP - 15 FT.
COURTYARD - 15 FT.
COMMUNITY ROOM - 250 SF

PROPOSED: OPEN SPACE CALCULATIONS

AREA TYPE	AREA
BALCONIES - NORTH COMMONS	4,755 SF
COMMUNITY ROOMS	5,965 SF
COURTYARDS	11,224 SF
PRIVATE PATIOS - NORTH COMMONS	1,849 SF
ROOF DECK - NORTH COMMONS	6,563 SF
ROOF DECK - SOUTH COMMONS	747 SF
TOTAL PROVIDED	31,103 SF

UNIT MIX

SOUTH COMMONS - UNIT TYPES (NET SF)

UNIT TYPE	COUNT	UNIT SF	TOTAL UNIT TYPE SF
1 BEDROOM A	22	613 SF	13,478 SF
1 BEDROOM B	1	535 SF	535 SF
1 BEDROOM D	5	562 SF	2,811 SF
1 BEDROOM E	6	592 SF	3,551 SF
2 BEDROOM A	6	866 SF	5,196 SF
2 BEDROOM B	6	826 SF	4,958 SF
2 BEDROOM C	3	672 SF	2,015 SF
2 BEDROOM D	6	917 SF	5,499 SF
2 BEDROOM E	1	1,001 SF	1,001 SF
3 BEDROOM A	6	1,142 SF	6,853 SF
3 BEDROOM B	4	1,195 SF	4,780 SF
STUDIO A	24	452 SF	10,850 SF
STUDIO B	1	413 SF	413 SF
Grand total: 91	91	.	61,940 SF

NORTH COMMONS - UNIT TYPES (NET SF)

UNIT TYPE	COUNT	UNIT SF	TOTAL UNIT TYPE SF
1 BEDROOM G.1	44	705 SF	31,022 SF
1 BEDROOM G.2	22	631 SF	13,892 SF
2 BEDROOM F	22	908 SF	19,968 SF
2 BEDROOM G	44	1,034 SF	45,474 SF
2 BEDROOM H	20	1,096 SF	21,917 SF
3 BEDROOM C	22	1,191 SF	26,208 SF
PENTHOUSE A	4	1,748 SF	6,991 SF
PENTHOUSE B	2	1,567 SF	3,133 SF
STUDIO C	86	469 SF	40,330 SF
TOWNHOUSE	4	1,422 SF	5,687 SF
Grand total: 270	270	.	214,623 SF

PROJECT TEAM

PROJECT SPONSOR
URBAN CORE DEVELOPMENT, LLC
4096 Piedmont Avenue, Suite 313
Oakland, CA 94611

CONTACT: Michael Johnson, President, CEO
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EMAIL: mjohnson@urbancorellc.com

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PGAdesign LANDSCAPE ARCHITECTS
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SITE AERIAL PLAN

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LAKEHOUSE COMMONS
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East Bay Asian Local Development Co.
1825 San Pablo Ave., Suite 200
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2016.04.29 Design Review

COVER SHEET

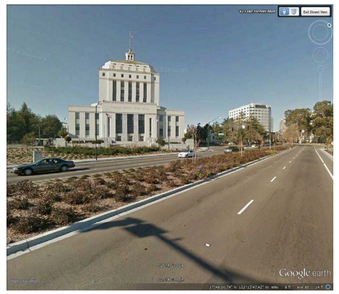
JOB NUMBER: 1607
DATE: Issue Date
SCALE: 1" = 100'-0"

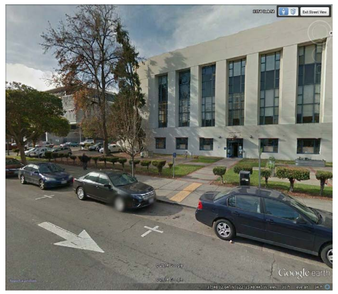
- PRELIMINARY - NOT FOR CONSTRUCTION -

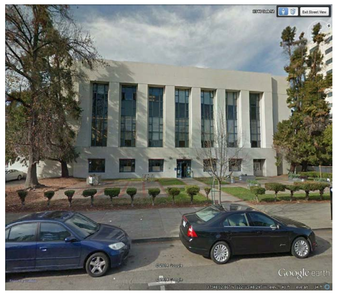
T0.01

ADJACENT SITES / CONTEXT

EXISTING SITE







HISTORICAL REFERENCE

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2016.04.29 Design Review

SITE CONTEXT

JOB NUMBER: 1607
DATE: Issue Date
SCALE:

- PRELIMINARY - NOT FOR CONSTRUCTION -

T0.02

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2016.04.29 Design Review

RENDERINGS

JOB NUMBER: 1607
DATE: Issue Date
SCALE:

- PRELIMINARY - NOT FOR CONSTRUCTION -

T0.03

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2016.04.29 Design Review

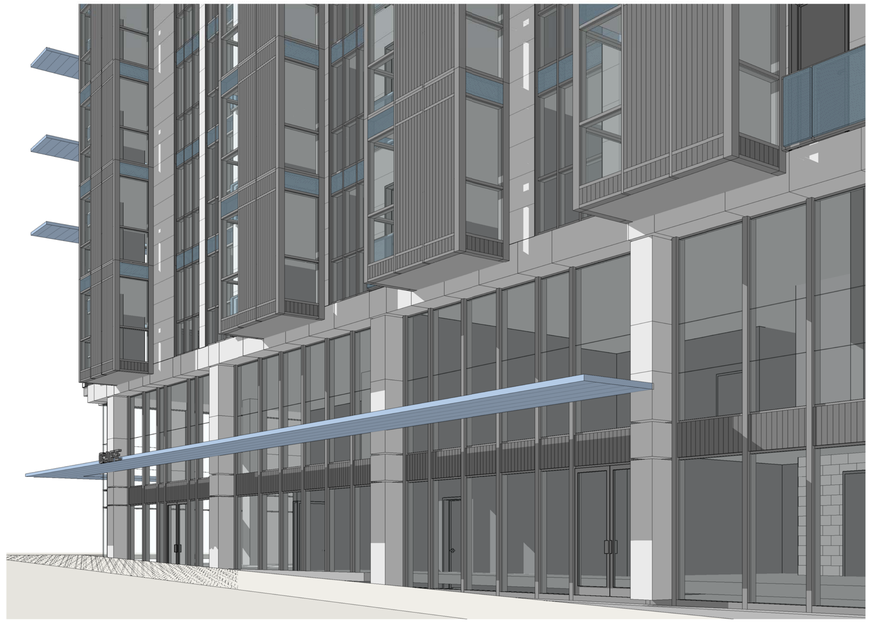
PERSPECTIVE VIEWS

JOB NUMBER: 1607
DATE: Issue Date
SCALE:

- PRELIMINARY - NOT FOR CONSTRUCTION -

T0.05

Perspective View - East 12th St. and 2nd Ave. 1



Perspective View - Streetscape along E 12th St 2

Perspective View - Streetscape along E 12th St. 3

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2016.04.29 Design Review

PERSPECTIVE VIEWS

JOB NUMBER: 1607
DATE: Issue Date
SCALE:

- PRELIMINARY - NOT FOR CONSTRUCTION -

T0.06

Lakehouse Commons - North

		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	
L. FLOORING								
≥25%	**L1. Environmentally Preferable Flooring**	1				3		If carpet is 25% of floor area & recycle content
≥75%	**L2. Low-Emitting Flooring Meets CDPH 2010 Standard Method—Residential**	3			3			
No	**L3. Durable Flooring**	0				1		
No	**L4. Thermal Mass Flooring**	0		1				
M. APPLIANCES AND LIGHTING								
Yes	**M1. ENERGY STAR® Dishwasher**	1					1	
TBD	**M2. CEE-Rated Clothes Washer**			1			2	Needs to meet MEF & WF
<20 cubic feet	**M3. Size-Efficient ENERGY STAR Refrigerator**	2		2				
	M4. Permanent Centers for Waste Reduction Strategies							
No	M4.1 Built-In Recycling Center	0				1		Two bins within the unit
No	M4.2 Built-In Composting Center	0				1		
	M5. Lighting Efficiency							
Yes	M5.1 High-Efficacy Lighting	2		2				No screw in lamps
No	M5.2 Lighting System Designed to IESNA Footcandle Standards or Designed by Lighting Consultant	0		2				
No	**M6. Central Laundry**	0					1	Tower building has in-unit laundry
Yes	**M7. Gearless Elevator**	1		1				Gearless/traction ok Geared/hydrolic No
N. COMMUNITY								
	N1. Smart Development							
Yes	N1.1 Infill Site	2	1			1		
No	N1.2 Designated Brownfield Site	0	1		1			
>35	N1.3 Conserve Resources by Increasing Density	4		2		2		
No	N1.4 Cluster Homes for Land Preservation	0	1			1		
	N1.5 Home Size Efficiency	9				9		
812	Enter the area of the home, in square feet							
2	Enter the number of bedrooms							1 bedroom projects get no points
Yes	**N2. Home(s)/Development Located Within 1/2 Mile of a Major Transit Stop**	2	2					
	N3. Pedestrian and Bicycle Access							
	N3.1 Pedestrian Access to Services Within 1/2 Mile of Community Services		2					
5	Enter the number of Tier 1 services							
	Enter the number of Tier 2 services							
No	N3.2 Connection to Pedestrian Pathways	0	1					
No	N3.3 Traffic Calming Strategies	0	2					
No	N3.4 Sidewalks Buffered from Roadways and 5-8 Feet Wide	0	1					
Yes	N3.5 Bicycle Storage for Residents	1	1					15% of total occupants (2 people/1 bdrm)
No	N3.6 Bicycle Storage for Non-Residents	0	1					
1 space per unit	N3.7 Reduced Parking Capacity	2	2					
	N4. Outdoor Gathering Places							
Yes	N4.1 Public or Semi-Public Outdoor Gathering Places for Residents	1	1					Need either 25 or 50 sq.ft depending on if density is less than 50 units/acre or greater
No	N4.2 Public Outdoor Gathering Places with Direct Access to Tier 1 Community Services	0	1					
	N5. Social Interaction							
Yes	N5.1 Residence Entries with Views to Callers	1	1					double peep holes or sidelights
No	N5.2 Entrances Visible from Street and/or Other Front Doors	0	1					
No	N5.3 Porches Oriented to Street and Public Space	0	1					
Yes	N5.4 Social Gathering Space	1	1					50 sq.ft per unit of outdoor gathering space in the development
	N6. Passive Solar Design							
No	N6.1 Heating Load	0		2				
No	N6.2 Cooling Load	0		2				
	N7. Adaptable Building							
No	N7.1 Universal Design Principles in Units	0	1		1			
No	N7.2 Full-Function Independent Rental Unit	0	1					
	N8. Affordability							
≥25%	N8.1 Dedicated Units for Households Making 80% of AMI or Less	1	2					

Lakehouse Commons - North

		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	
E. EXTERIOR								
Yes	**E1. Environmentally Preferable Decking**	1				1		Check for local concrete production
Yes	**E2. Flashing Installation Third-Party Verified**	2				2		
No	**E3. Rain Screen Wall System**	0				2		
Yes	**E4. Durable and Non-Combustible Cladding Materials**	1				1		
	E5. Durable Roofing Materials							
Yes	E5.1 Durable and Fire Resistant Roofing Materials or Assembly	1				1		10 yr manf wrnty + 3 yr sub + class A
Yes	E5.2 Roofing Warranty for Shingle Roofing	Y	R	R	R	R	R	3 year sub + 20 year manfr warranty on shingle only.
No	**E6. Vegetated Roof**	0	2	2				
F. INSULATION								
	F1. Insulation with 30% Post-Consumer or 60% Post-Industrial Recycled Content							
No	F1.1 Walls and Floors	0				1		Buildings are concrete and metal frame
No	F1.2 Ceilings	0				1		
	F2. Insulation that Meets the CDPH Standard Method—Residential for Low Emissions							
TBD	F2.1 Walls and Floors				1			
TBD	F2.2 Ceilings				1			
	F3. Insulation That Does Not Contain Fire Retardants							
No	F3.1 Cavity Walls and Floors	0			1			
No	F3.2 Ceilings	0			1			
No	F3.3 Interior and Exterior Insulation	0			1			
G. PLUMBING								
	G1. Efficient Distribution of Domestic Hot Water							
Yes	G1.1 Insulated Hot Water Pipes	1		1				
No	G1.2 WaterSense Volume Limit for Hot Water Distribution	0					1	
No	G1.3 Increased Efficiency in Hot Water Distribution	0					2	
	G2. Install Water-Efficient Fixtures							
Yes	G2.1 WaterSense Showerheads with Matching Compensation Valve	2					2	
Yes	G2.2 WaterSense Bathroom Faucets	1					1	
Yes	G2.3 WaterSense Toilets with a Maximum Performance (MaP) Threshold of No Less Than 500 Grams	1					1	
No	G2.4 Urinals with Flush Rate of ≤ 0.1 Gallons/Flush	0					1	
No	**G3. Pre-Plumbing for Graywater System**	0					1	
No	**G4. Operational Graywater System**	0					3	
No	**G5. Submeter Water for Tenants**	0					2	Hot & Cold
H. HEATING, VENTILATION, AND AIR CONDITIONING								
	H1. Sealed Combustion Units							
Yes	H1.1 Sealed Combustion Furnace	1			1			
Yes	H1.2 Sealed Combustion Water Heater	2			2			Heatpump Water heater, power vented, unit outside of building all count
No	**H2. High Performing Zoned Hydronic Radiant Heating System**	0		1	1			
	H3. Effective Ductwork							
TBD	H3.1 Duct Mastic on Duct Joints and Seams			1				
No	H3.2 Pressure Balance the Ductwork System	0		1				
No	**H4. ENERGY STAR® Bathroom Fans Per HVI Standards with Air Flow Verified**	0			1			
	H5. Advanced Practices for Cooling							
No	H5.1 ENERGY STAR Ceiling Fans in Living Areas and Bedrooms	0		1				
No	H5.2 Operable Windows and Skylights Located to Induce Cross Ventilation in At Least One Room in 80% of Units	0		1				
	H6. Whole House Mechanical Ventilation Practices to Improve Indoor Air Quality							
Yes	H6.1 Meet ASHRAE Standard 62.2-2012 Ventilation Residential Standards	Y	R	R	R	R	R	
No	H6.2 Advanced Ventilation Standards	0			1			
No	H6.3 Outdoor Air Ducted to Bedroom and Living Areas	0			2			
	H7. Effective Range Design and Installation							
No	H7.1 Effective Range Hood Ducting and Design	0			1			
No	H7.2 Automatic Range Hood Control	0			1			
I. RENEWABLE ENERGY								

GreenPointRATED
A PROGRAM OF BUILD IT GREEN

NEW HOME RATING SYSTEM, VERSION 6.1

MULTIFAMILY

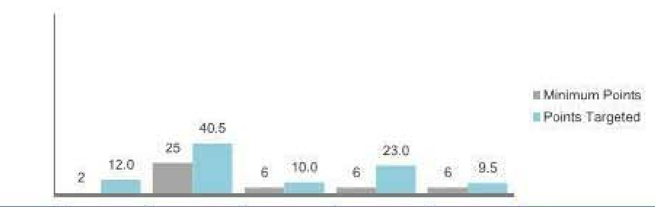
The GreenPoint Rated checklist tracks green features incorporated into the home. GreenPoint Rated is administered by Build It Green, a non-profit whose mission is to promote healthy, energy and resource efficient buildings in California.
The minimum requirements of GreenPoint Rated are: verification of 50 or more points; Earn the following minimum points per category: Commuity (2) Energy (25), Indoor Air Quality/Health (6), Resources (6), and Water (6); and meet the prerequisites CALGreen Mandatory, E5.2 , H6.1, J5.1, O1, O7.

The criteria for the green building practices listed below are described in the GreenPoint Rated Single Family Rating Manual. For more information please visit **www.builditgreen.org/greenpointrated**
Build It Green is not a code enforcement agency.
A home is only GreenPoint Rated if all features are verified by a Certified GreenPoint Rater through Build It Green.

New Home Multifamily v. 6.1

Points Targeted: 95.0

Certification Level: Silver



Lakehouse Commons - North

Measures		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	Notes
			Possible Points					
CALGreen								
Yes	**CALGreen Res** (REQUIRED)	4		1	1	1	1	
A. SITE								
No	**A1. Construction Footprint**	0				1		
	A2. Job Site Construction Waste Diversion							
Yes	A2.1 65% C&D Waste Diversion (**Including** Alternative Daily Cover)	2				2		Includes demolition waste
No	A2.2 65% C&D Waste Diversion (**Excluding** Alternative Daily Cover)	0				2		Excludes 3 material already 100% recycled
No	A2.3 Recycling Rates from Third-Party Verified Mixed-Use Waste Facility	0				1		
TBD	**A3. Recycled Content Base Material**					1		Class II aggregate ok
TBD	**A4. Heat Island Effect Reduction (Non-Roof)**			1				50% of impervious area SRI≥29% OR shaded OR covered parking with SRI≥29% (combine garage and hardscape)
TBD	**A5. Construction Environmental Quality Management Plan Including Flush-Out**				1			2 week flush out
	A6. Stormwater Control: Prescriptive Path							
No	A6.1 Permeable Paving Material	0					1	25% of hardscape
TBD	A6.2 Filtration and/or Bio-Retention Features						1	
No	A6.3 Non-Leaching Roofing Materials	0					1	
No	A6.4 Smart Stormwater Street Design	0	1					90% of hardscape flows into landscape
No	**A7. Stormwater Control: Performance Path**	0					3	
B. FOUNDATION								
No	**B1. Fly Ash and/or Slag in Concrete**	0				1		30% flyash/slag of all structural concrete
No	**B2. Radon-Resistant Construction**	0			2			
No	**B3. Foundation Drainage System**	0				2		
No	**B4. Moisture Controlled Crawlspace**	0			1			
	B5. Structural Pest Controls							
No	B5.1 Termite Shields and Separated Exterior Wood-to-Concrete Connections	0				1		Applies only to SF and MF low-rise Buildings
No	B5.2 Plant Trunks, Bases, or Stems at Least 36 Inches from the Foundation	0				1		
C. LANDSCAPE								
0.00%	Enter the landscape area percentage							Capped at 3 points for C1-C7,C9-C11 if under 15%
No	**C1. Plants Grouped by Water Needs (Hydrozoning)**	0					1	
No	**C2. Three Inches of Mulch in Planting Beds**	0					1	
	C3. Resource Efficient Landscapes							
No	C3.1 No Invasive Species Listed by Cal-IPC	0				1		
No	C3.2 Plants Chosen and Located to Grow to Natural Size	0				1		Minimal shearing of plants required. Excludes turf.

Lakehouse Commons - North

		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	
No	N8.2 Units with Multiple Bedrooms for Households Making 80% of AMI or Less	0	1					
No	N8.3 At Least 20% of Units at 120% AMI or Less are For Sale	0	1					
	N9. Mixed-Use Developments							
No	N9.1 Live/Work Units Include a Dedicated Commercial Entrance	0	1					
No	N9.2 At Least 2% of Development Floor Space Supports Mixed Use	0	1					
No	N9.3 Half of the Non-Residential Floor Space is Dedicated to Community Service	0	1					
O. OTHER								
Yes	**O1. GreenPoint Rated Checklist in Blueprints**	Y	R	R	R	R	R	
Yes	**O2. Pre-Construction Kickoff Meeting with Rater and Subcontractors**	2		0.5		1	0.5	
No	**O3. Orientation and Training to Occupants—Conduct Educational Walkthroughs**	0		0.5	0.5	0.5	0.5	
TBD	**O4. Builder's or Developer's Management Staff are Certified Green Building Professionals**			0.5	0.5	0.5	0.5	
No	**O5. Home System Monitors**	0		2			1	
	O6. Green Building Education							
TBD	O6.1 Marketing Green Building		2					
TBD	O6.2 Green Building Signage			0.5			0.5	
Yes	**O7. Green Appraisal Addendum**	Y	R	R	R	R	R	
No	**O8. Detailed Durability Plan and Third-Party Verification of Plan Implementation**	0				1		LEED for Homes standard
TBD	**O9. Residents Are Offered Free or Discounted Transit Passes**		2					
TBD	**O10. Vandalism Deterrence Practices and Vandalism Management Plan**					1		
P. DESIGN CONSIDERATIONS								
	P1. Acoustics: Noise and Vibration Control		1		1			
	Enter the number of Tier 1 practices							higher standard than code
	Enter the number of Tier 2 practices							
	P2. Mixed-Use Design Strategies							
No	P2.1 Tenant Improvement Requirements for Build-Outs	0			1		1	
No	P2.2 Commercial Loading Area Separated for Residential Area	0			1			
No	P2.3 Separate Mechanical and Plumbing Systems	0			1			
	P3. Commissioning							
No	P3.1 Design Phase	0		1	1			
No	P3.2 Construction Phase	0		1	1			
No	P3.3 Post-Construction Phase	0		1	1			
Yes	**P4. Building Enclosure Testing**	3		1	1	1		
INNOVATIONS								
TBD	**Enter Innovation 1 description here. Enter up to four points at right.**							
TBD	**Enter Innovation 2 description here. Enter up to four points at right.**							
TBD	**Enter Innovation 3 description here. Enter up to four points at right.**							
TBD	**Enter Innovation 4 description here. Enter up to four points at right.**							
	Summary		Community	Energy	IAQ/Health	Resources	Water	
	Total Available Points in Specific Categories	336	43	93	61	86	53	
	Minimum Points Required in Specific Categories	50	2	25	6	6	6	
	Total Points Targeted	**95.0**	**12.0**	**40.5**	**10.0**	**23.0**	**9.5**	

Lakehouse Commons - North

		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	
No	**I1. Pre-Plumbing for Solar Water Heating**	0		1				
TBD	**I2. Preparation for Future Photovoltaic Installation**			1				200 sq.ft of roof area plus structural
	I3. Onsite Renewable Generation (Solar PV, Solar Thermal, and Wind)			25				
	I4. Net Zero Energy Home							
No	I4.1 Near Zero Energy Home	0		2				
No	I4.2 Net Zero Electric	0		4				
Yes	**I5. Solar Hot Water Systems to Preheat Domestic Hot Water**	4		4				
No	**I6. Photovoltaic System for Multifamily Projects**	0		12				
J. BUILDING PERFORMANCE AND TESTING								
No	**J1. Third-Party Verification of Quality of Insulation Installation**	0			1			
No	**J2. Supply and Return Air Flow Testing**	0		1	1			
No	**J3. Mechanical Ventilation Testing and Low Leakage**	0			1			
No	**J4. Combustion Appliance Safety Testing**	0			1			
	J5. Building Performance Exceeds Title 24 Part 6							
0.10	J5.1 Home Outperforms Title 24	25		30+				
0.00%	J5.2 Non-Residential Spaces Outperform Title 24	0		15+				
Yes	**J6. Title 24 Prepared and Signed by a CABEC Certified Energy Analyst**	1		1				
TBD	**J7. Participation in Utility Program with Third-Party Plan Review**			1				
No	**J8. ENERGY STAR for Homes**	0		1				
No	**J9. EPA Indoor airPlus Certification**				1			
K. FINISHES								
	K1. Entryways Designed to Reduce Tracked-In Contaminants							
No	K1.1 Entryways to Individual Units	0			1			
Yes	K1.2 Entryways to Buildiings	1			1			6 ft. in direction of travel
No	**K2. Zero-VOC Interior Wall and Ceiling Paints**	0			2			
No	**K3. Low-VOC Caulks and Adhesives**	0			1			
	K4. Environmentally Preferable Materials for Interior Finish							
No	K4.1 Cabinets	0				2		
No	K4.2 Interior Trim	0				2		finger jointed pine qualifies
No	K4.3 Shelving	0				2		
No	K4.4 Doors	0				2		
No	K4.5 Countertops	0				1		
	K5. Formaldehyde Emissions in Interior Finish Exceed CARB							
No	K5.1 Doors	0			1			
TBD	K5.2 Cabinets and Countertops				2			CARB NAF standard
No	K5.3 Interior Trim and Shelving	0			2			
No	**K6. Products That Comply With the Health Product Declaration Open Standard**	0			2			
No	**K7. Indoor Air Formaldehyde Level Less Than 27 Parts Per Billion**	0			2			
No	**K8. Comprehensive Inclusion of Low Emitting Finishes**				1			
No	**K9. Durable Cabinets**	0			2			
No	**K10. At Least 25% of Interior Furniture Has Environmentally Preferable Attributes**	0			1			

Lakehouse Commons - North

		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	
No	C3.3 Drought Tolerant, California Native, Mediterranean Species, or Other Appropriate Species	0					3	Applies to 75% of landscaping. Includes turf.
	C4. Minimal Turf in Landscape							
Yes	C4.1 No Turf on Slopes Exceeding 10% and No Overhead Sprinklers Installed in Areas Less Than Eight Feet Wide	1					2	
≤25%	C4.2 Turf on a Small Percentage of Landscaped Area	1					2	
No	**C5. Trees to Moderate Building Temperature**	0	1	1			1	
No	**C6. High-Efficiency Irrigation System**	0					2	Non-turf areas ≤1.0gpm. Turf ≤1"/hour.
No	**C7. One Inch of Compost in the Top Six to Twelve Inches of Soil**	0					2	
No	**C8. Rainwater Harvesting System**	0					3	
No	**C9. Recycled Wastewater Irrigation System**	0					1	
Yes	**C10. Submeter or Dedicated Meter for Landscape Irrigation**	0					2	
No	**C11. Landscape Meets Water Budget**	0					2	
	C12. Environmentally Preferable Materials for Site							
No	C12.1 Environmentally Preferable Materials for 70% of Non-Plant Landscape Elements and Fencing	0				1		
TBD	C12.2 Play Structures and Surfaces Have an Average Recycled Content ≥20%					1		
Yes	**C13. Reduced Light Pollution**	1	1					
No	**C14. Large Stature Tree(s)**	0	1					
No	**C15. Third Party Landscape Program Certification**	0					1	Large stature≥50'. Existing trees ok. 1 tree per 15,000 SF
No	**C16. Maintenance Contract with Certified Professional**	0					1	
No	**C17. Community Garden**	0	2					
D. STRUCTURAL FRAME AND BUILDING ENVELOPE								
	D1. Optimal Value Engineering							
No	D1.1 Joists, Rafters, and Studs at 24 Inches on Center	0		1		2		
No	D1.2 Non-Load Bearing Door and Window Headers Sized for Load	0				1		
No	D1.3 Advanced Framing Measures	0				2		
No	**D2. Construction Material Efficiencies**	0				1		pre-assembled walls, floors or roof
	D3. Engineered Lumber							
No	D3.1 Engineered Beams and Headers	0				1		
No	D3.2 Wood I-Joists or Web Trusses for Floors	0				1		
No	D3.3 Enginered Lumber for Roof Rafters	0				1		Roof trusses do not qualify
No	D3.4 Engineered or Finger-Jointed Studs for Vertical Applications	0				1		
No	D3.5 OSB for Subfloor	0				0.5		
No	D3.6 OSB for Wall and Roof Sheathing	0				0.5		
No	**D4. Insulated Headers**	0		1				
	D5. FSC-Certified Wood							
No	D5.1 Dimensional Lumber, Studs, and Timber	0				6		
No	D5.2 Panel Products	0				3		
	D6. Solid Wall Systems							
No	D6.1 At Least 90% of Floors	0				1		
No	D6.2 At Least 90% of Exterior Walls	0		1		1		
No	D6.3 At Least 90% of Roofs	0		1		1		
No	**D7. Energy Heels on Roof Trusses**	0		1				Only buildings 3 stories and less
No	**D8. Overhangs and Gutters**	0		1		1		
	D9. Reduced Pollution Entering the Home from the Garage							
No	D9.1 Detached Garage	0			2			
Yes	D9.2 Mitigation Strategies for Attached Garage	1			1			CO Monitor
	D10. Structural Pest and Rot Controls							
No	D10.1 All Wood Located At Least 12 Inches Above the Soil	0				1		
No	D10.2 Wood Framing Treating With Borates or Factory-Impregnated, or Wall Materials Other Than Wood	0				1		
No	**D11. Moisture-Resistant Materials in Wet Areas (such as Kitchen, Bathrooms, Utility Rooms, and Basements)**	0			1	1		

PYATOK
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OAKLAND, CA 94612

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Phone | (619) 704–2700
Web | www.avrpstudios.com

LAKEHOUSE COMMONS
E 12th Street and Lake Merritt Boulevard, Oakland CA

URBAN CORE DEVELOPMENT, LLC
4096 Piedmont Avenue, Suite 313
Oakland, CA 94611

East Bay Asian Local Development Co.
1825 San Pablo Ave., Suite 200
Oakland, CA 94612

2016.04.29 Design Review

GREENPOINT CHECKLIST - NORTH COMMONS

JOB NUMBER: 1607
DATE: Issue Date
SCALE:

- PRELIMINARY - NOT FOR CONSTRUCTION -

T0.10

Lakehouse Commons - South

		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	
L. FLOORING								
≥20%	**L1. Environmentally Preferable Flooring**	1				3		If carpet is 25% of floor area & recycle content
≥75%	**L2. Low-Emitting Flooring Meets CDPH 2010 Standard Method—Residential**	3			3			
No	**L3. Durable Flooring**	0				1		
No	**L4. Thermal Mass Flooring**	0		1				
M. APPLIANCES AND LIGHTING								
Yes	**M1. ENERGY STAR® Dishwasher**	1					1	
TBD	**M2. CEE-Rated Clothes Washer**			1			2	Needs to meet MEF & WF
<20 cubic feet	**M3. Size-Efficient ENERGY STAR Refrigerator**	2		2				
	M4. Permanent Centers for Waste Reduction Strategies							
No	M4.1 Built-In Recycling Center	0					1	Two bins within the unit
No	M4.2 Built-In Composting Center	0					1	
	M5. Lighting Efficiency							
Yes	M5.1 High-Efficacy Lighting	2		2				No screw in lamps
No	M5.2 Lighting System Designed to IESNA Footcandle Standards or Designed by Lighting Consultant	0		2				
Yes	**M6. Central Laundry**	1					1	Tower building has in-unit laundry
Yes	**M7. Gearless Elevator**	1		1				Gearless/traction ok Geared/hydrolic No
N. COMMUNITY								
	N1. Smart Development							
Yes	N1.1 Infill Site	2	1			1		
No	N1.2 Designated Brownfield Site	0	1		1			
>35	N1.3 Conserve Resources by Increasing Density	4		2		2		
No	N1.4 Cluster Homes for Land Preservation	0	1			1		
	N1.5 Home Size Efficiency					9		
67%	Enter the area of the home, in square feet							
	Enter the number of bedrooms							1 bedroom projects get no points
Yes	**N2. Home(s)/Development Located Within 1/2 Mile of a Major Transit Stop**	2	2					
	N3. Pedestrian and Bicycle Access							
	N3.1 Pedestrian Access to Services Within 1/2 Mile of Community Services		2					
5	Enter the number of Tier 1 services							
	Enter the number of Tier 2 services							
No	N3.2 Connection to Pedestrian Pathways	0	1					
No	N3.3 Traffic Calming Strategies	0	1					
No	N3.4 Sidewalks Buffered from Roadways and S-8 Feet Wide	0	1					
No	N3.5 Bicycle Storage for Residents	1	1					15% of total occupants (2 people/1 bdrm)
No	N3.6 Bicycle Storage for Non-Residents	0	1					
1 space per unit	N3.7 Reduced Parking Capacity	2	2					
	N4. Outdoor Gathering Places							
Yes	N4.1 Public or Semi-Public Outdoor Gathering Places for Residents	1	1					Need either 25 or 50 sq ft depending on if density is less than 50 units/acre or greater
No	N4.2 Public Outdoor Gathering Places with Direct Access to Tier 1 Community Services	0	1					
	N5. Social Interaction							
Yes	N5.1 Residence Entries with Views to Callers	1	1					double peep holes or sidelights
No	N5.2 Entrances Visible from Street and/or Other Front Doors	0	1					
No	N5.3 Porches Oriented to Street and Public Space	0	1					
Yes	N5.4 Social Gathering Space	1	1					50 sq ft per unit of outdoor gathering space in the development
	N6. Passive Solar Design							
No	N6.1 Heating Load	0		2				
No	N6.2 Cooling Load	0		2				
	N7. Adaptable Building							
No	N7.1 Universal Design Principles in Units	0	1		1			
No	N7.2 Full-Function Independent Rental Unit	0	1					
	N8. Affordability							
≥25%	N8.1 Dedicated Units for Households Making 80% of AMI or Less	1	2					
No	N8.2 Units with Multiple Bedrooms for Households Making 80% of AMI or Less	0	1					
No	N8.3 At Least 20% of Units at 120% AMI or Less are For Sale	0	1					
	N9. Mixed-Use Developments							
No	N9.1 Live/Work Units Include a Dedicated Commercial Entrance	0	1					
No	N9.2 At Least 2% of Development Floor Space Supports Mixed Use	0	1					
No	N9.3 Half of the Non-Residential Floor Space is Dedicated to Community Service	0	1					
O. OTHER								
Yes	**O1. GreenPoint Rated Checklist in Blueprints**	Y	R	R	R	R	R	
Yes	**O2. Pre-Construction kickoff Meeting with Rater and Subcontractors**	2		0.5		1	0.5	
No	**O3. Orientation and Training to Occupants—Conduct Educational Walkthroughs**	0		0.5	0.5	0.5	0.5	
TBD	**O4. Builder's or Developer's Management Staff are Certified Green Building Professionals**			0.5	0.5	0.5	0.5	
No	**O5. Home System Monitors**	0		3			1	
	O6. Green Building Education							
TBD	O6.1 Marketing Green Building		2					
TBD	O6.2 Green Building Signage			0.5				
Yes	**O7. Green Appraisal Addendum**	Y	R	R	R	R	R	
No	**O8. Detailed Durability Plan and Third-Party Verification of Plan Implementation**	0				1		LEED for Homes standard
TBD	**O9. Residents Are Offered Free or Discounted Transit Passes**		2					
TBD	**O10. Vandalism Deterrence Practices and Vandalism Management Plan**					1		
P. DESIGN CONSIDERATIONS								
	P1. Acoustics: Noise and Vibration Control		1		1			
	Enter the number of Tier 1 practices							higher standard than code
	Enter the number of Tier 2 practices							
	P2. Mixed-Use Design Strategies							
No	P2.1 Tenant Improvement Requirements for Build-Outs	0			1		1	
No	P2.2 Commercial Loading Area Separated for Residential Area	0			1			
No	P2.3 Separate Mechanical and Plumbing Systems	0			1			
	P3. Commissioning							
No	P3.1 Design Phase	0		1	1			
No	P3.2 Construction Phase	0		1	1			
No	P3.3 Post-Construction Phase	0		1	1			
Yes	**P4. Building Enclosure Testing**	3		1	1	1		
INNOVATION								
TBD	**Enter innovation 1 description here. Enter up to four points at right.**							
TBD	**Enter innovation 2 description here. Enter up to four points at right.**							
TBD	**Enter innovation 3 description here. Enter up to four points at right.**							
TBD	**Enter innovation 4 description here. Enter up to four points at right.**							

Summary	Community	Energy	IAQ/Health	Resources	Water
Total Available Points in Specific Categories	336	43	93	61	86	53
Minimum Points Required in Specific Categories	50	2	25	6	6	6
Total Points Targeted	**87.0**	**12.0**	**40.5**	**10.0**	**14.0**	**10.5**

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Lakehouse Commons - South

		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	
E. EXTERIOR								
Yes	**E1. Environmentally Preferable Decking**	1				1		Check for local concrete production
Yes	**E2. Flashing Installation Third-Party Verified**	2				2		
No	**E3. Rain Screen Wall System**	0				2		
Yes	**E4. Durable and Non-Combustible Cladding Materials**	1				1		
	E5. Durable Roofing Materials							
Yes	E5.1 Durable and Fire Resistant Roofing Materials or Assembly	1				1		10 yr manf wrnty + 3 yr sub + class A
Yes	E5.2 Roofing Warranty for Shingle Roofing	Y	R	R	R	R	R	3 year sub + 20 year manfr warranty on shingle only.
No	**E6. Vegetated Roof**	0	2	2				
F. INSULATION								
	F1. Insulation with 30% Post-Consumer or 60% Post-Industrial Recycled Content							
No	F1.1 Walls and Floors	0				1		Buildings are concrete and metal frame
No	F1.2 Ceilings	0				1		
	F2. Insulation that Meets the CDPH Standard Method—Residential for Low Emissions							
TBD	F2.1 Walls and Floors				1			
TBD	F2.2 Ceilings				1			
	F3. Insulation That Does Not Contain Fire Retardants							
No	F3.1 Cavity Walls and Floors	0			1			
No	F3.2 Ceilings	0			1			
No	F3.3 Interior and Exterior Insulation	0			1			
G. PLUMBING								
	G1. Efficient Distribution of Domestic Hot Water							
Yes	G1.1 Insulated Hot Water Pipes	1		1				
No	G1.2 Water/Steme Volume Limit for Hot Water Distribution	0					1	
No	G1.3 Increased Efficiency in Hot Water Distribution	0					2	
	G2. Install Water-Efficient Fixtures							
Yes	G2.1 WaterSense Showerheads with Matching Compensation Valve	2					2	
Yes	G2.2 WaterSense Bathroom Faucets	1					1	
Yes	G2.3 WaterSense Toilets with a Maximum Performance (MaP) Threshold of No Less Than 550 Grams	1					1	
No	G2.4 Urinals with Flush Rate of ≤ 0.1 Gallons/Flush	0					1	
No	**G3. Pre-Plumbing for Graywater System**	0					1	
No	**G4. Operational Graywater System**	0					3	
No	**G5. Submeter Water for Tenants**	0					2	Hot & Cold
H. HEATING, VENTILATION, AND AIR CONDITIONING								
	H1. Sealed Combustion Units							
Yes	H1.1 Combustion Furnace	1			1			
Yes	H1.2 Sealed Combustion Water Heater	2			2			Heatpump Water heater, power vented, unit outside of building all count
No	**H2. High Performing Zoned Hydronic Radiant Heating System**	0		1	1			
	H3. Effective Ductwork							
TBD	H3.1 Duct Mastic on Duct Joints and Seams			1				
No	H3.2 Pressure Balance the Ductwork System	0		1				
No	**H4. ENERGY STAR® Bathroom Fans Per HVI Standards with Air Flow Verified**	0			1			
	H5. Advanced Practices for Cooling							
No	H5.1 ENERGY STAR Ceiling Fans in Living Areas and Bedrooms	0		1				
No	H5.2 Operable Windows and Skylights Located to Induce Cross Ventilation in At Least One Room in 80% of Units	0		1				
	H6. Whole House Mechanical Ventilation Practices to Improve Indoor Air Quality							
Yes	H6.1 Meet ASHRAE Standard 62.2-2012 Ventilation Residential Standards	Y	R	R	R	R	R	
No	H6.2 Advanced Ventilation Standards	0			1			
No	H6.3 Outdoor Air Ducted to Bedroom and Living Areas	0			2			
	H7. Effective Range Design and Installation							
No	H7.1 Effective Range Hood Ducting and Design	0			1			
No	H7.2 Automatic Range Hood Control	0			1			
I. RENEWABLE ENERGY								
No	**I1. Pre-Plumbing for Solar Water Heating**	0		1				
TBD	**I2. Preparation for Future Photovoltaic Installation**			1				200 sq ft of roof area plus structural
	I3. Onsite Renewable Generation (Solar PV, Solar Thermal, and Wind)			25				
	I4. Net Zero Energy Home							
No	I4.1 Near Zero Energy Home	0		2				
No	I4.2 Net Zero Electric	0		4				
No	**I5. Solar Hot Water Systems to Preheat Domestic Hot Water**	0		4				
No	**I6. Photovoltaic System for Multifamily Projects**	0		12				
J. BUILDING PERFORMANCE AND TESTING								
No	**J1. Third-Party Verification of Quality of Insulation Installation**	0				1		
No	**J2. Supply and Return Air Flow Testing**	0			1			
No	**J3. Mechanical Ventilation Testing and Low Leakage**	0				1		
No	**J4. Combustion Appliance Safety Testing**	0				1		
	J5. Building Performance Exceeds Title 24 Part 6							
0.10	J5.1 Home Outperforms Title 24	25		30+				
0.00%	J5.2 Non-Residential Spaces Outperform Title 24	0		15+				
Yes	**J6. Title 24 Prepared and Signed by a CABEC Certified Energy Analyst**	1		1				
Yes	**J7. Participation in Utility Program with Third-Party Plan Review**	1		1				
No	**J8. ENERGY STAR for Homes**	0		1				
No	**J9. EPA Indoor airPlus Certification**				1			
K. FINISHES								
	K1. Entryways Designed to Reduce Tracked-In Contaminants							
No	K1.1 Entryways to Individual Units	0			1			
Yes	K1.2 Entryways to Buildings	1			1			6 ft. in direction of travel
No	**K2. Zero-VOC Interior Wall and Ceiling Paints**	0			2			
No	**K3. Low-VOC Caulks and Adhesives**	0			1			
	K4. Environmentally Preferable Materials for Interior Finish							
No	K4.1 Cabinets	0				2		
No	K4.2 Interior Trim	0				2		finger jointed pine qualifies
No	K4.3 Shelving	0				2		
No	K4.4 Doors	0				2		
No	K4.5 Countertops	0				1		
	K5. Formaldehyde Emissions in Interior Finish Exceed CARB							
No	K5.1 Doors	0			1			
TBD	K5.2 Cabinets and Countertops				2			CARB NAF standard
No	K5.3 Interior Trim and Shelving	0			2			
No	**K6. Products That Comply With the Health Product Declaration Open Standard**	0			2			
No	**K7. Indoor Air Formaldehyde Level Less Than 27 Parts Per Billion**	0			2			
No	**K8. Comprehensive Inclusion of Low Emitting Finishes**				1			
No	**K9. Durable Cabinets**	0			2			
No	**K10. At Least 25% of Interior Furniture Has Environmentally Preferable Attributes**	0			1			

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GreenPoint Rated — A Program by Build It Green

NEW HOME RATING SYSTEM, VERSION 6.1

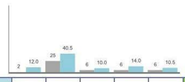
MULTIFAMILY

The GreenPoint Rated checklist tracks green features incorporated into the home. GreenPoint Rated is administered by Build It Green, a non-profit whose mission is to promote healthy, energy and resource efficient buildings in California.
The minimum requirements of GreenPoint Rated are: verification of 50 or more points; Earn the following minimum points per category: Community (2) Energy (25), Indoor Air Quality/Health (6), Resources (6), and Water (6); and meet the prerequisites CALGreen Mandatory, ES.2 , HE.1, J5.1, O1, O7.

The criteria for the green building practices listed below are described in the GreenPoint Rated Single Family Rating Manual. For more information please visit **www.builditgreen.org/greenpointrated**.
Build It Green is not a code enforcement agency.
A home is only GreenPoint Rated if all features are verified by a Certified GreenPoint Rater through Build It Green.

New Home Multifamily v. 6.1

Points Targeted: 87.0
Certification Level: Silver



Lakehouse Commons - South

Measures	Points Targeted	Community	Energy	IAQ/Health	Resources	Water	Notes
		Possible Points					
CALGreen							
Yes	**CALGreen Res (REQUIRED)**	4		1	1	1	1	
A. SITE								
No	**A1. Construction Footprint**	0				1		
	A2. Job Site Construction Waste Diversion							
Yes	A2.1 65% C&D Waste Diversion **(including** Alternative Daily Cover)	2				2		Includes demolition waste
No	A2.2 65% C&D Waste Diversion **(Excluding** Alternative Daily Cover)	0				2		Excludes 3 material already 100% recycled
No	A2.3 Recycling Rates from Third-Party Verified Mixed-Use Waste Facility	0				1		
TBD	**A3. Recycled Content Base Material**					1		Class II aggregate ok
TBD	**A4. Heat Island Effect Reduction (Non-Roof)**			1				50% of impervious area SRI≥29% OR shaded OR covered parking with SRI≥29% (combine garage and hardscape)
TBD	**A5. Construction Environmental Quality Management Plan Including Flush-Out**				1			2 week flush out
	A6. Stormwater Control: Prescriptive Path							
No	A6.1 Permeable Paving Material	0					1	25% of hardscape
TBD	A6.2 Filtration and/or Bio-Retention Features						1	
No	A6.3 Non-Leaching Roofing Materials	0					1	
No	A6.4 Smart Stormwater Street Design	0	1					90% of hardscape flows into landscape
No	**A7. Stormwater Control: Performance Path**	0					3	
B. FOUNDATION								
No	**B1. Fly Ash and/or Slag in Concrete**	0				1		30% flyash/slag of all structural concrete
No	**B2. Radon-Resistant Construction**	0			2			
No	**B3. Foundation Drainage System**	0				2		
No	**B4. Moisture Controlled Crawlspace**	0			1			
	B5. Structural Pest Controls							
No	B5.1 Termite Shields and Separated Exterior Wood-to-Concrete Connections	0				1		Applies only to SF and MF low-rise Buildings
No	B5.2 Plant Trunks, Bases, or Stems at Least 36 Inches from the Foundation	0				1		
C. LANDSCAPE								
0.00%	Enter the landscape area percentage							Capped at 3 points for C1-c7,C9-C11 if under 15%
No	**C1. Plants Grouped by Water Needs (Hydrozoning)**	0					1	
No	**C2. Three Inches of Mulch in Planting Beds**	0					1	
	C3. Resource Efficient Landscapes							
No	C3.1 No Invasive Species Listed by Cal-IPC	0				1		
No	C3.2 Plants Chosen and Located to Grow to Natural Size	0				1		Minimal shearing of plants required. Excludes turf.
No	C3.3 Drought Tolerant, California Native, Mediterranean Species, or Other Appropriate Species	0					3	Applies to 75% of landscaping. Includes turf.
	C4. Minimal Turf in Landscape							
Yes	C4.1 No Turf on Slopes Exceeding 10% and No Overhead Sprinklers Installed in Areas Less Than Eight Feet Wide	1					2	
≤25%	C4.2 Turf on a Small Percentage of Landscaped Area	1					2	
No	**C5. Trees to Moderate Building Temperature**	4	1		1		1	
No	**C6. High-Efficiency Irrigation System**	0					2	Non-turf areas ≤1.0gpm. Turf ≤1"/hour.
No	**C7. One Inch of Compost in the Top Six to Twelve Inches of Soil**	0					2	
No	**C8. Rainwater Harvesting System**	0					3	
No	**C9. Recycled Wastewater Irrigation System**	0					1	
Yes	**C10. Submeter or Dedicated Meter for Landscape Irrigation**	0					2	
No	**C11. Landscape Meets Water Budget**	0					2	
	C12. Environmentally Preferable Materials for Site							
No	C12.1 Environmentally Preferable Materials for 70% of Non-Plant Landscape Elements and Fencing	0				1		
TBD	C12.2 Play Structures and Surfaces Have an Average Recycled Content ≥20%					1		
Yes	**C13. Reduced Light Pollution**	1	1					
No	**C14. Large Stature Tree(s)**	0	1					
No	**C15. Third Party Landscape Program Certification**	0					1	Large statures≥50'. Existing trees ok. 1 tree per 15,000 SF
No	**C16. Maintenance Contract with Certified Professional**	0					1	
No	**C17. Community Garden**	0	2					
D. STRUCTURAL FRAME AND BUILDING ENVELOPE								
	D1. Optimal Value Engineering							
No	D1.1 Joists, Rafters, and Studs at 24 Inches on Center	0		1		2		
No	D1.2 Non-Load Bearing Door and Window Headers Sized for Load	0				1		
No	D1.3 Advanced Framing Measures	0				2		
No	**D2. Construction Material Efficiencies**	0				1		pre-assembled walls, floors or roof
	D3. Engineered Lumber							
No	D3.1 Engineered Beams and Headers	0				1		
No	D3.2 Wood I-Joists or Web Trusses for Floors	0				1		
No	D3.3 Engineered Lumber for Roof Rafters	0				1		Roof trusses do not qualify
No	D3.4 Engineered or Finger-Jointed Studs for Vertical Applications	0				1		
No	D3.5 OSB for Subfloor	0				0.5		
No	D3.6 OSB for Wall and Roof Sheathing	0				0.5		
No	**D4. Insulated Headers**	0	1	1				
	D5. FSC-Certified Wood							
No	D5.1 Dimensional Lumber, Studs, and Timber	0				6		
No	D5.2 Panel Products	0				3		
	D6. Solid Wall Systems							
No	D6.1 At Least 90% of Floors	0				1		
No	D6.2 At Least 90% of Exterior Walls	0		1		1		
No	D6.3 At Least 90% of Roofs	0		1		1		
No	**D7. Energy Heels on Roof Trusses**	0		1				Only buildings 3 stories and less
No	**D8. Overhangs and Gutters**	0		1		1		
	D9. Reduced Pollution Entering the Home from the Garage							
No	D9.1 Detached Garage	0			2			
Yes	D9.2 Mitigation Strategies for Attached Garage	1			1			CO Monitor
	D10. Structural Pest and Rot Controls							
No	D10.1 All Wood Located At Least 12 Inches Above the Soil	0				1		
No	D10.2 Wood Framing Treating With Borates or Factory-Impregnated, or Wall Materials Other Than Wood	0				1		
No	**D11. Moisture-Resistant Materials in Wet Areas (such as Kitchen, Bathrooms, Utility Rooms, and Basements)**	0			1	1		

Draft GreenPoint Rated New Home Multi Family Version 6.0

PYATOK
1611 TELEGRAPH AVE. SUITE 200
OAKLAND, CA 94612

510.465.7010 p | 510.465.8575 f
www.pyatok.com

AVRP Studios

703 16th Street, Suite 200
San Diego, CA 92101
Phone | (619) 704–2700
Web | www.avrpstudios.com

LAKEHOUSE COMMONS

E 12th Street and Lake Merritt Boulevard, Oakland CA

URBAN CORE DEVELOPMENT, LLC
4096 Piedmont Avenue, Suite 313
Oakland, CA 94611

East Bay Asian Local Development Co.
1825 San Pablo Ave., Suite 200
Oakland, CA 94612

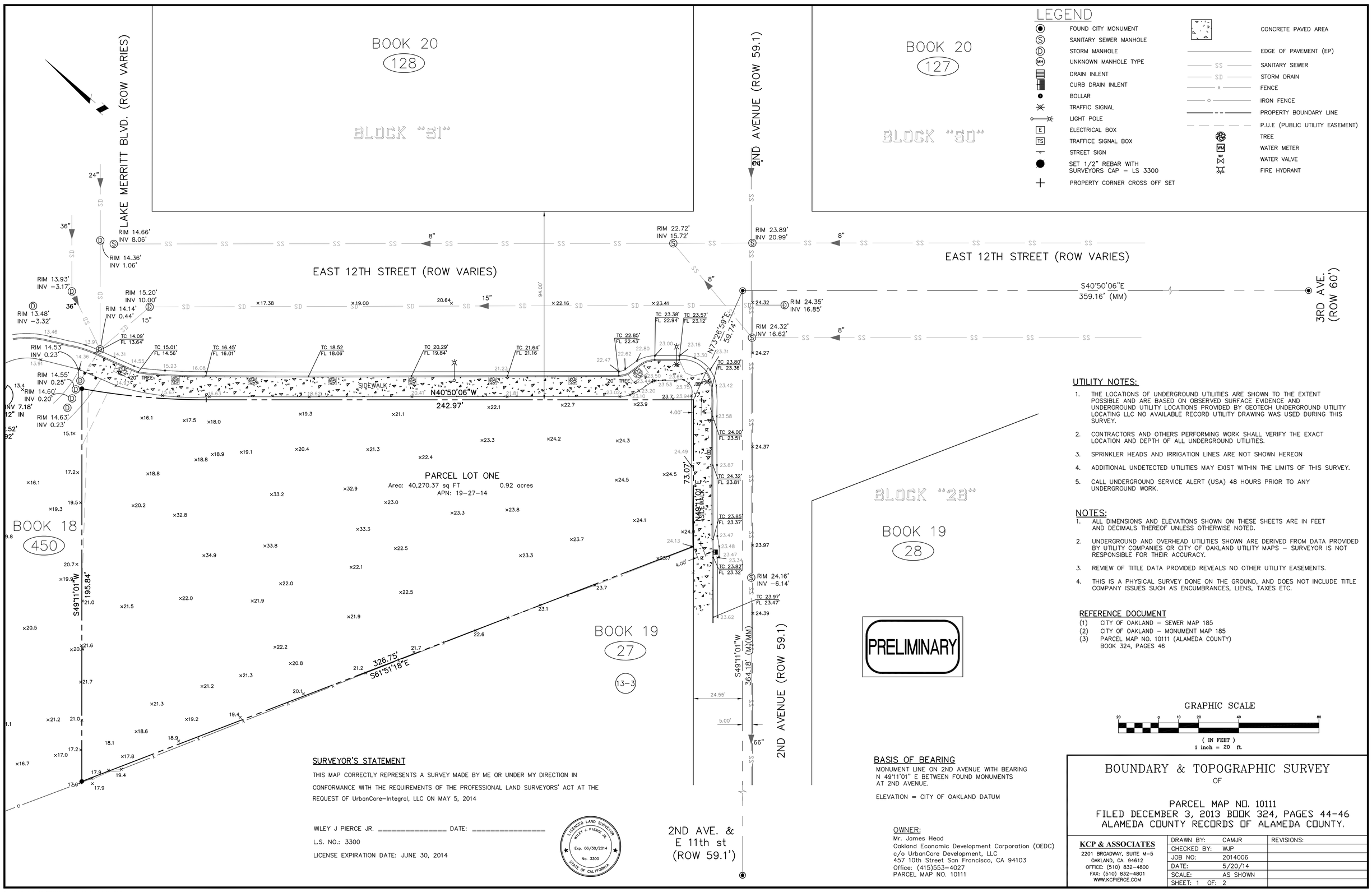
2016.04.29 Design Review

GREENPOINT CHECKLIST - SOUTH COMMONS

JOB NUMBER: 1607
DATE: Issue Date
SCALE:

- PRELIMINARY - NOT FOR CONSTRUCTION -

T0.11



LEGEND

- FOUND CITY MONUMENT
- SANITARY SEWER MANHOLE
- STORM MANHOLE
- UNKNOWN MANHOLE TYPE
- DRAIN INLENT
- CURB DRAIN INLENT
- BOLLAR
- TRAFFIC SIGNAL
- LIGHT POLE
- ELECTRICAL BOX
- TRAFFICE SIGNAL BOX
- STREET SIGN
- SET 1/2" REBAR WITH SURVEYORS CAP – LS 3300
- PROPERTY CORNER CROSS OFF SET
- CONCRETE PAVED AREA
- EDGE OF PAVEMENT (EP)
- SANITARY SEWER
- STORM DRAIN
- FENCE
- IRON FENCE
- PROPERTY BOUNDARY LINE
- P.U.E (PUBLIC UTILITY EASEMENT)
- TREE
- WATER METER
- WATER VALVE
- FIRE HYDRANT

UTILITY NOTES:

1. THE LOCATIONS OF UNDERGROUND UTILITIES ARE SHOWN TO THE EXTENT POSSIBLE AND ARE BASED ON OBSERVED SURFACE EVIDENCE AND UNDERGROUND UTILITY LOCATIONS PROVIDED BY GEOTECH UNDERGROUND UTILITY LOCATING LLC NO AVAILABLE RECORD UTILITY DRAWING WAS USED DURING THIS SURVEY.
2. CONTRACTORS AND OTHERS PERFORMING WORK SHALL VERIFY THE EXACT LOCATION AND DEPTH OF ALL UNDERGROUND UTILITIES.
3. SPRINKLER HEADS AND IRRIGATION LINES ARE NOT SHOWN HEREON
4. ADDITIONAL UNDETECTED UTILITIES MAY EXIST WITHIN THE LIMITS OF THIS SURVEY.
5. CALL UNDERGROUND SERVICE ALERT (USA) 48 HOURS PRIOR TO ANY UNDERGROUND WORK.

NOTES:

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3. REVIEW OF TITLE DATA PROVIDED REVEALS NO OTHER UTILITY EASEMENTS.
4. THIS IS A PHYSICAL SURVEY DONE ON THE GROUND, AND DOES NOT INCLUDE TITLE COMPANY ISSUES SUCH AS ENCUMBRANCES, LIENS, TAXES ETC.

REFERENCE DOCUMENT

(1) CITY OF OAKLAND – SEWER MAP 185
(2) CITY OF OAKLAND – MONUMENT MAP 185
(3) PARCEL MAP NO. 10111 (ALAMEDA COUNTY) BOOK 324, PAGES 46

PRELIMINARY

GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)
1 inch = 20 ft.

SURVEYOR'S STATEMENT

THIS MAP CORRECTLY REPRESENTS A SURVEY MADE BY ME OR UNDER MY DIRECTION IN CONFORMANCE WITH THE REQUIREMENTS OF THE PROFESSIONAL LAND SURVEYORS' ACT AT THE REQUEST OF UrbanCore–Integral, LLC ON MAY 5, 2014

WILEY J PIERCE JR. _____ DATE: _____

L.S. NO.: 3300

LICENSE EXPIRATION DATE: JUNE 30, 2014

LICENSED LAND SURVEYOR WILEY J. PIERCE JR. Exp. 06/30/2014 No. 3300 STATE OF CALIFORNIA

BASIS OF BEARING

MONUMENT LINE ON 2ND AVENUE WITH BEARING N 49°11'01" E BETWEEN FOUND MONUMENTS AT 2ND AVENUE.

ELEVATION = CITY OF OAKLAND DATUM

OWNER:

Mr. James Head
Oakland Economic Development Corporation (OEDC)
c/o UrbanCore Development, LLC
457 10th Street San Francisco, CA 94103
Office: (415)553-4027
PARCEL MAP NO. 10111

BOUNDARY & TOPOGRAPHIC SURVEY

OF

PARCEL MAP NO. 10111
FILED DECEMBER 3, 2013 BOOK 324, PAGES 44-46
ALAMEDA COUNTY RECORDS OF ALAMEDA COUNTY.

KCP & ASSOCIATES
2201 BROADWAY, SUITE M-5
OAKLAND, CA. 94612
OFFICE: (510) 832-4800
FAX: (510) 832-4801
WWW.KCPIERCE.COM

DRAWN BY:	CAMJR	REVISIONS:
CHECKED BY:	WJP	
JOB NO:	2014006	
DATE:	5/20/14	
SCALE:	AS SHOWN	
SHEET: 1 OF: 2		

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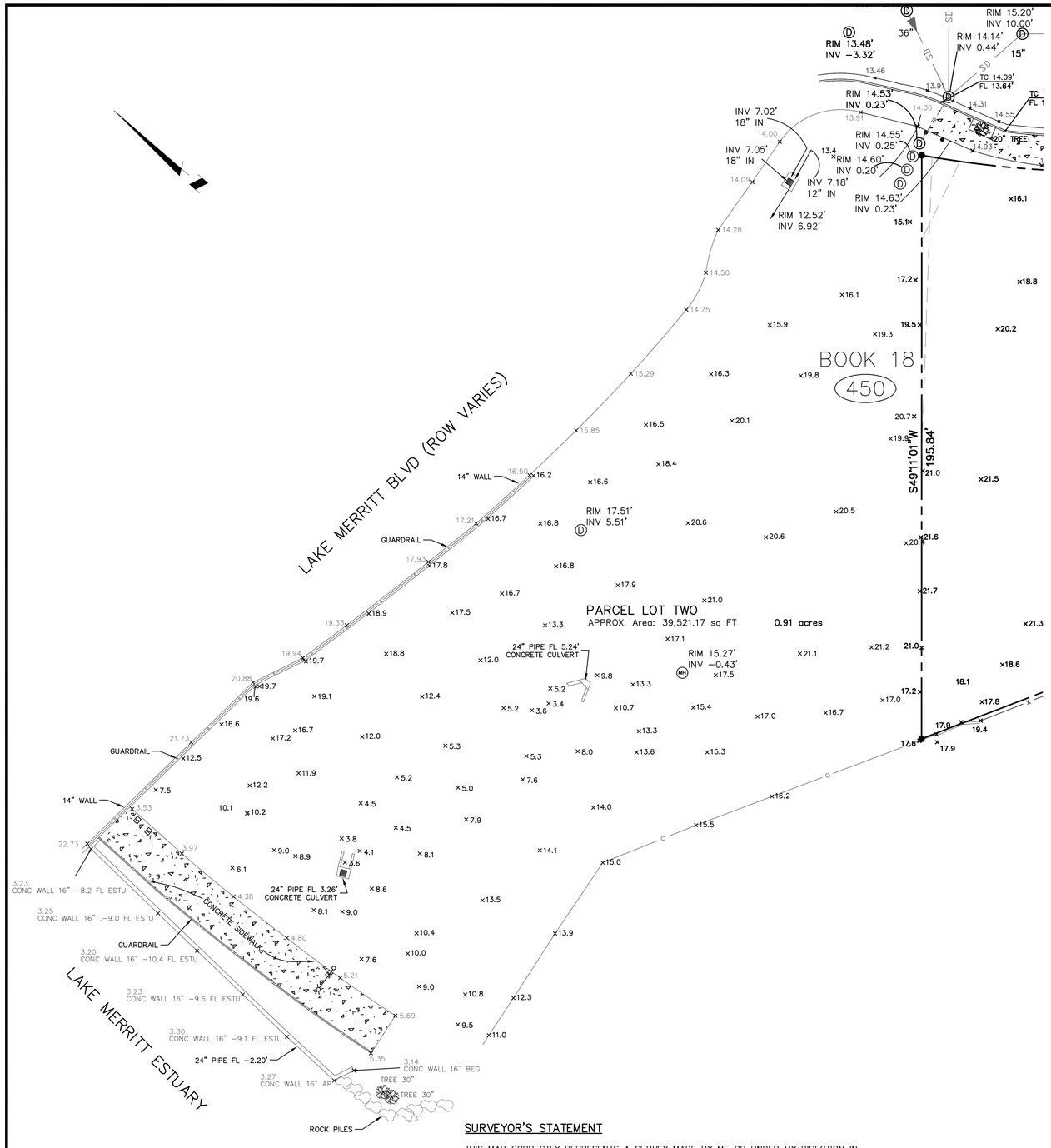

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- STORM MANHOLE
- UNKNOWN MANHOLE TYPE
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- TREE
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L.S. NO.: 3300

LICENSE EXPIRATION DATE: JUNE 30, 2014

LICENSED LAND SURVEYOR
WILEY J. PIERCE JR.
Exp. 06/30/2014
No. 3300
STATE OF CALIFORNIA

BASIS OF BEARING

MONUMENT LINE ON 2ND AVENUE WITH BEARING N 49°11'01" E BETWEEN FOUND MONUMENTS AT 2ND AVENUE.

ELEVATION = CITY OF OAKLAND DATUM

OWNER:
Mr. James Head
Oakland Economic Development Corporation (OEDC)
c/o UrbanCore Development, LLC
457 10th Street San Francisco, CA 94103
Office: (415)553–4027
PARCEL MAP NO. 10111

BOUNDARY & TOPOGRAPHIC SURVEY

OF

PARCEL MAP NO. 10111
FILED DECEMBER 3, 2013 BOOK 324, PAGES 44–46
ALAMEDA COUNTY RECORDS OF ALAMEDA COUNTY.

KCP & ASSOCIATES
2201 BROADWAY, SUITE M–5
OAKLAND, CA. 94612
OFFICE: (510) 832–4800
FAX: (510) 832–4801
WWW.KCPIERCE.COM

DRAWN BY:	CAMJR	REVISIONS:
CHECKED BY:	WJP	
JOB NO:	2014006	
DATE:	5/20/14	
SCALE:	AS SHOWN	
SHEET: 2 OF: 2		

D:\Land Projects R2\2014006 Lake_Merritt\dwg\LakeMerritt.dwg

LAKE MERRITT TOWERS & PARK SITE PLAN

PARK DESIGN INTENT

The park is to be a passive green open space consisting of mostly native plantings of groundcover, shrubs and trees appropriate for the lakeside setting. A large section of the park will be used to treat stormwater runoff from the bridge. Visibility though the park in all directions will be integral in keeping the park safe. The groundcover will be low maintenance grasses and wildflowers requiring mowing once or twice a year. Temporary irrigation will be used for two to three years to establish the trees and shrubs. All plantings will adhere to Bay Friendly practices and follow the state's Water Efficient Landscape Ordinance.

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2016.04.29	Design Review

LANDSCAPE- PLAN SITE

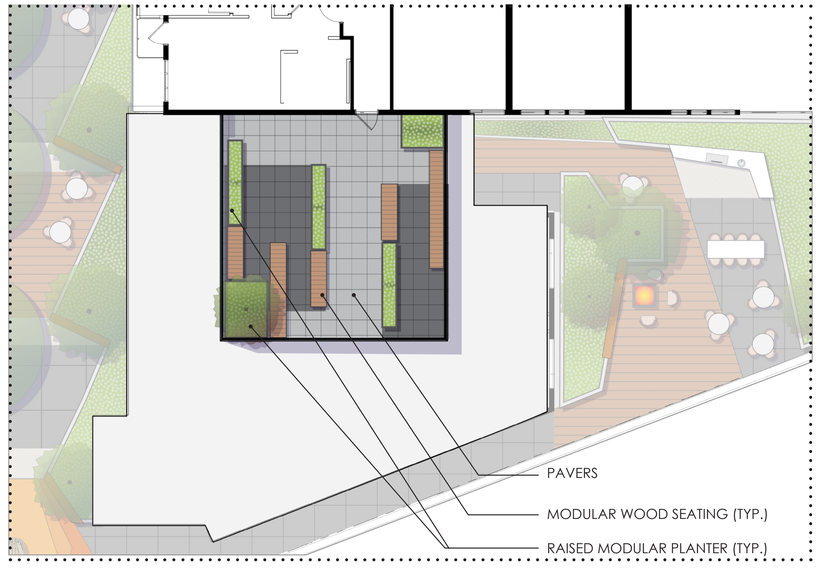
JOB NUMBER:	
DATE:	4/29/16
SCALE:	1"=20'

- PRELIMINARY - NOT FOR CONSTRUCTION -

L0.01

LAKE MERRITT TOWERS // LEVEL 3 PODIUM PLAN

LEVEL 7 TERRACE PLAN



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LANDSCAPE-PLAN PODIUM

JOB NUMBER:	
DATE:	4/29/16
SCALE:	1"=10'

- PRELIMINARY - NOT FOR CONSTRUCTION -

L0.02

PODIUM PALETTE

AMENITIES

GROUP LOUNGE AREA WITH FIRE PIT

HOT TUB

OUTDOOR KITCHEN

PLAY STRUCTURE

SITE FURNISHINGS

MOVEABLE FURNITURE

MOVEABLE DINING

OUTDOOR DINING TABLE

SEATING ALONG PLANTER

PAVING MATERIALS

WOOD DECKING

COLORED AND TEXTURED
CONCRETE TOPPING SLAB

NATURAL STONE PAVERS

STORMWATER TREATMENT & PLANTING

BIOREMEDIATION FLOW THROUGH
PLANTER

SHADE TREES

RED MAPLE
ACER RUBRUM

CRAPE MYRTLE
LAGERSTROEMIA INDICA

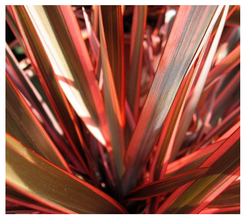
SMALL FLOWERING TREES

WESTERN REDBUD
CERCIS OCCIDENTALIS

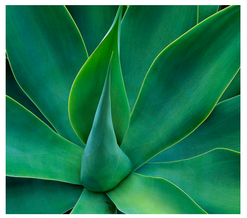
STRAWBERRY TREE
ARBUTUS 'MARINA'

PINEAPPLE GUAVA
FEIJOA SELLOWIANA

TALL PLANTING



NEW ZEALAND FLAX
PHORMIUM TENAX



FOX TAIL AGAVE
AGAVE ATTENUATA

BLUE FINGER
SENECIO MANDRALISCAE

MEDITERRANEAN SPURGE
EUPHORBIA CHARACIAS

KANGAROO PAW
ANIGOZANTHOS

GROUND COVER

CAPE RUSH
CHONDROPETALUM TECTORUM

DUNE SEDGE
CAREX PANSA

CROCOSMIA 'LUCIFER'

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LANDSCAPE
PODIUM MATERIALS

JOB NUMBER:
DATE: 4/29/16
SCALE: NTS

- PRELIMINARY - NOT FOR CONSTRUCTION -

L0.03

INITIAL PLANTING LIST FOR LAKE MERRITT TOWERS PARK

LARGE TREES

COAST LIVE OAK
QUERCUS AGRIFOLIA

VALLEY OAK
QUERCUS LOBATA

FLOWERING TREES

WESTERN REDBUD
CERCIS OCCIDENTALIS

CALIFORNIA BUCKEYE
AESCULUS CALIFORNICUS

CALIFORNIA ELDERBERRY
SAMBUCUS MEXICANA

SHRUBS

ARCTOSTAPHYLLOS HOOKERI
WAYSIDE

CEANOTHUS GLORIOSUS
POINT REYES

ROSA CALIFORNICUS
CALIFORNIA WILD ROSE

ZAUSCHNERIA CALIFORNICA
CALIFORNIA FUCHSIA

GROUND COVER

JUNCUS PATENS
CAREX PANSA

ACHILLEA MILLEFOLIUM
GOLDEN YARROW

ESCHSCHOLZIA CALIFORNICA
CALIFORNIA POPPY

IRIS DOUGLASIANA
DOUGLAS IRIS

WYETHIA ANGUSTIFOLIA
MULES EARS

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LANDSCAPE
PARK MATERIALS

JOB NUMBER:
DATE: 4/29/16
SCALE: NTS

- PRELIMINARY - NOT FOR CONSTRUCTION -

L0.04

LAKE MERRITT TOWERS // STORMWATE CALCULATIONS

DRAINAGE MANAGEMENT AREAS

DRAINAGE MANAGEMENT AREA	TOTAL SURFACE AREA (SF)	TOTAL LANDSCAPING (SELF-TREATING) (SF)	TOTAL IMPERVIOUS SURFACES (SF)	TREATMENT AREA REQUIRED (SF)
AREA 1	1836	82	1836	73
AREA 2	1638	425	1638	66
AREA 3	1226	82	1226	49
AREA 4	1241	348	1241	49
AREA 5	1183	82	1183	47
AREA 6	1222	244	1222	49
AREA 7	1941	609	1941	78
AREA 8	2073	100	2073	83
AREA 9	5861	260	5861	234
AREA 10	4950	130	4950	198
AREA 11	3108	228	3108	124
PODIUM PAVING (MECHANICALLY TREATED)	7911			
		TOTAL	**26279**	**1050**

TREATMENT AREAS

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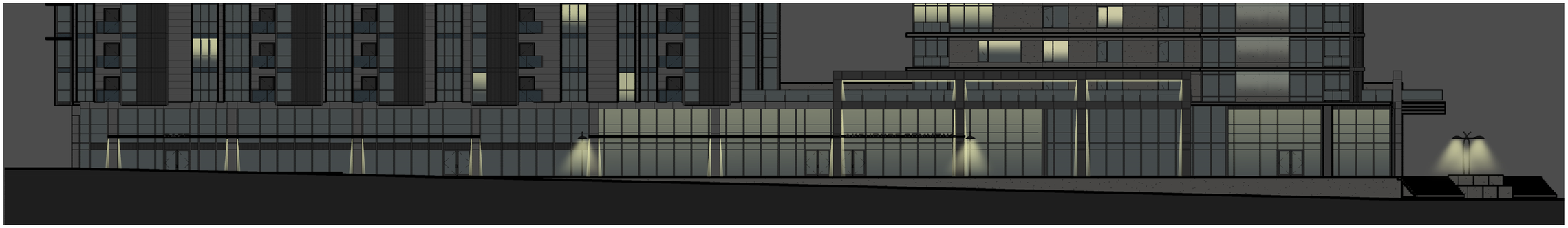
LANDSCAPE STORMWATER CALCULATIONS

JOB NUMBER:
DATE: 4/29/16
SCALE: NTS

- PRELIMINARY - NOT FOR CONSTRUCTION -

L0.05



2 12TH STREET ENLARGED ELEVATION -WEST

3/32" = 1'-0"

1 BUILDING PLAN - LEVEL 1

3/32" = 1'-0"

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ILLUMINOSA LIGHTING CONCEPT DESIGN

JOB NUMBER: 1607

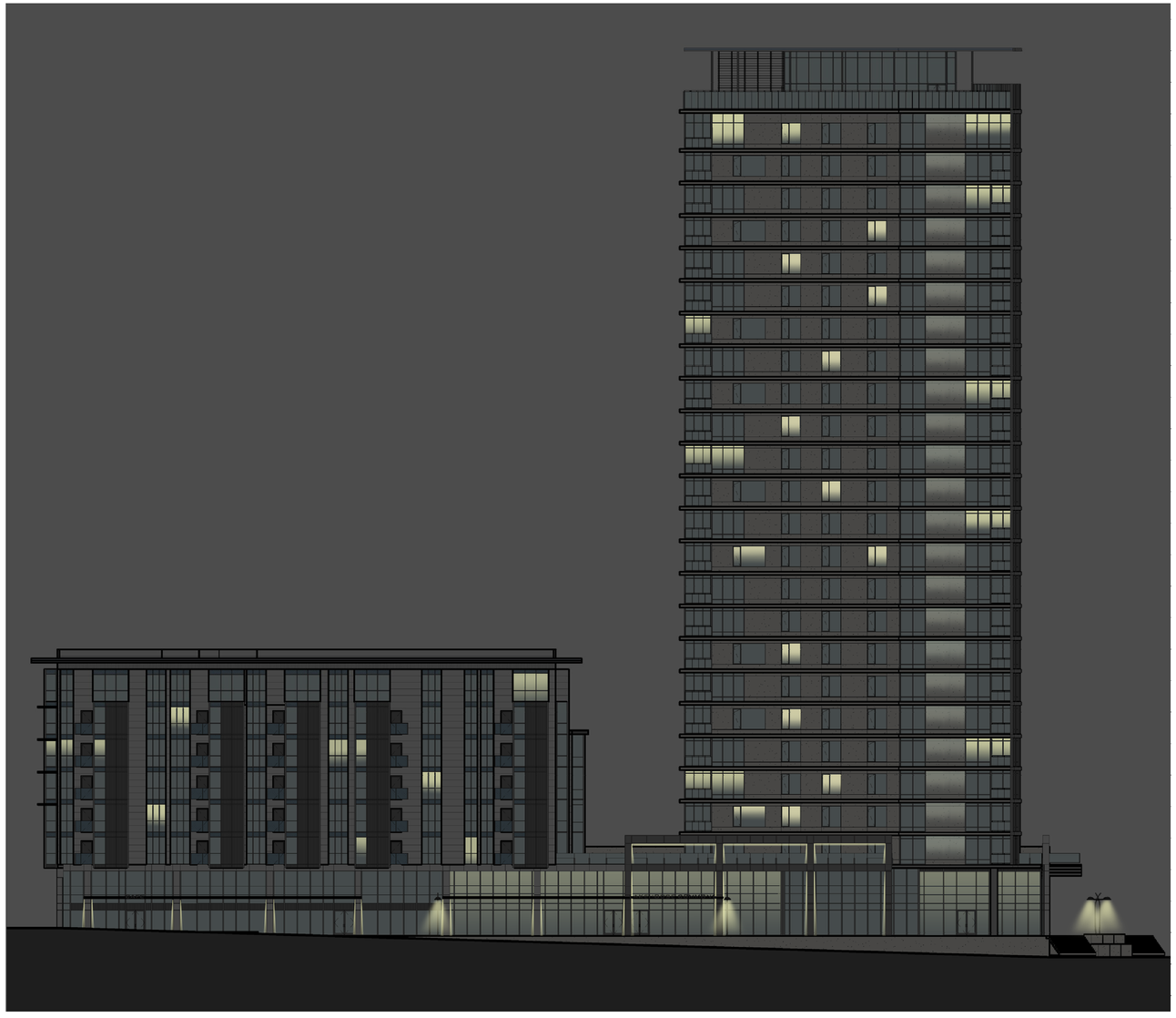
DATE: Issue Date

SCALE: 3/32" = 1'-0"

- PRELIMINARY - NOT FOR CONSTRUCTION -

AL.01

2 Perspective View - East 12th St and Lake Merritt Blvd



1 12TH STREET ELEVATION - WEST
1" = 20'-0"

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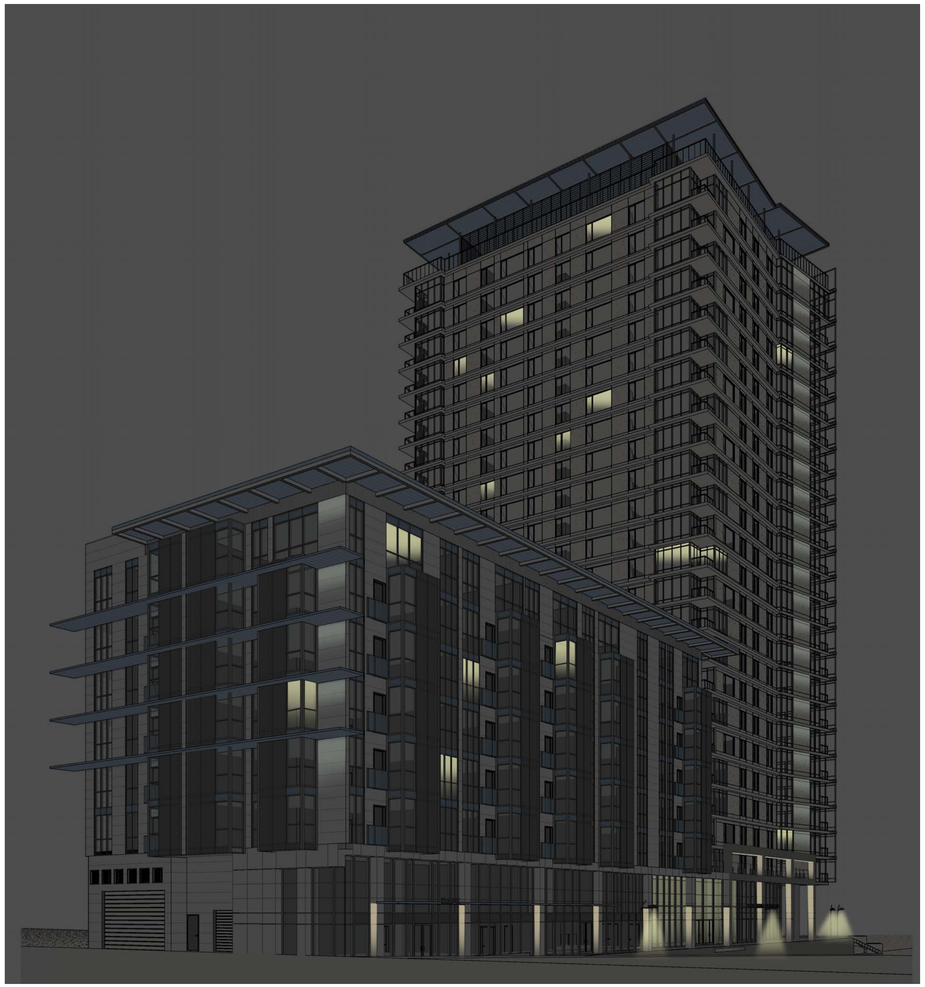
ILLUMINOSA
LIGHTING CONCEPT
DESIGN

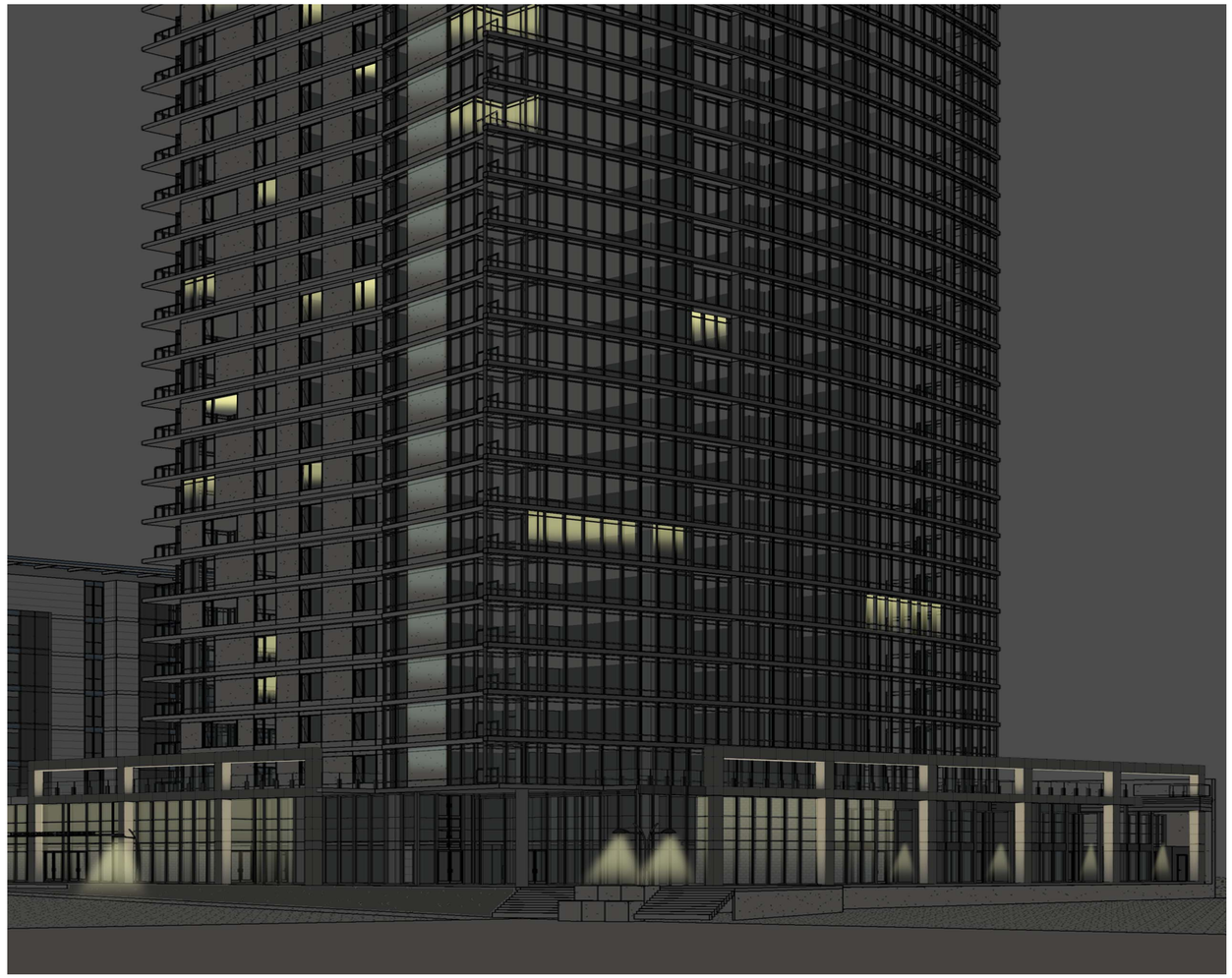
JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

AL.02



2 Perspective View - East 12th St



1 Perspective View - Streetscape along E 12th St

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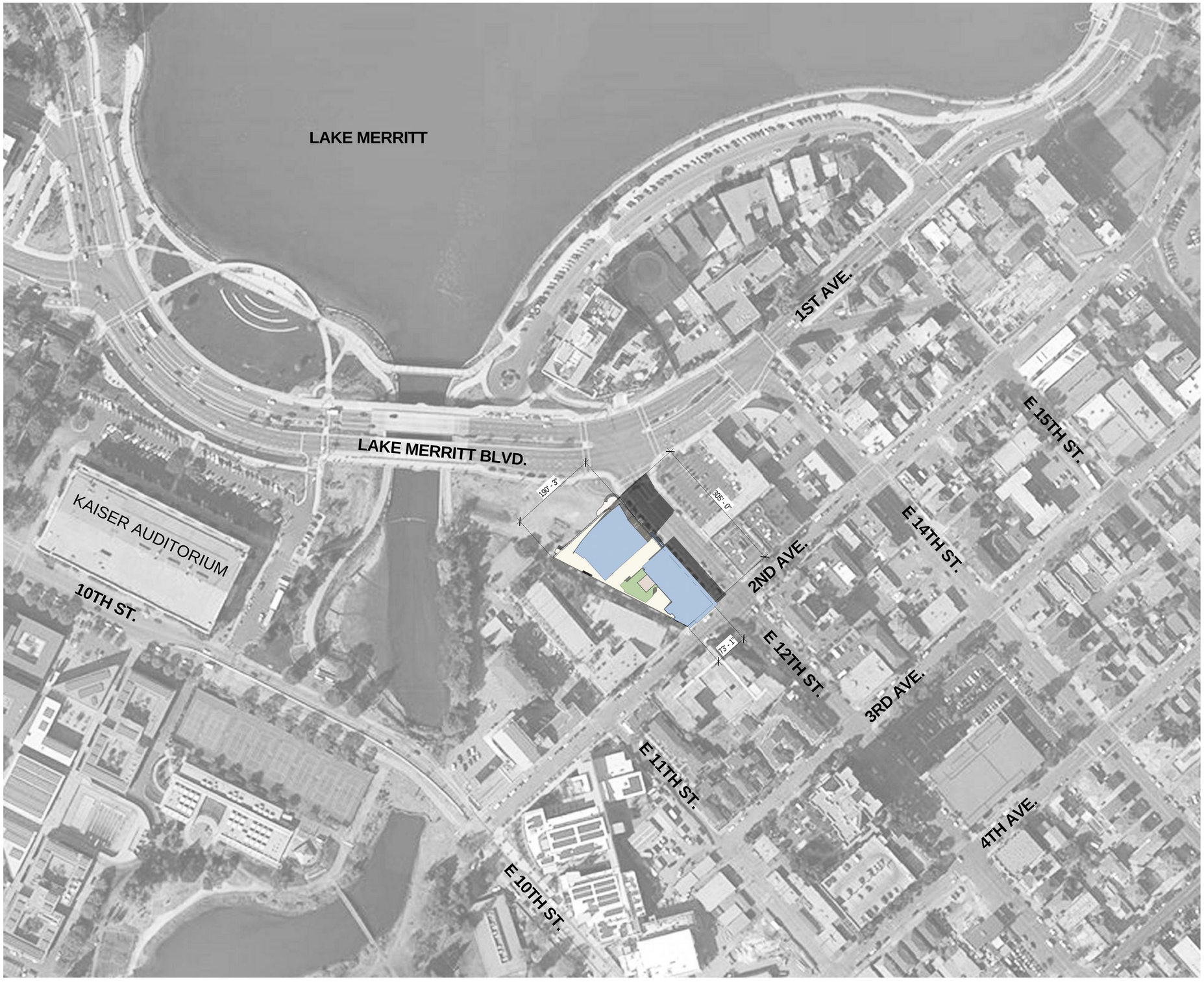
ILLUMINOSA LIGHTING CONCEPT DESIGN

JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

AL.03



N TRUE NORTH

N PROJECT NORTH

SITE PLAN
1" = 100'-0" 1

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2016.04.29 Design Review

SITE PLAN

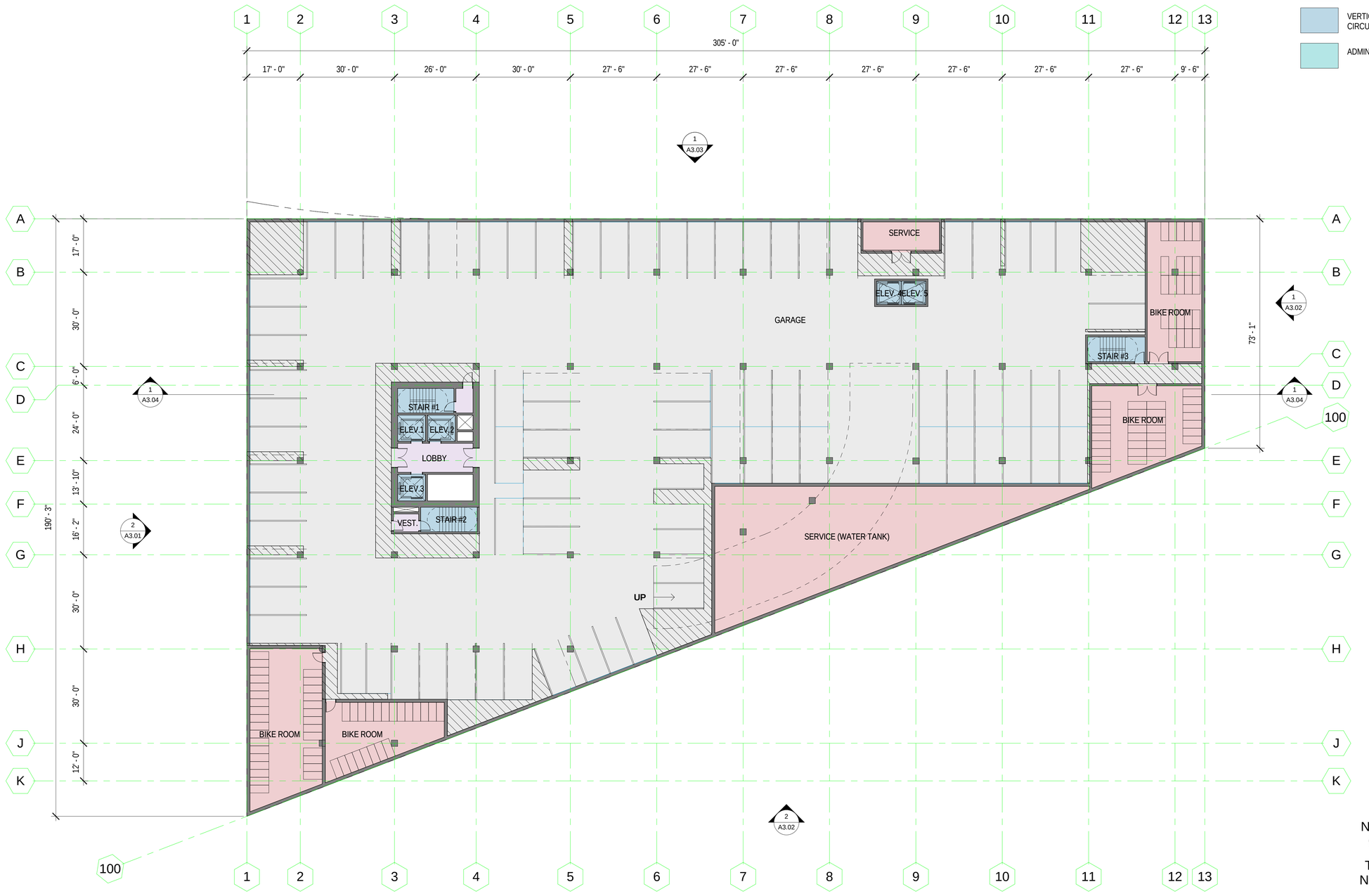
JOB NUMBER: 1607
DATE: Issue Date
SCALE: 1" = 100'-0"

- PRELIMINARY - NOT FOR CONSTRUCTION -

A1.00

ROOM LEGEND

PARKING	ROOF DECK
RETAIL	UNIT - STUDIO
SERVICE/ UTILITY	UNIT - 1 BEDROOM
AMENITIES	UNIT - 2 BEDROOM
LOBBIES AND CORRIDORS	UNIT 3 BEDROOM
VERTICAL CIRCULATION	UNIT - TOWNHOUSE
ADMINSITRATION	UNIT - PENTHOUSE



BUILDING PLAN - LEVEL B2
1/16" = 1'-0" (1)

N TRUE NORTH

N PROJECT NORTH

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BUILDING PLAN - LEVEL B2

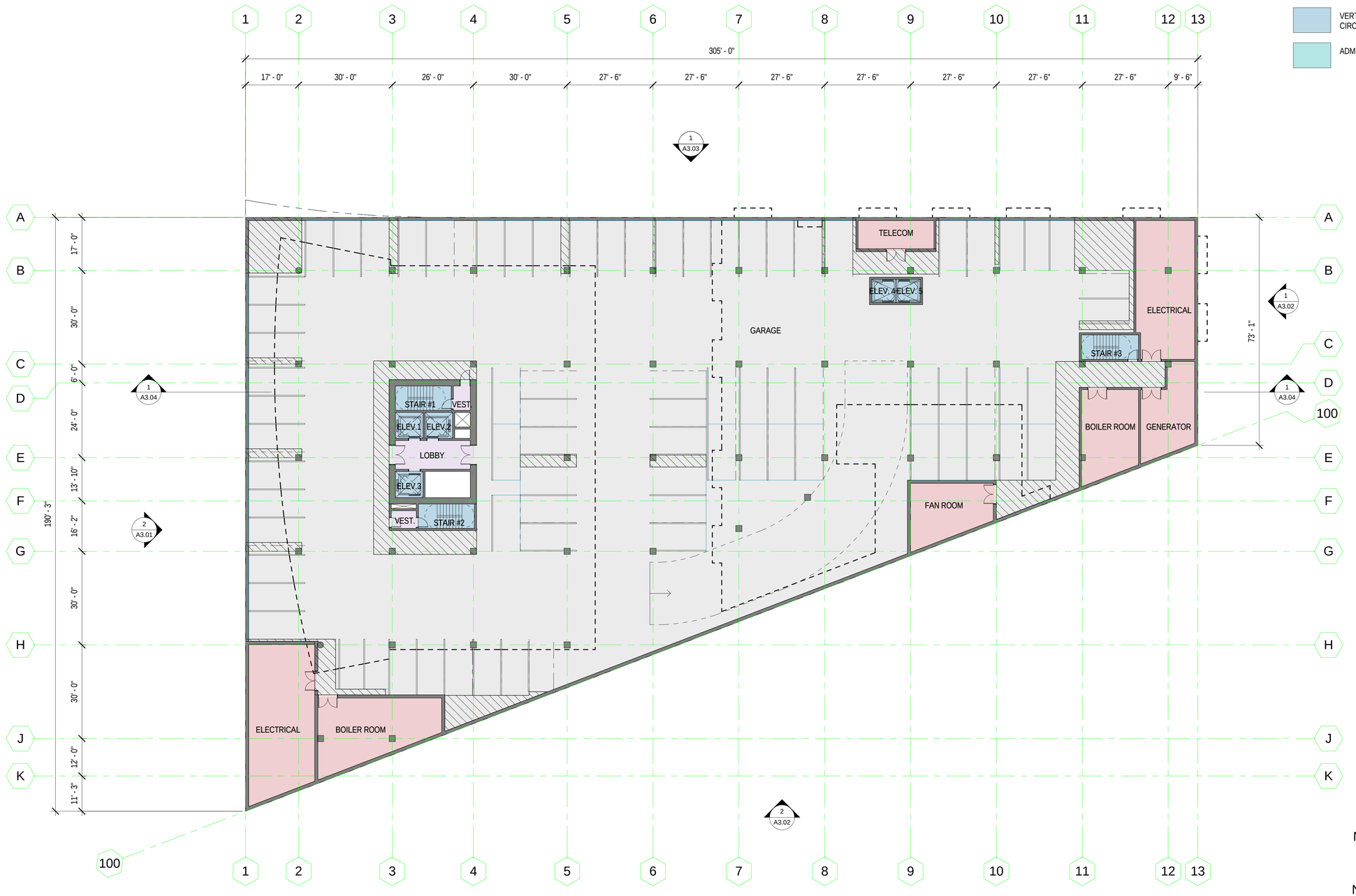
JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A1.01

ROOM LEGEND

PARKING	ROOF DECK
RETAIL	UNIT - STUDIO
SERVICE/ UTILITY	UNIT - 1 BEDROOM
AMENITIES	UNIT - 2 BEDROOM
LOBBIES AND CORRIDORS	UNIT 3 BEDROOM
VERTICAL CIRCULATION	UNIT - TOWNHOUSE
ADMINSITRATION	UNIT - PENTHOUSE



N TRUE NORTH

N PROJECT NORTH

BUILDING PLAN - LEVEL B1
1/16" = 1'-0" (1)

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BUILDING PLAN - LEVEL B1

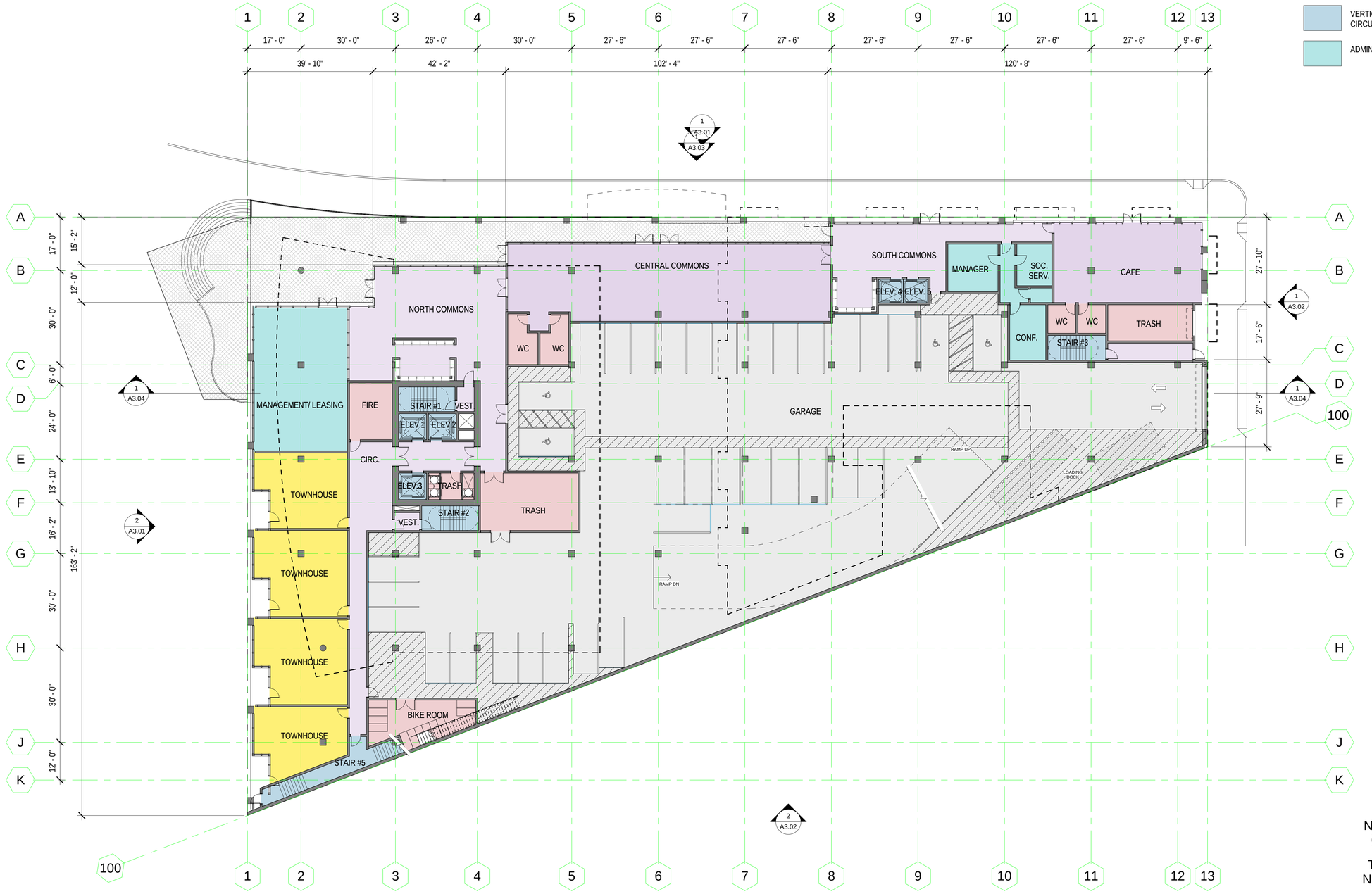
JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A1.02

ROOM LEGEND

- PARKING
- RETAIL
- SERVICE/ UTILITY
- AMENITIES
- LOBBIES AND CORRIDORS
- VERTICAL CIRCULATION
- ADMINSITRATION
- ROOF DECK
- UNIT - STUDIO
- UNIT - 1 BEDROOM
- UNIT - 2 BEDROOM
- UNIT 3 BEDROOM
- UNIT - TOWNHOUSE
- UNIT - PENTHOUSE



N TRUE NORTH

N PROJECT NORTH

BUILDING PLAN - LEVEL 1
1/16" = 1'-0" (1)

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BUILDING PLAN - LEVEL 1

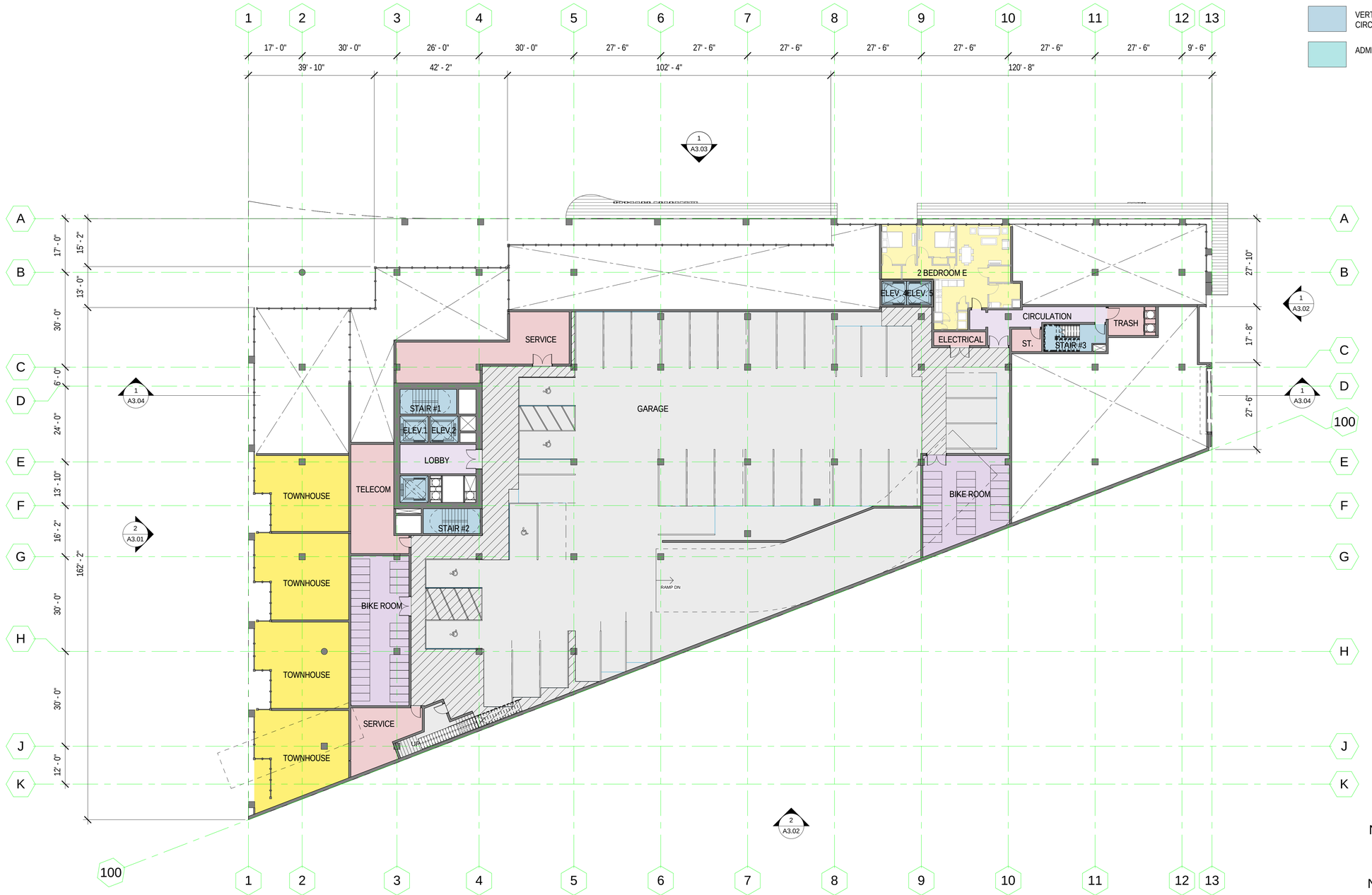
JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A1.03

ROOM LEGEND

PARKING	ROOF DECK
RETAIL	UNIT - STUDIO
SERVICE/ UTILITY	UNIT - 1 BEDROOM
AMENITIES	UNIT - 2 BEDROOM
LOBBIES AND CORRIDORS	UNIT 3 BEDROOM
VERTICAL CIRCULATION	UNIT - TOWNHOUSE
ADMINSITRATION	UNIT - PENTHOUSE



N TRUE NORTH

N PROJECT NORTH

BUILDING PLAN - LEVEL 2
1/16" = 1'-0" 1

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BUILDING PLAN - LEVEL 2

JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A1.04

ROOM LEGEND

PARKING	ROOF DECK
RETAIL	UNIT - STUDIO
SERVICE/ UTILITY	UNIT - 1 BEDROOM
AMENITIES	UNIT - 2 BEDROOM
LOBBIES AND CORRIDORS	UNIT 3 BEDROOM
VERTICAL CIRCULATION	UNIT - TOWNHOUSE
ADMINSITRATION	UNIT - PENTHOUSE

N TRUE NORTH

N PROJECT NORTH

BUILDING PLAN - LEVEL 3 AND 4
1/16" = 1'-0" (1)

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BUILDING PLAN - LEVEL 3 AND 4

JOB NUMBER:	1607
DATE:	Issue Date
SCALE:	As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A1.05

ROOM LEGEND

PARKING	ROOF DECK
RETAIL	UNIT - STUDIO
SERVICE/ UTILITY	UNIT - 1 BEDROOM
AMENITIES	UNIT - 2 BEDROOM
LOBBIES AND CORRIDORS	UNIT 3 BEDROOM
VERTICAL CIRCULATION	UNIT - TOWNHOUSE
ADMINSITRATION	UNIT - PENTHOUSE

N TRUE NORTH

N PROJECT NORTH

BUILDING PLAN - LEVEL 5 AND 6 (1)
1/16" = 1'-0"

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BUILDING PLAN - LEVEL 5 AND 6

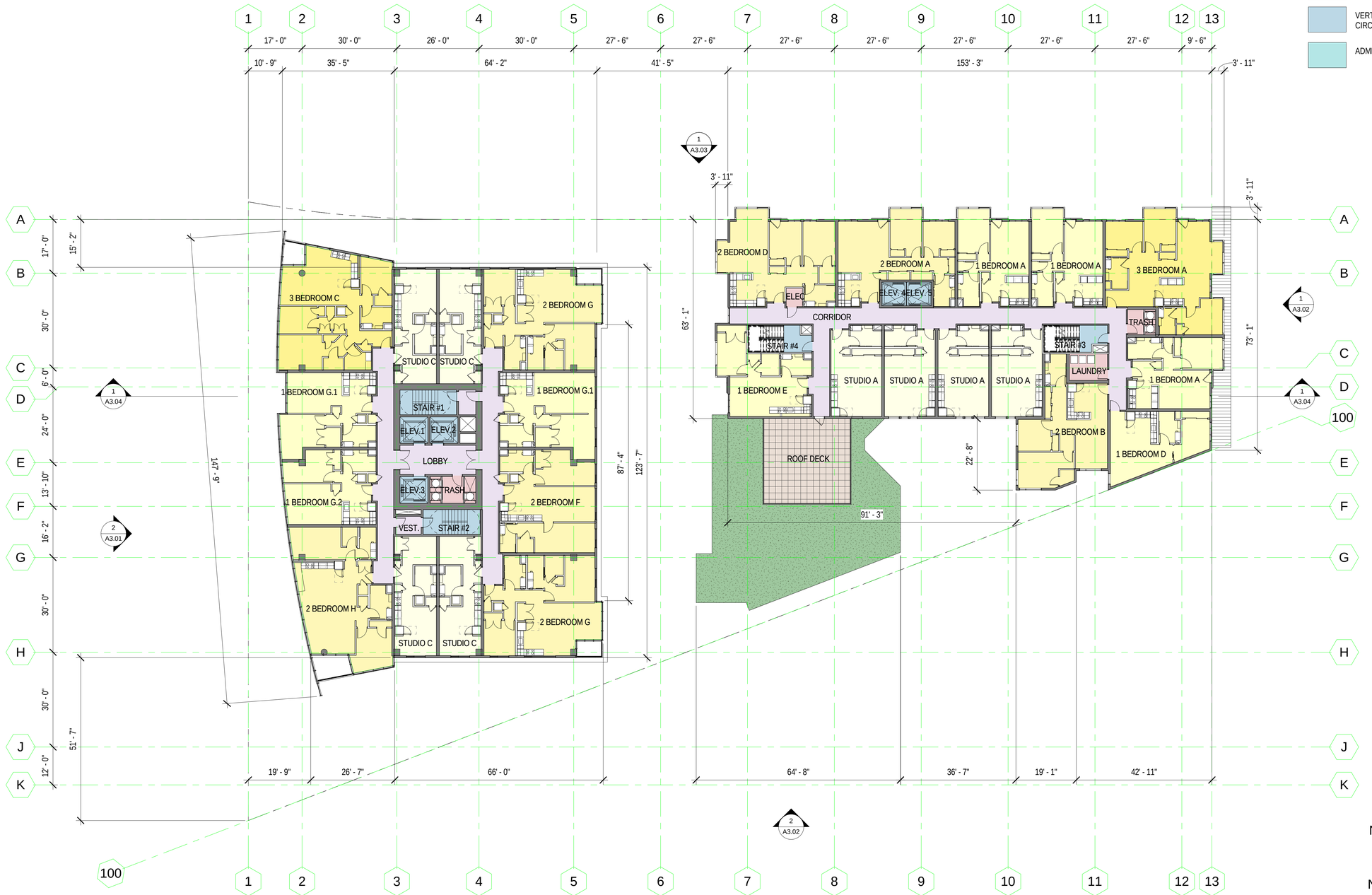
JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A1.06

ROOM LEGEND

PARKING	ROOF DECK
RETAIL	UNIT - STUDIO
SERVICE/ UTILITY	UNIT - 1 BEDROOM
AMENITIES	UNIT - 2 BEDROOM
LOBBIES AND CORRIDORS	UNIT 3 BEDROOM
VERTICAL CIRCULATION	UNIT - TOWNHOUSE
ADMINSITRATION	UNIT - PENTHOUSE



N TRUE NORTH

N PROJECT NORTH

BUILDING PLAN - LEVEL 7 AND 8 (1)
1/16" = 1'-0"

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2016.04.29 Design Review

BUILDING PLAN - LEVEL 7 AND 8

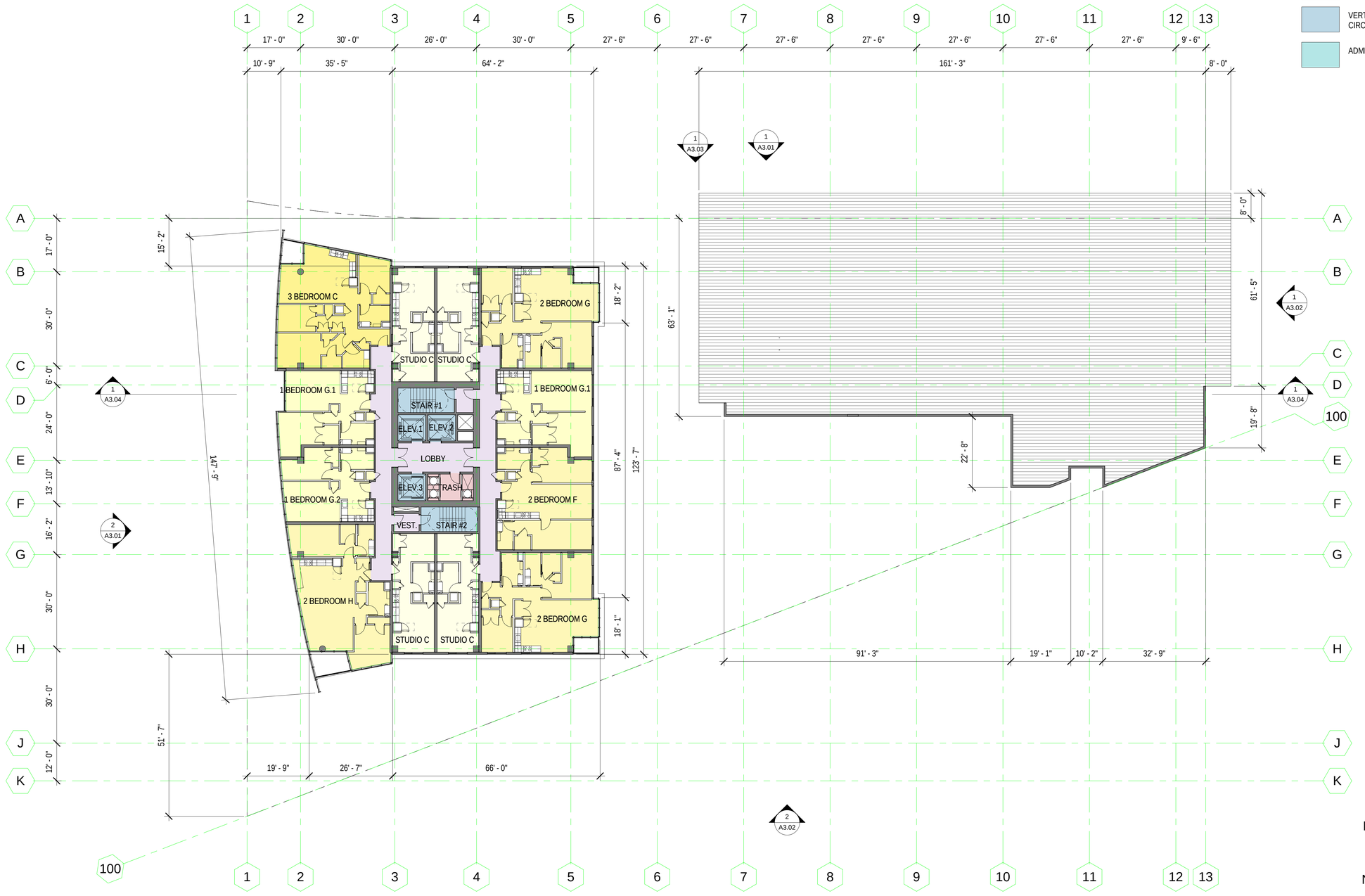
JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A1.07

ROOM LEGEND

PARKING	ROOF DECK
RETAIL	UNIT - STUDIO
SERVICE/ UTILITY	UNIT - 1 BEDROOM
AMENITIES	UNIT - 2 BEDROOM
LOBBIES AND CORRIDORS	UNIT 3 BEDROOM
VERTICAL CIRCULATION	UNIT - TOWNHOUSE
ADMINSITRATION	UNIT - PENTHOUSE



N TRUE NORTH

N PROJECT NORTH

BUILDING PLAN - LEVEL 9 THROUGH 24
1/16" = 1'-0" 1

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BUILDING PLAN - LEVEL 9 THROUGH 24

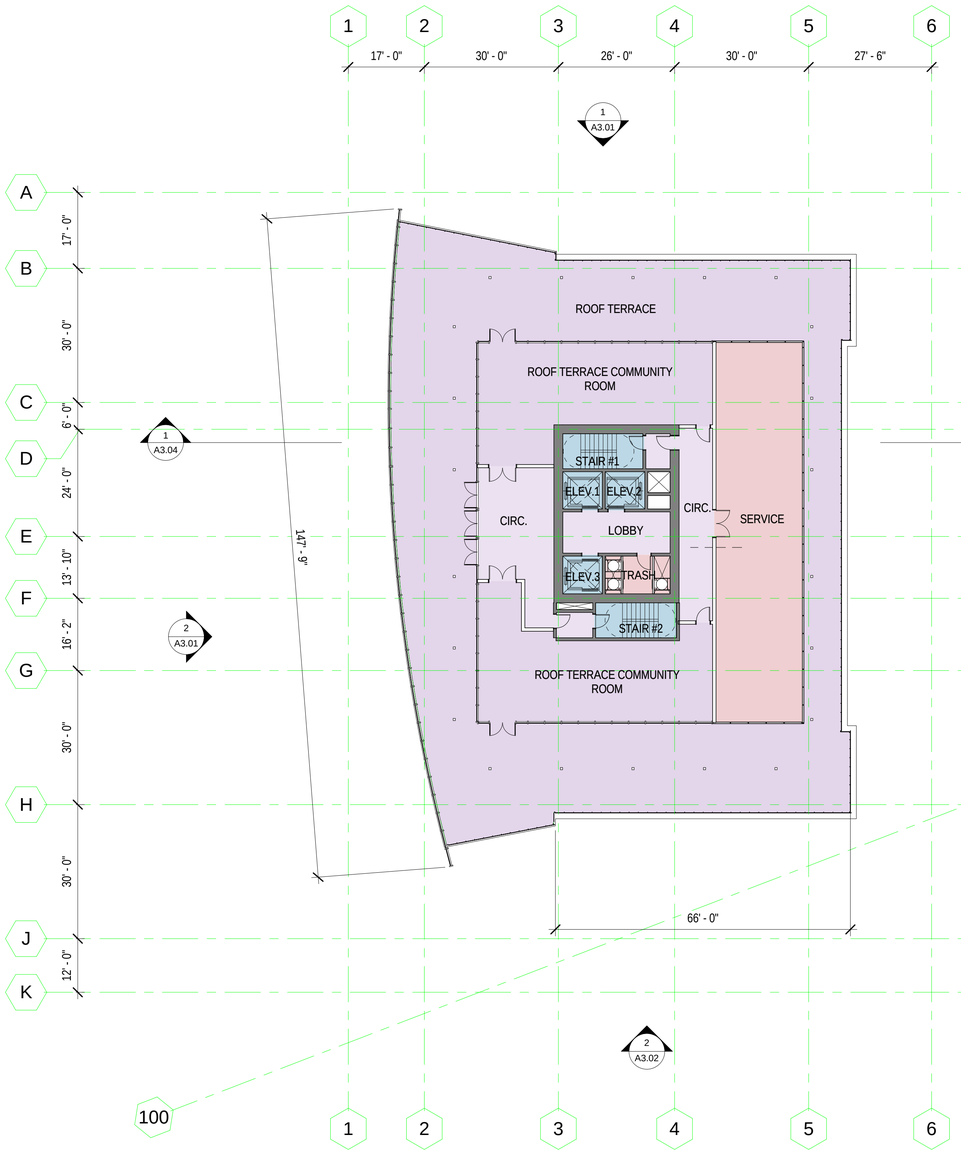
JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A1.08

ROOM LEGEND

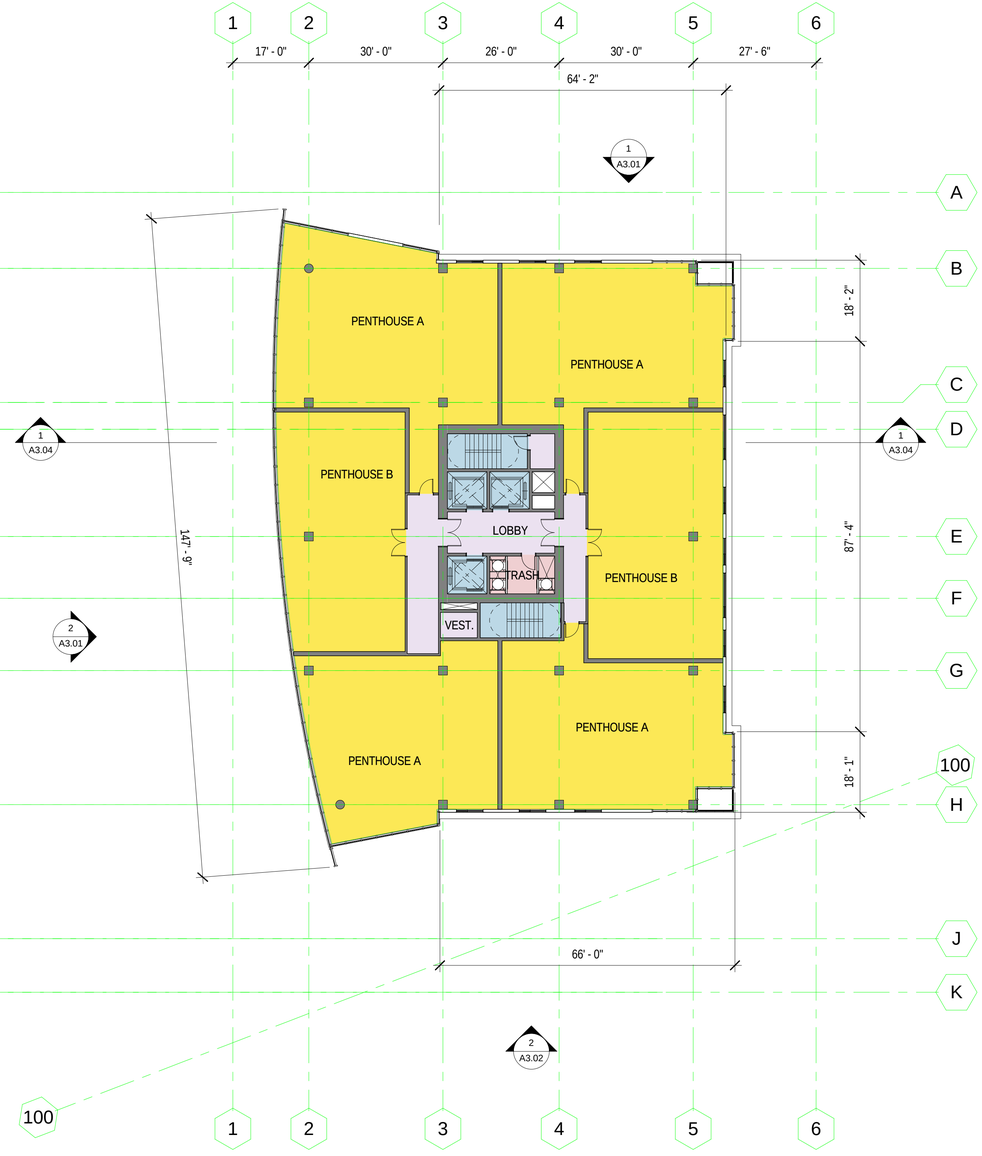
PARKING	ROOF DECK
RETAIL	UNIT - STUDIO
SERVICE/ UTILITY	UNIT - 1 BEDROOM
AMENITIES	UNIT - 2 BEDROOM
LOBBIES AND CORRIDORS	UNIT 3 BEDROOM
VERTICAL CIRCULATION	UNIT - TOWNHOUSE
ADMINSITRATION	UNIT - PENTHOUSE



N TRUE NORTH

N PROJECT NORTH

BUILDING PLAN - LEVEL 26 (2)
1/16" = 1'-0"



N TRUE NORTH

N PROJECT NORTH

BUILDING PLAN - LEVEL 25 (1)
1/16" = 1'-0"

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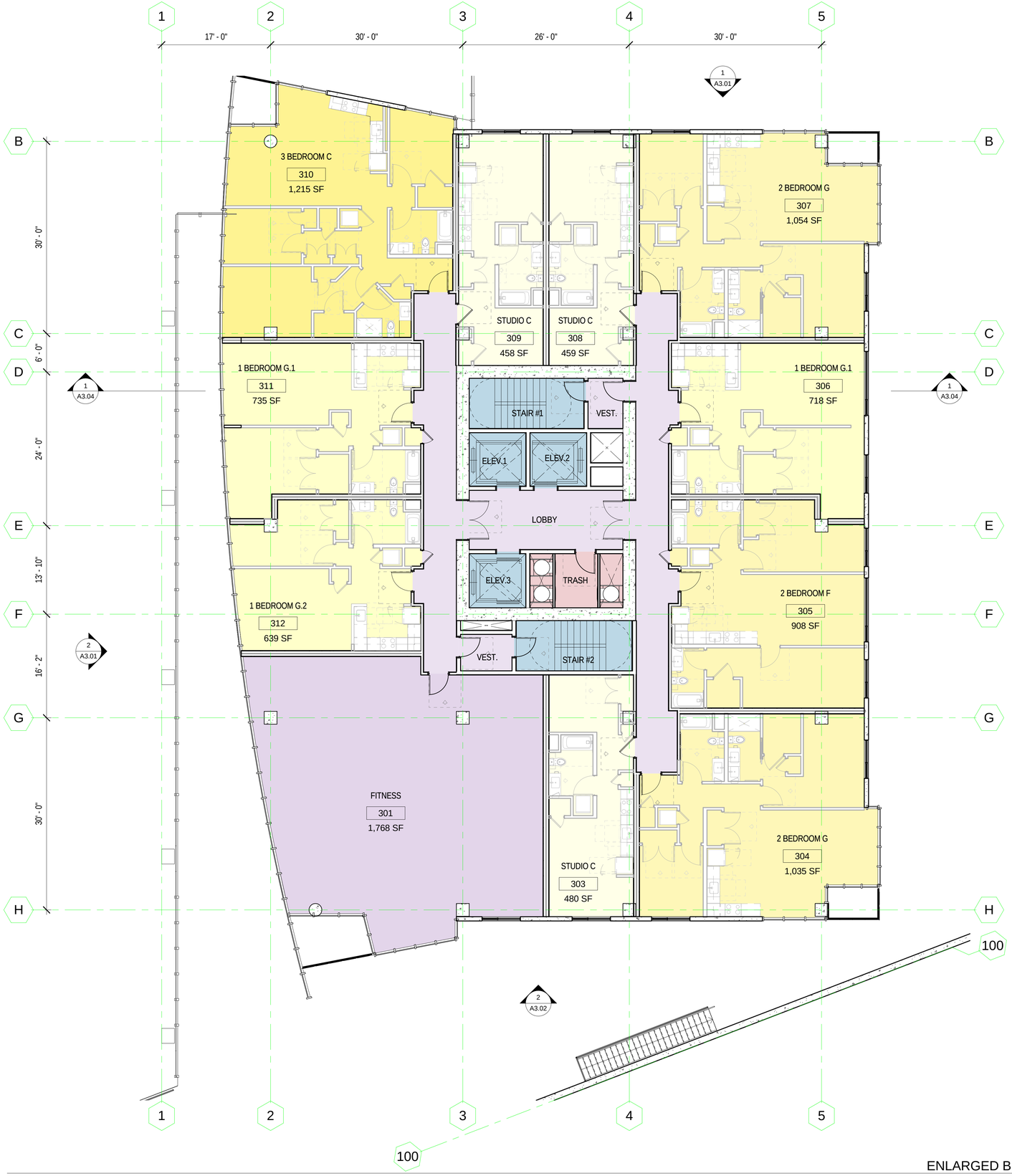
BUILDING PLANS - LEVELS 25 AND 26

JOB NUMBER:	1607
DATE:	Issue Date
SCALE:	As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A1.09



ROOM LEGEND

- PARKING
- RETAIL
- SERVICE/ UTILITY
- AMENITIES
- LOBBIES AND CORRIDORS
- VERTICAL CIRCULATION
- ADMINSITRATION
- ROOF DECK
- UNIT - STUDIO
- UNIT - 1 BEDROOM
- UNIT - 2 BEDROOM
- UNIT 3 BEDROOM
- UNIT - TOWNHOUSE
- UNIT - PENTHOUSE

N TRUE NORTH

N PROJECT NORTH

ENLARGED BUILDING PLAN - LEVEL 3_NORTH 1

1/8" = 1'-0"

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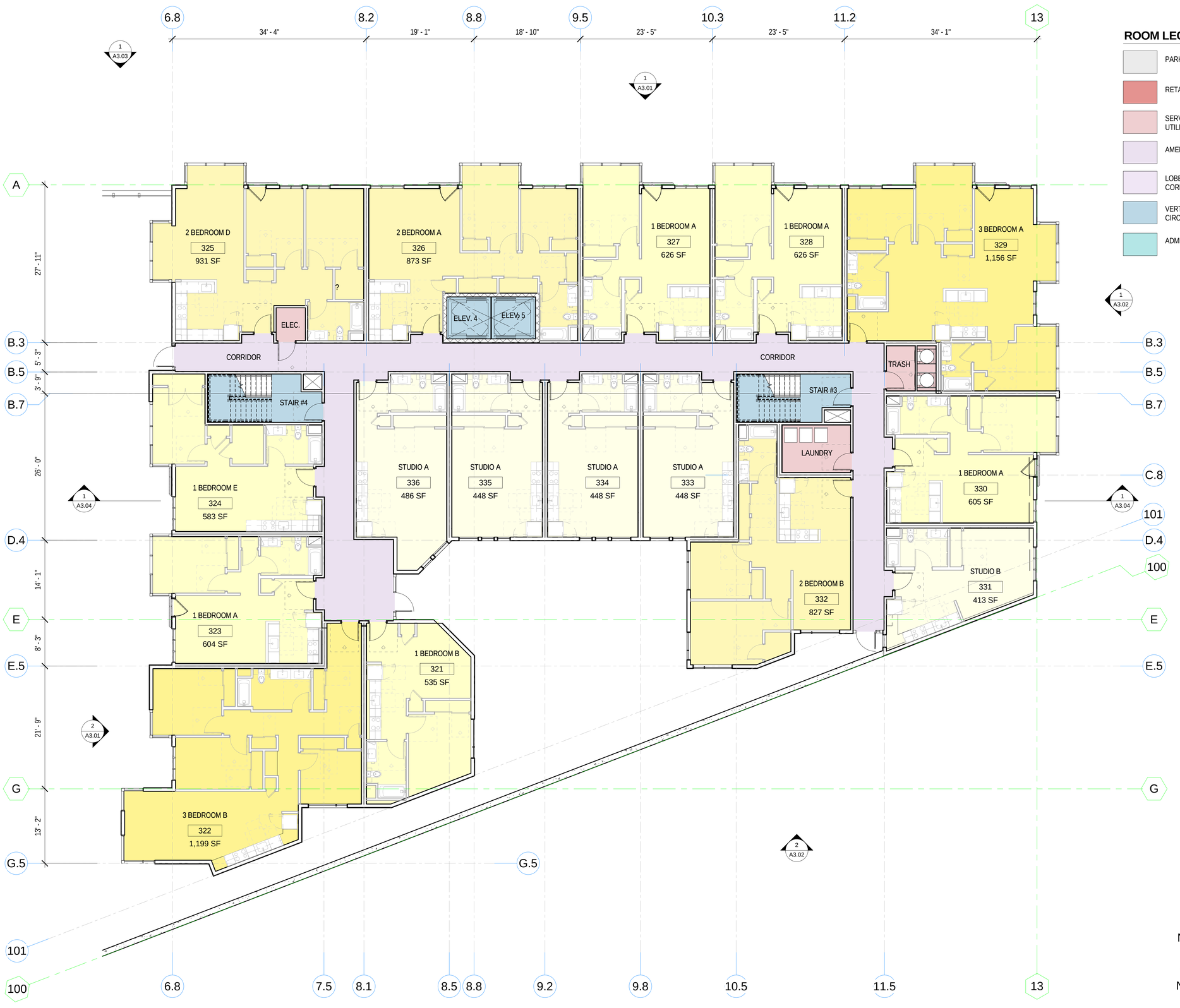
ENLARGED BUILDING PLAN - LEVEL 3 - NORTH COMMONS

JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A2.01a



ROOM LEGEND

- PARKING
- RETAIL
- SERVICE/ UTILITY
- AMENITIES
- LOBBIES AND CORRIDORS
- VERTICAL CIRCULATION
- ADMINSITRATION
- ROOF DECK
- UNIT - STUDIO
- UNIT - 1 BEDROOM
- UNIT - 2 BEDROOM
- UNIT 3 BEDROOM
- UNIT - TOWNHOUSE
- UNIT - PENTHOUSE

N TRUE NORTH

N PROJECT NORTH

ENLARGED BUILDING PLAN - LEVEL 3_SOUTH
1/8" = 1'-0" (1)

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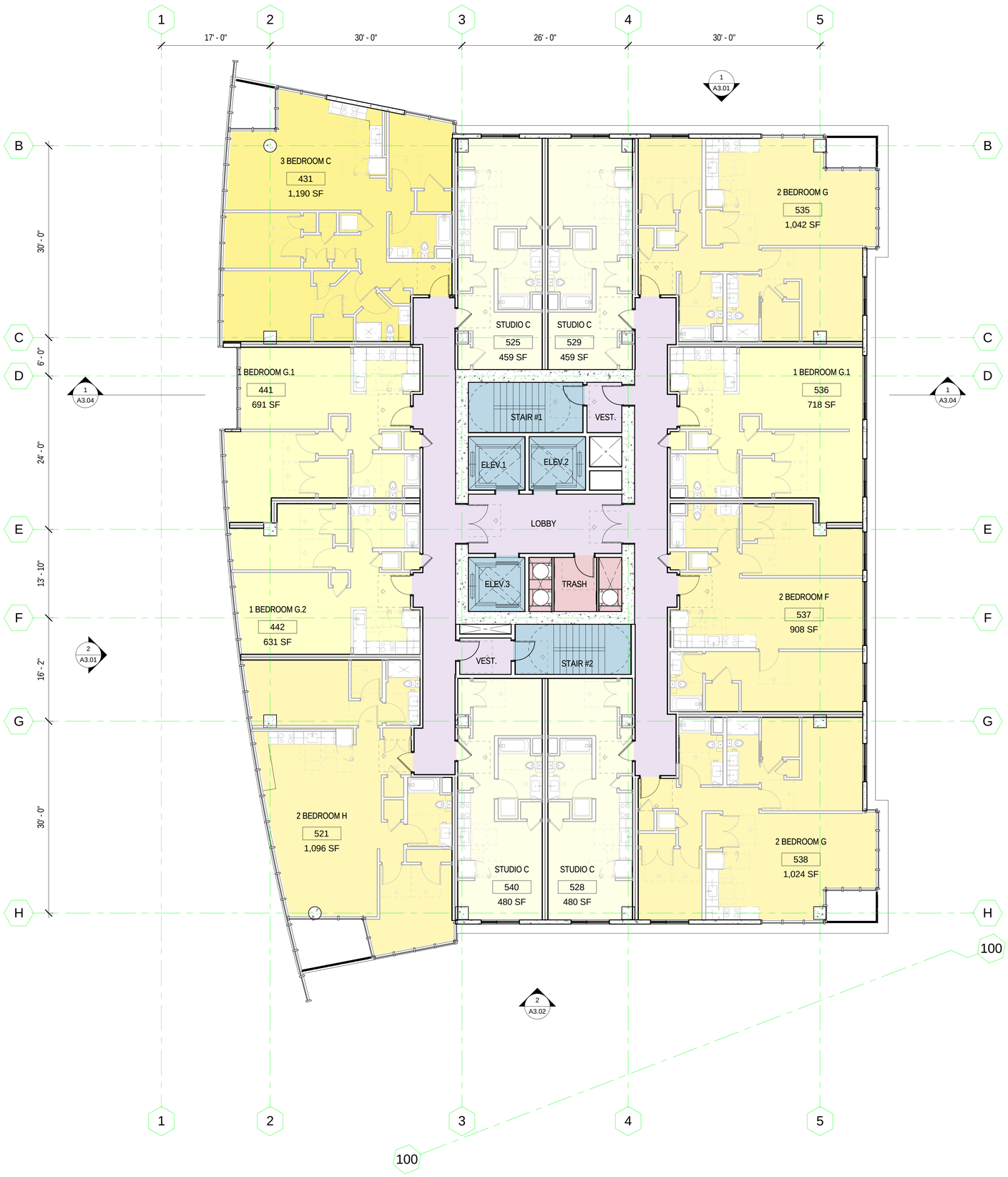
ENLARGED BUILDING PLAN - LEVEL 3 - SOUTH COMMONS

JOB NUMBER:	1607
DATE:	Issue Date
SCALE:	As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A2.01b



ROOM LEGEND

- PARKING
- RETAIL
- SERVICE/ UTILITY
- AMENITIES
- LOBBIES AND CORRIDORS
- VERTICAL CIRCULATION
- ADMINSITRATION
- ROOF DECK
- UNIT - STUDIO
- UNIT - 1 BEDROOM
- UNIT - 2 BEDROOM
- UNIT 3 BEDROOM
- UNIT - TOWNHOUSE
- UNIT - PENTHOUSE

N TRUE NORTH

N PROJECT NORTH

ENLARGED BUILDING PLAN - LEVEL 5_NORTH

1/8" = 1'-0"

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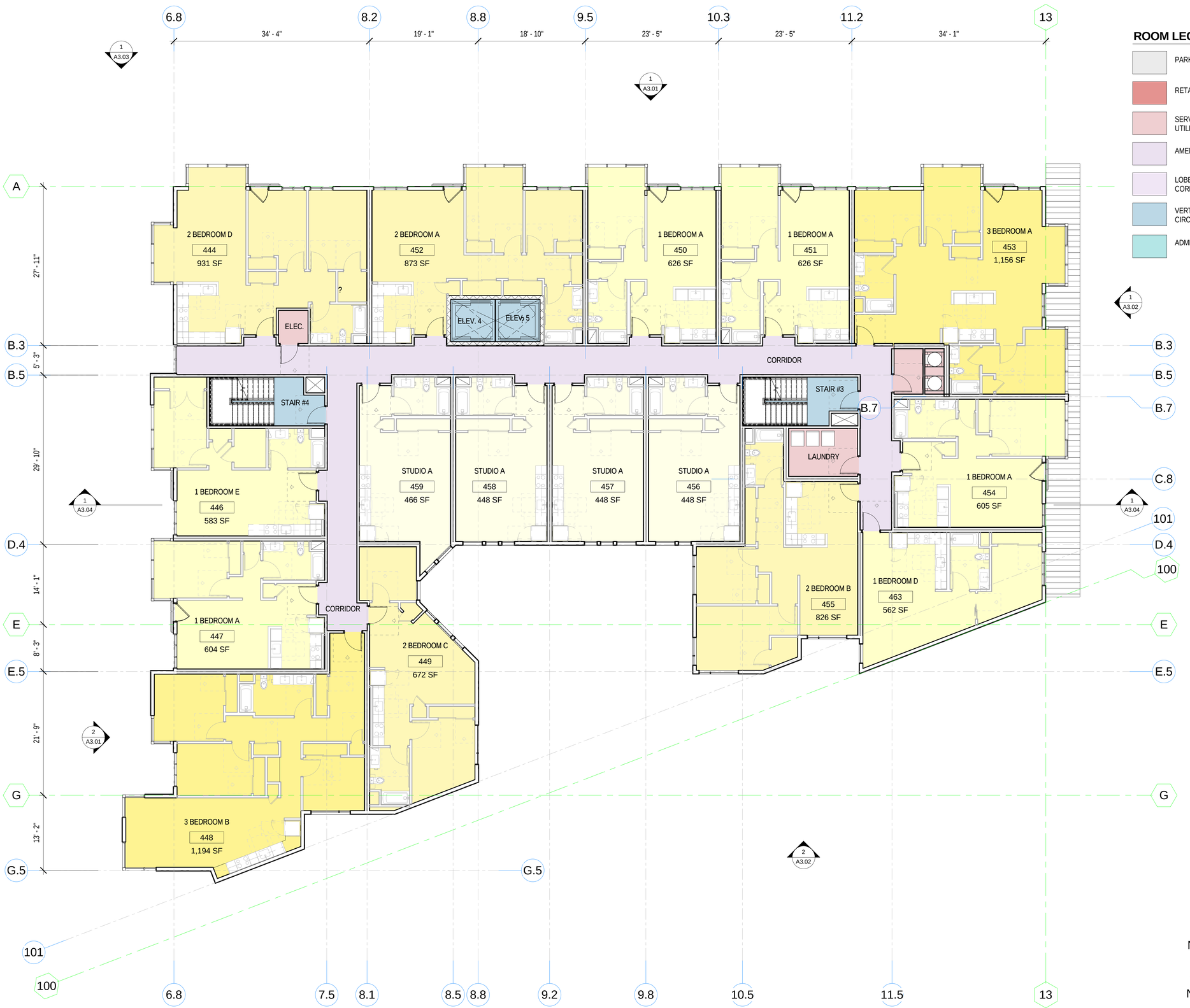
ENLARGED BUILDING PLAN - LEVEL 5 - NORTH COMMONS

JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A2.02a



ROOM LEGEND

- PARKING
- RETAIL
- SERVICE/ UTILITY
- AMENITIES
- LOBBIES AND CORRIDORS
- VERTICAL CIRCULATION
- ADMINSITRATION
- ROOF DECK
- UNIT - STUDIO
- UNIT - 1 BEDROOM
- UNIT - 2 BEDROOM
- UNIT 3 BEDROOM
- UNIT - TOWNHOUSE
- UNIT - PENTHOUSE

N TRUE NORTH

N PROJECT NORTH

ENLARGED BUILDING PLAN - LEVEL 5_SOUTH
1/8" = 1'-0" (1)

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ENLARGED BUILDING PLAN - LEVEL 5 - SOUTH COMMONS

JOB NUMBER:	1607
DATE:	Issue Date
SCALE:	As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A2.02b

ROOM LEGEND

- PARKING
- RETAIL
- SERVICE/ UTILITY
- AMENITIES
- LOBBIES AND CORRIDORS
- VERTICAL CIRCULATION
- ADMINSITRATION
- ROOF DECK
- UNIT - STUDIO
- UNIT - 1 BEDROOM
- UNIT - 2 BEDROOM
- UNIT 3 BEDROOM
- UNIT - TOWNHOUSE
- UNIT - PENTHOUSE

ENLARGED BUILDING PLAN - LEVEL 7_SOUTH
1/8" = 1'-0" (1)

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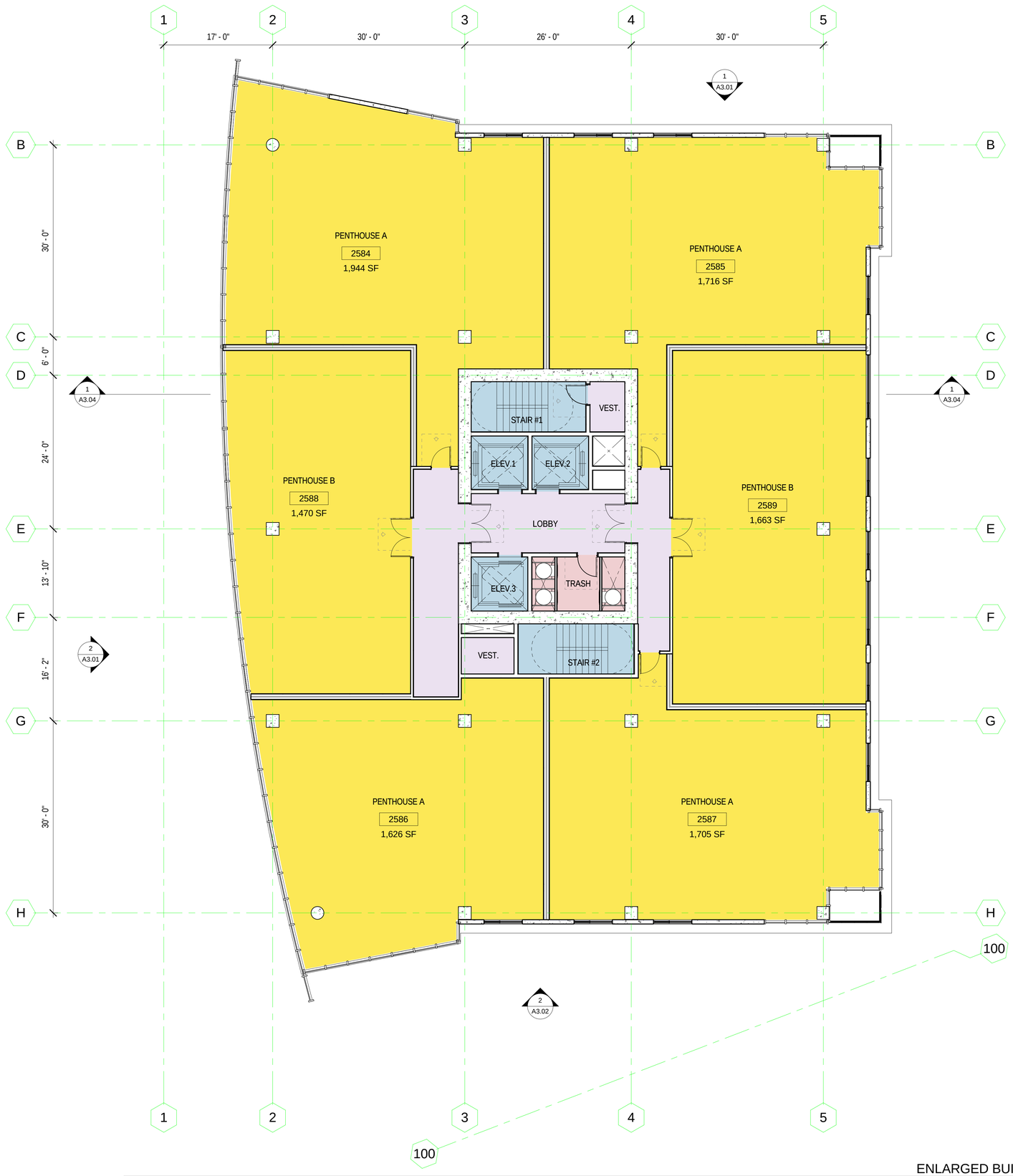
ENLARGED BUILDING PLAN - LEVEL 7 - SOUTH COMMONS

JOB NUMBER:	1607
DATE:	Issue Date
SCALE:	As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A2.03b



ROOM LEGEND

- PARKING
- RETAIL
- SERVICE/ UTILITY
- AMENITIES
- LOBBIES AND CORRIDORS
- VERTICAL CIRCULATION
- ADMINSITRATION
- ROOF DECK
- UNIT - STUDIO
- UNIT - 1 BEDROOM
- UNIT - 2 BEDROOM
- UNIT 3 BEDROOM
- UNIT - TOWNHOUSE
- UNIT - PENTHOUSE

N TRUE NORTH

N PROJECT NORTH

ENLARGED BUILDING PLAN - LEVEL 25_NORTH 1

1/8" = 1'-0"

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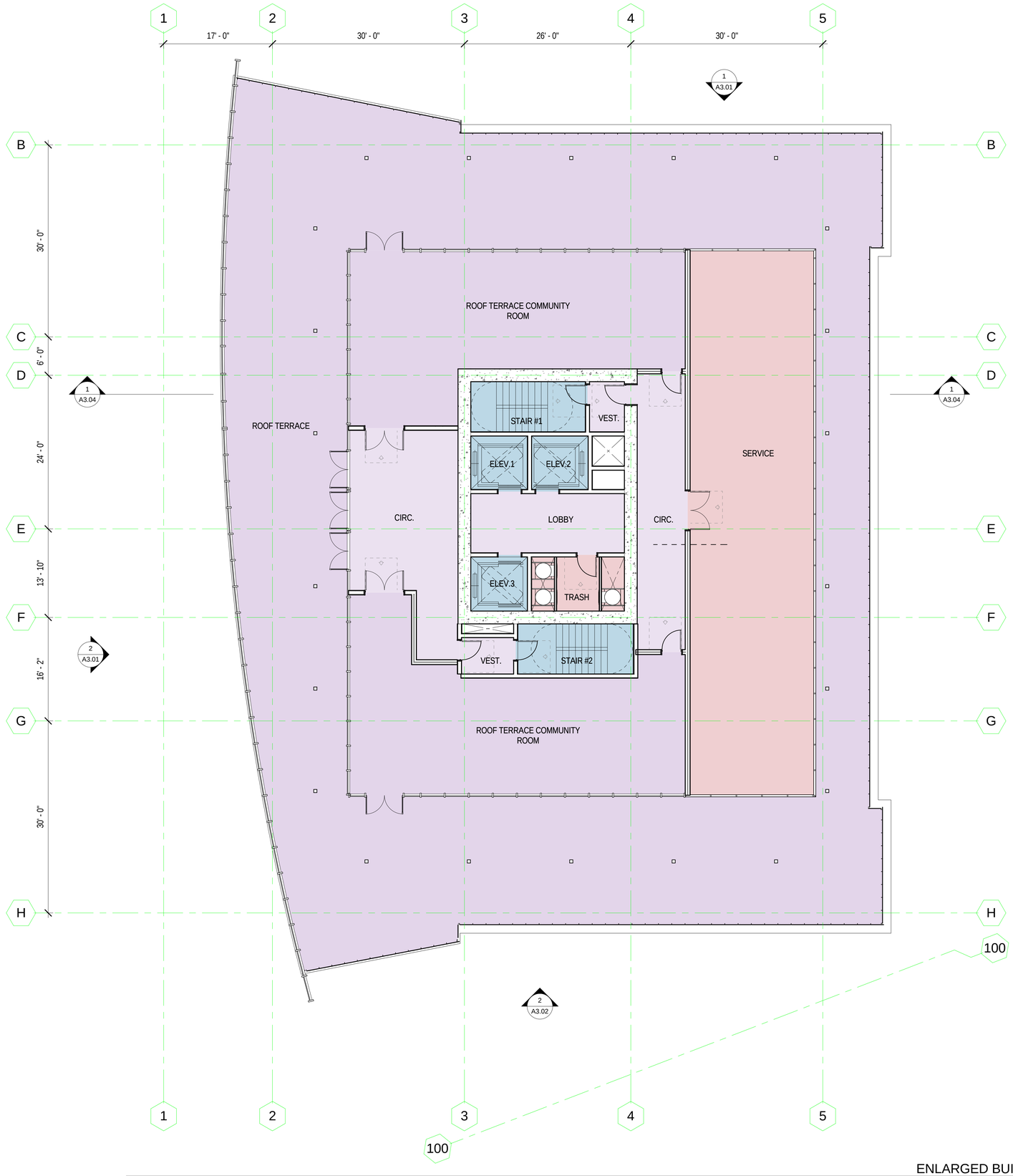
ENLARGED BUILDING PLAN - LEVEL 25 - NORTH COMMONS

JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

A2.04a



ROOM LEGEND

- PARKING
- RETAIL
- SERVICE/ UTILITY
- AMENITIES
- LOBBIES AND CORRIDORS
- VERTICAL CIRCULATION
- ADMINSITRATION
- ROOF DECK
- UNIT - STUDIO
- UNIT - 1 BEDROOM
- UNIT - 2 BEDROOM
- UNIT 3 BEDROOM
- UNIT - TOWNHOUSE
- UNIT - PENTHOUSE

N TRUE NORTH

N PROJECT NORTH

ENLARGED BUILDING PLAN - LEVEL 26_NORTH 1

1/8" = 1'-0"

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JOB NUMBER: 1607
DATE: Issue Date
SCALE: As indicated

- PRELIMINARY - NOT FOR CONSTRUCTION -

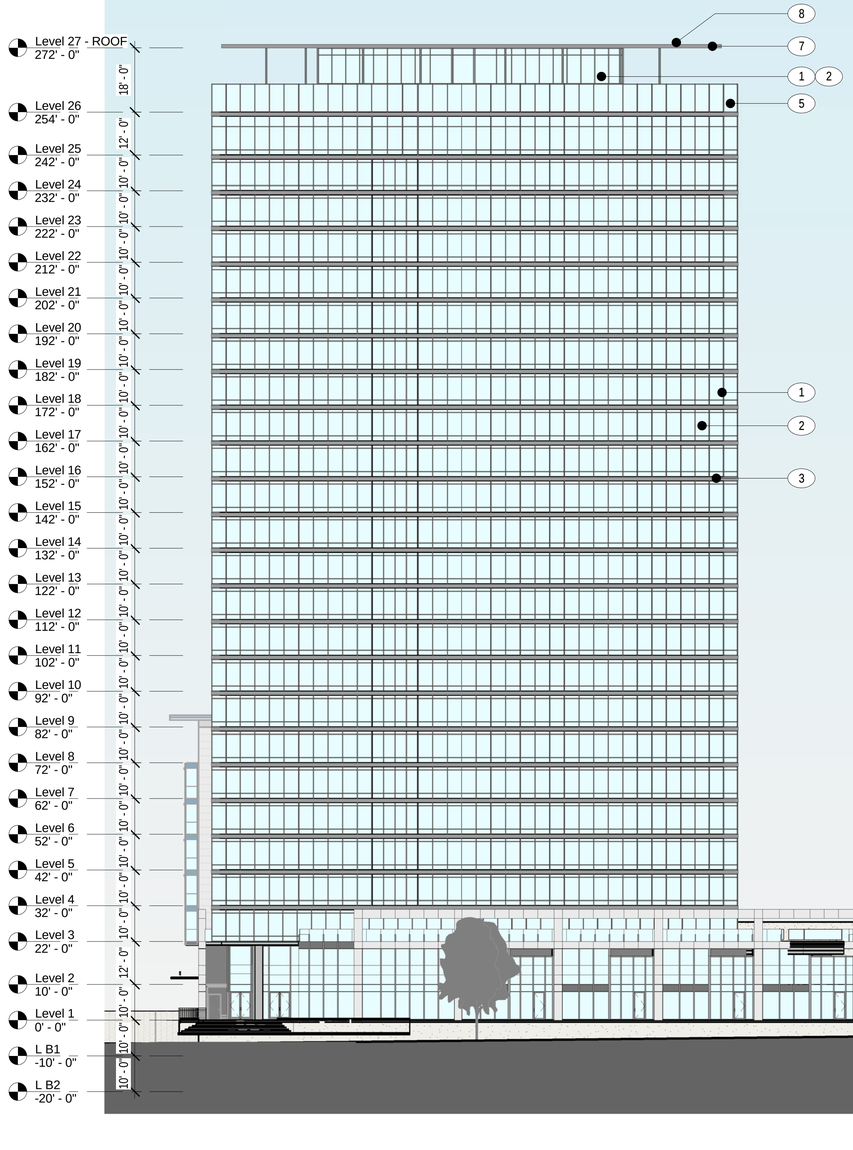
A2.05a

ELEVATION GENERAL NOTES

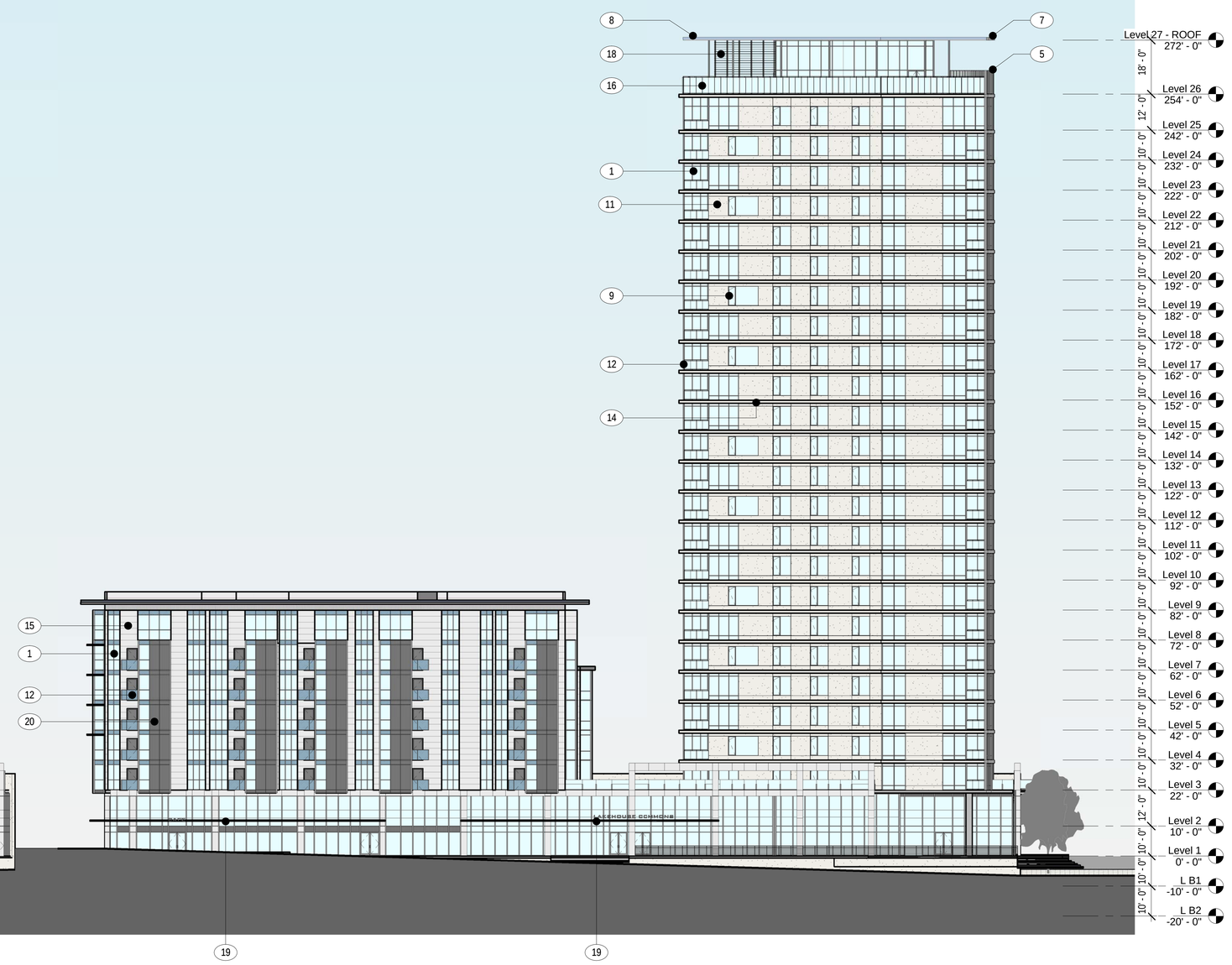
NUMBER	GENERAL NOTE
1	ALUMINUM WINDOW WALL SYSTEM WITH SILVER-GREY PAINTED FINISH ON ALL FRAME MEMBERS
2	INSULATED GLAZING WITH BLUE-GRAY TINT
3	CURVING METAL PANELS WITH SILVER-GRAY PAINTED FINISH AT SLAB EDGE
5	ALUMINUM WINDOW WALL SYSTEM VIEW SCREEN AT ROOF LEVEL
6	PEDESTAL PAVER SYSTEM AT ROOF TERRACE IN BEIGE-GRAY COLOR
7	METAL COVER CAP AT PHOTOVOLTAIC PANEL ROOF EDGE WITH A SILVER-GRAY PAINTED FINISH
8	TRANSLUCENT PHOTOVOLTAIC PANELS ABOVE ROOF TERRACE AREAS IN BLUE-GREY TINT
9	ALUMINIUM SELF-RECESSED WINDOWS
10	GREEN ROOF SYSTEM
11	PRECAST CONCRETE PANELS WITH A FINE TEXTURED LIGHT GRAY FINISH

ELEVATION GENERAL NOTES

NUMBER	GENERAL NOTE
12	ALUMINUM BALCONY RAILING IN SILVER-GRAY PAINTED FINISH WITH BLUE-GREEN TINTED GLAZING
13	BLACONY FLOOR TO BE NEUTRAL COLORED WATERPROOF TRAFFIC COATING
14	EXTENDED AND ALIGNED SLAB EDGE AS WELL AS UNDERSIDE OF SLAB PAINTED TO MATCH PRECAST CONCRETE COLOR
15	HARDIE PANEL RAINSCREEN AT SOUTH COMMONS
16	ALUMINUM ROOF RAILING IN SILVER-GRAY PAINTED FINISH WITH BLUE-GREEN TINTED GLAZING
18	CONTINUOUS METAL LOUVER PANELS IN GRAY- BLACK PAINTED FINISH
19	LAMINATED, CERAMIC FRIT GLASS CANOPY
20	POWDER COATED METAL PANEL



LAKE MERRITT BLVD ELEVATION (NORTH) 2
1" = 20'-0"



12TH STREET ELEVATION (East) 1
1" = 20'-0"

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2016.04.29 Design Review

BUILDING ELEVATIONS

JOB NUMBER: 1607
DATE: Issue Date
SCALE: 1" = 20'-0"

- PRELIMINARY - NOT FOR CONSTRUCTION -

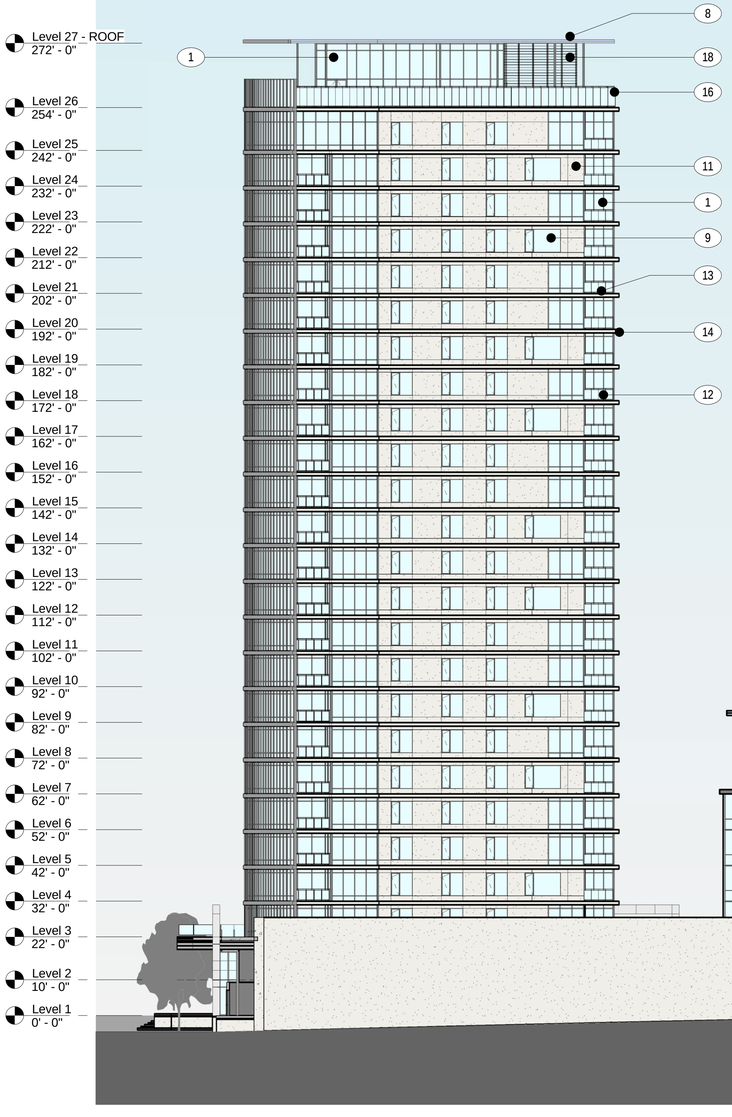
A3.01

ELEVATION GENERAL NOTES

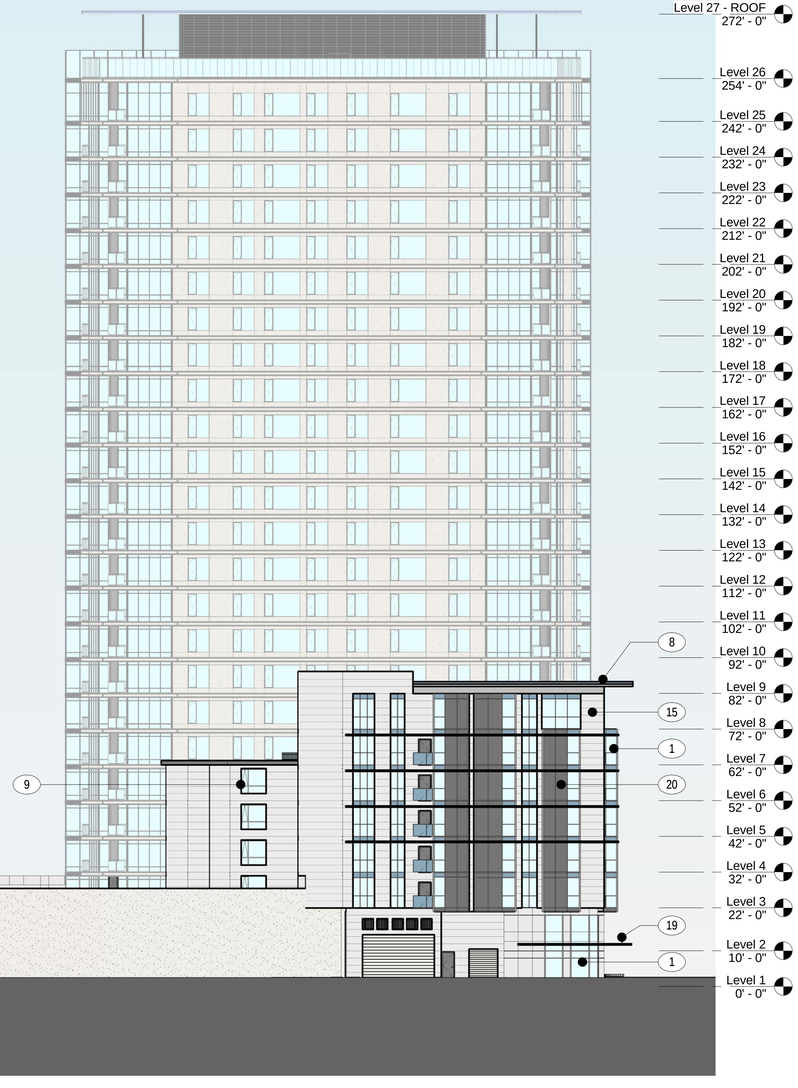
NUMBER	GENERAL NOTE
1	ALUMINUM WINDOW WALL SYSTEM WITH SILVER-GREY PAINTED FINISH ON ALL FRAME MEMBERS
2	INSULATED GLAZING WITH BLUE-GRAY TINT
3	CURVING METAL PANELS WITH SILVER-GRAY PAINTED FINISH AT SLAB EDGE
5	ALUMINUM WINDOW WALL SYSTEM VIEW SCREEN AT ROOF LEVEL
6	PEDESTAL PAVER SYSTEM AT ROOF TERRACE IN BEIGE-GRAY COLOR
7	METAL COVER CAP AT PHOTOVOLTAIC PANEL ROOF EDGE WITH A SILVER-GRAY PAINTED FINISH
8	TRANSLUCENT PHOTOVOLTAIC PANELS ABOVE ROOF TERRACE AREAS IN BLUE-GREY TINT
9	ALUMINIUM SELF-RECESSED WINDOWS
10	GREEN ROOF SYSTEM
11	PRECAST CONCRETE PANELS WITH A FINE TEXTURED LIGHT GRAY FINISH

ELEVATION GENERAL NOTES

NUMBER	GENERAL NOTE
12	ALUMINUM BALCONY RAILING IN SILVER-GRAY PAINTED FINISH WITH BLUE-GREEN TINTED GLAZING
13	BLACONY FLOOR TO BE NEUTRAL COLORED WATERPROOF TRAFFIC COATING
14	EXTENDED AND ALIGNED SLAB EDGE AS WELL AS UNDERSIDE OF SLAB PAINTED TO MATCH PRECAST CONCRETE COLOR
15	HARDIE PANEL RAINSCREEN AT SOUTH COMMONS
16	ALUMINUM ROOF RAILING IN SILVER-GRAY PAINTED FINISH WITH BLUE-GREEN TINTED GLAZING
18	CONTINUOUS METAL LOUVER PANELS IN GRAY- BLACK PAINTED FINISH
19	LAMINATED, CERAMIC FRIT GLASS CANOPY
20	POWDER COATED METAL PANEL



West Elevation 2
1" = 20'-0"



South Elevation 1
1" = 20'-0"

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2016.04.29 Design Review

BUILDING ELEVATIONS

JOB NUMBER: 1607
DATE: Issue Date
SCALE: 1" = 20'-0"

- PRELIMINARY - NOT FOR CONSTRUCTION -

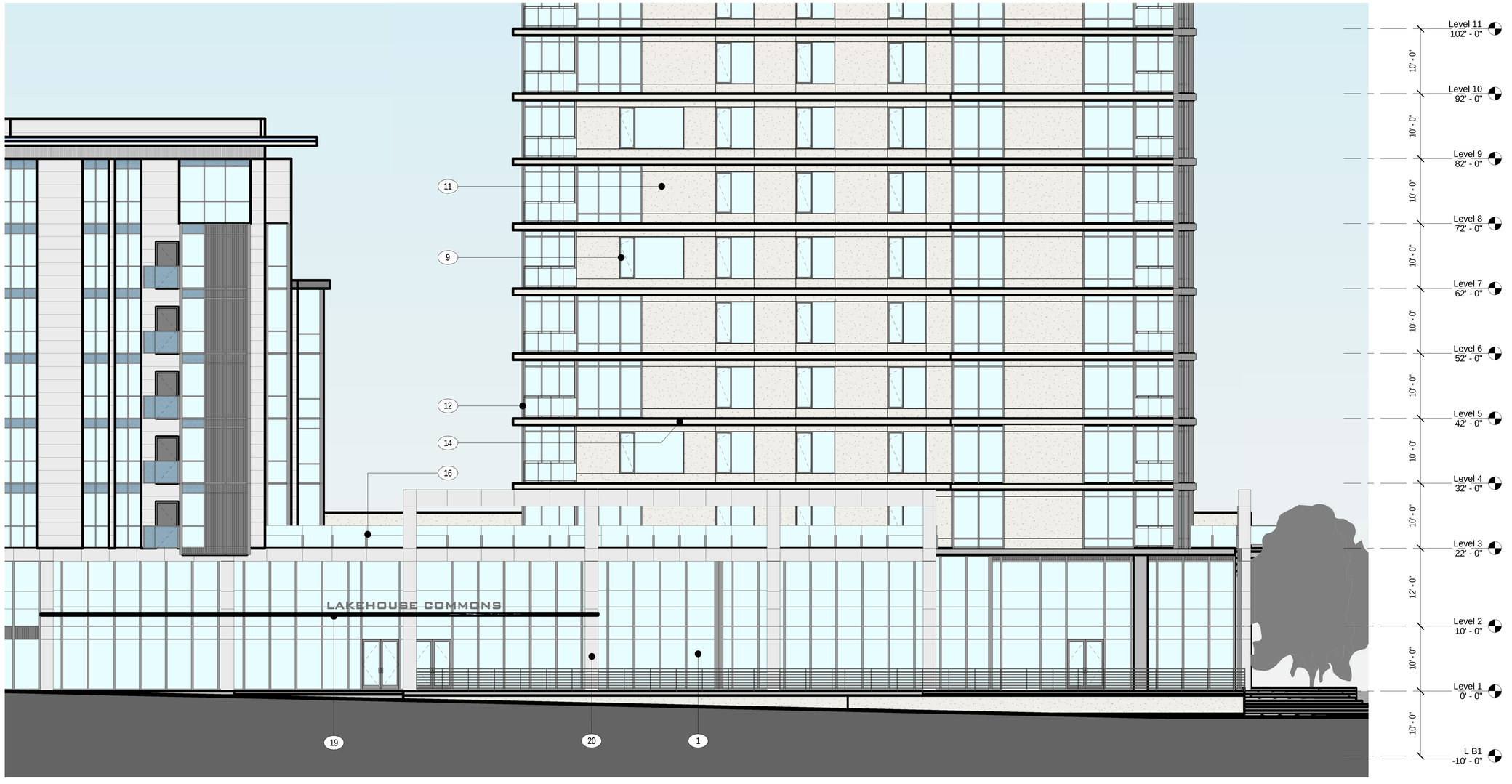
A3.02

ELEVATION GENERAL NOTES

NUMBER	GENERAL NOTE
1	ALUMINUM WINDOW WALL SYSTEM WITH SILVER-GREY PAINTED FINISH ON ALL FRAME MEMBERS
2	INSULATED GLAZING WITH BLUE-GRAY TINT
3	CURVING METAL PANELS WITH SILVER-GRAY PAINTED FINISH AT SLAB EDGE
5	ALUMINUM WINDOW WALL SYSTEM VIEW SCREEN AT ROOF LEVEL
6	PEDESTAL PAVER SYSTEM AT ROOF TERRACE IN BEIGE-GRAY COLOR
7	METAL COVER CAP AT PHOTOVOLTAIC PANEL ROOF EDGE WITH A SILVER-GRAY PAINTED FINISH
8	TRANSLUCENT PHOTOVOLTAIC PANELS ABOVE ROOF TERRACE AREAS IN BLUE-GREY TINT
9	ALUMINIUM SELF-RECESSED WINDOWS
10	GREEN ROOF SYSTEM
11	PRECAST CONCRETE PANELS WITH A FINE TEXTURED LIGHT GRAY FINISH

ELEVATION GENERAL NOTES

NUMBER	GENERAL NOTE
12	ALUMINUM BALCONY RAILING IN SILVER-GRAY PAINTED FINISH WITH BLUE-GREEN TINTED GLAZING
13	BLACONY FLOOR TO BE NEUTRAL COLORED WATERPROOF TRAFFIC COATING
14	EXTENDED AND ALIGNED SLAB EDGE AS WELL AS UNDERSIDE OF SLAB PAINTED TO MATCH PRECAST CONCRETE COLOR
15	HARDIE PANEL RAINSCREEN AT SOUTH COMMONS
16	ALUMINUM ROOF RAILING IN SILVER-GRAY PAINTED FINISH WITH BLUE-GREEN TINTED GLAZING
18	CONTINUOUS METAL LOUVER PANELS IN GRAY- BLACK PAINTED FINISH
19	LAMINATED, CERAMIC FRIT GLASS CANOPY
20	POWDER COATED METAL PANEL



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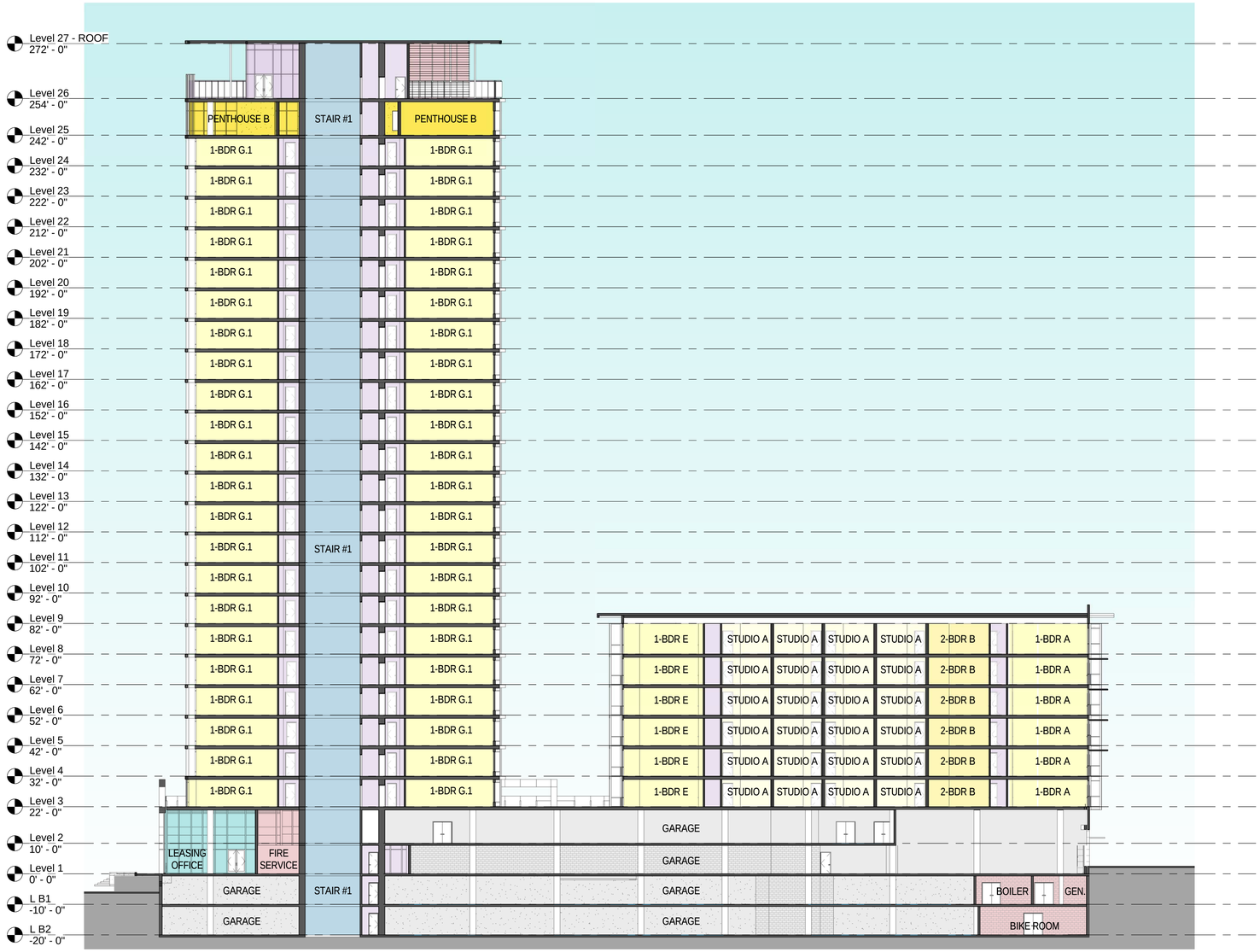
2016.04.29 Design Review

ENLARGED STREET LEVEL

JOB NUMBER: 1607
DATE: Issue Date
SCALE: 1/8" = 1'-0"

- PRELIMINARY - NOT FOR CONSTRUCTION -

A3.03



The project includes the proposed excavation of 25' below current grade. Resulting in the excavation of 1,006,900 SF of earth from the 40,276 SF site

NORTH/SOUTH BUILDING SECTION
1" = 20'-0"

1

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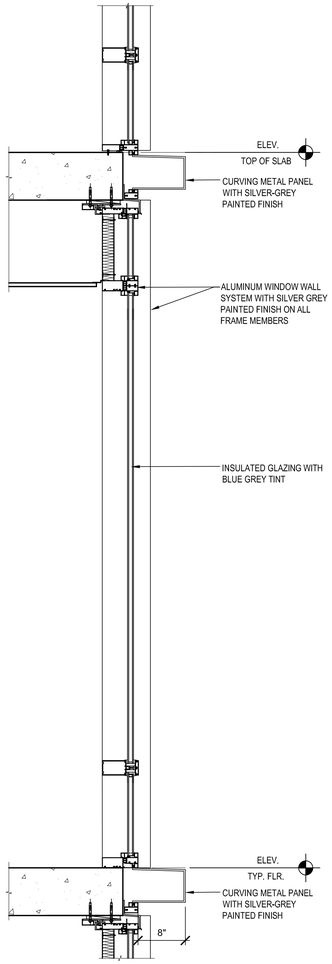
2016.04.29 Design Review

BUILDING SECTION

JOB NUMBER: 1607
DATE: Issue Date
SCALE: 1" = 20'-0"

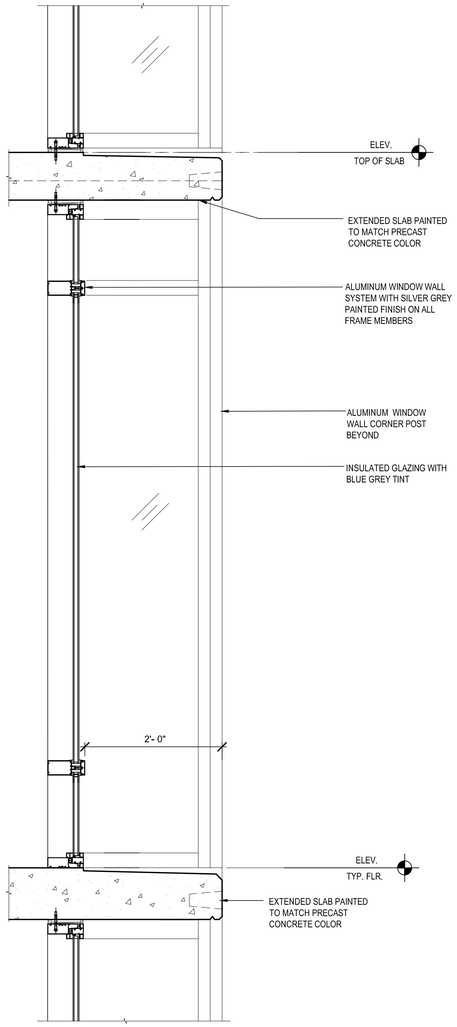
- PRELIMINARY - NOT FOR CONSTRUCTION -

A3.04



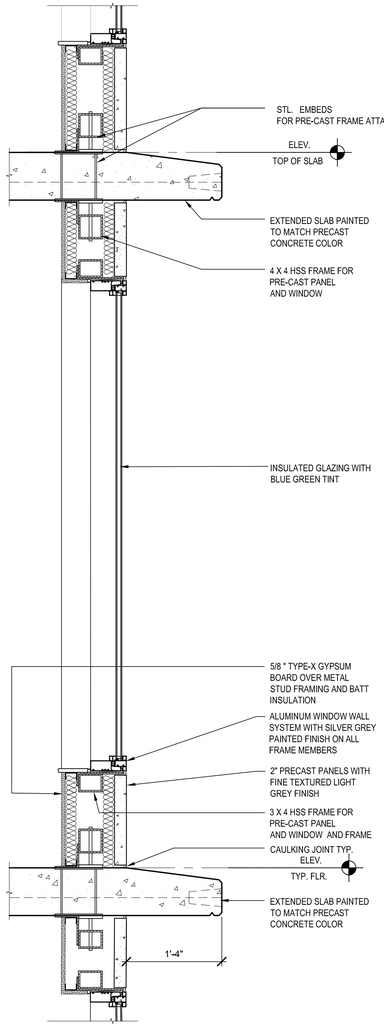
1 A4.01 **WINDOW WALL @ NORTH ELEVATION**

1" = 1'-0"



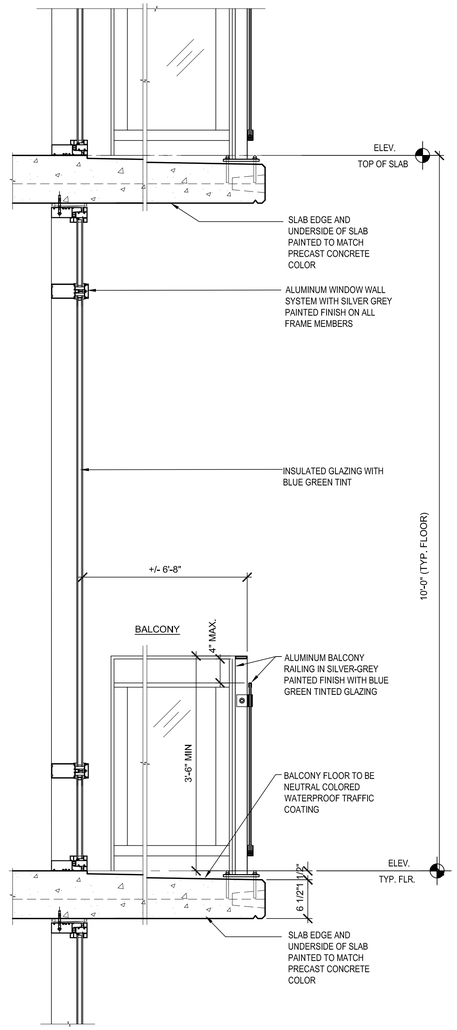
2 A4.01 **WINDOW WALL AT RECESS AT NORTH ELEVATION**

1" = 1'-0"



3 A4.01 **WINDOW AT PRE-CAST PANEL AT SOUTH, EAST, WEST ELEVATIONS**

1" = 1'-0"



4 A4.01 **WINDOW WALL AT BALCONY AT EAST, WEST ELEVATIONS**

1" = 1'-0"

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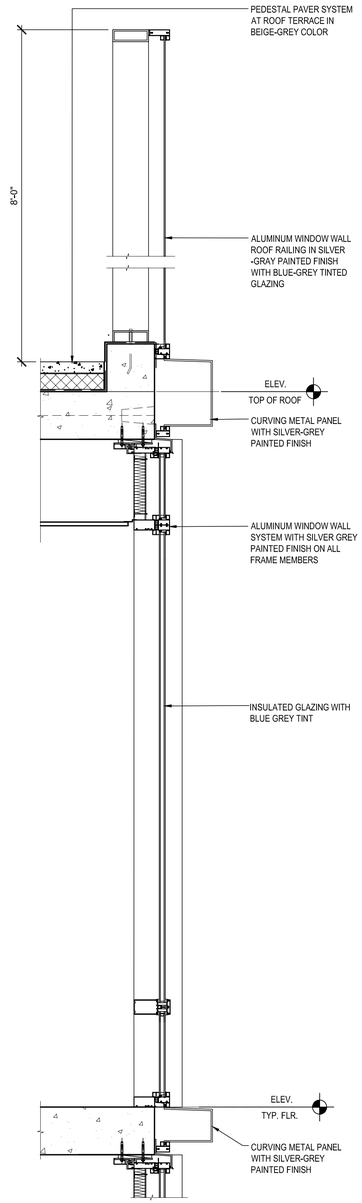
2016.04.15 Design Review Preview Set

WALL SECTIONS

JOB NUMBER: 1607
DATE: 2016.04.29
SCALE: 1" = 1'-0"

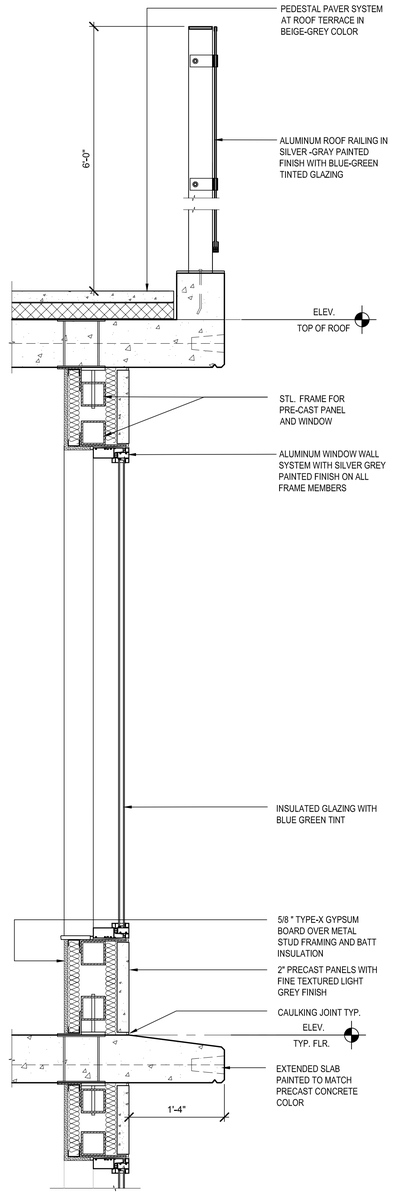
- PRELIMINARY - NOT FOR CONSTRUCTION -

A4.01



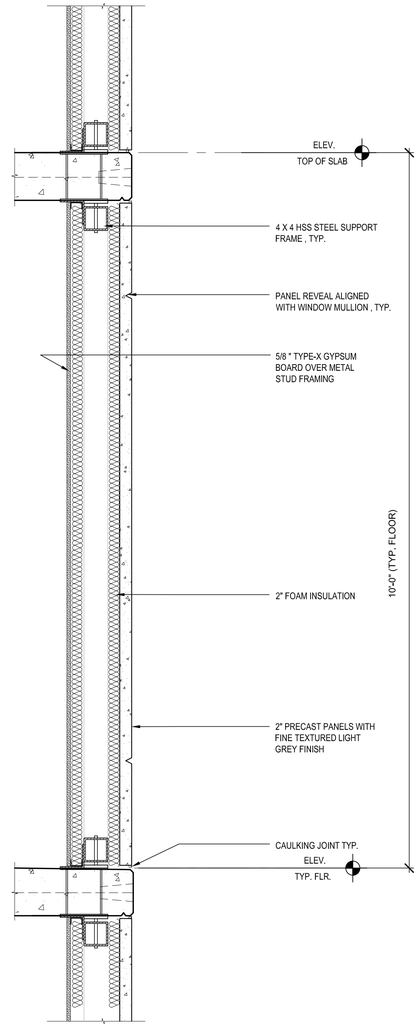
WINDOW AT PARAPET AT NORTH ELEVATION

5 / A4.02 — 1" = 1'-0"



WINDOW ROOF PARAPET AT EAST, WEST, SOUTH ELEVATIONS

6 / A4.02 — 1" = 1'-0"



TYPICAL WALL PANEL AT EAST ELEVATION

7 / A4.02 — 1" = 1'-0"

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2016.04.15 Design Review Preview Set

WALL SECTIONS

JOB NUMBER: 1607
DATE: 2016.04.29
SCALE: 1" = 1'-0"

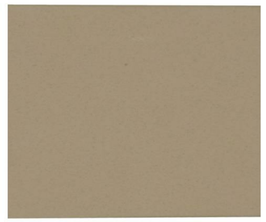
- PRELIMINARY - NOT FOR CONSTRUCTION -

A4.02

6 Hardie Panel Rainsreen

5 A - Aluminum Window Wall
B - Painted Aluminum

4 Painted Concrete Finish

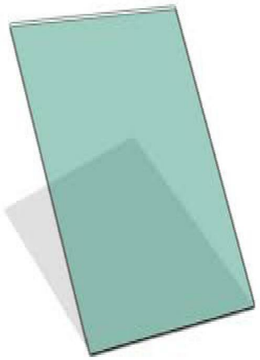


3 Pre-Cast Concrete Panel

2 Opaque Photovoltaic Panels

1 Translucent Photovoltaic Panels

10 Glazing Panel

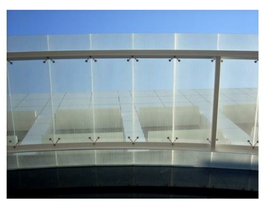


9 Glazing Panel

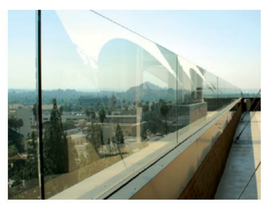
8 Insulated Glazing

7 Insulated Glazing

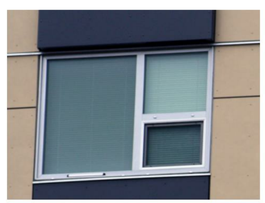
14 Polished Limestone



13 Ceramic Frit Glass Canopy Powder Coated Aluminum Framing



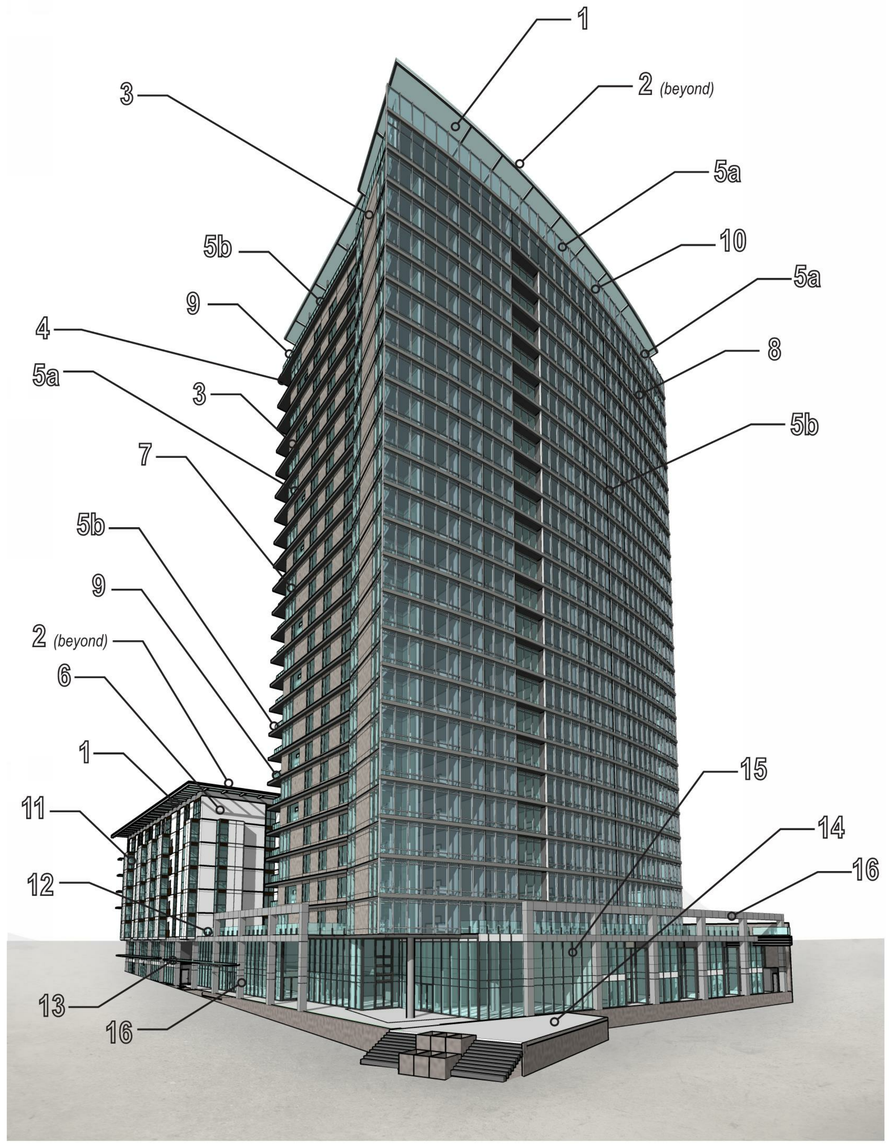
12 Frameless Glass Enclosure



11 Aluminum Self-Recessed Windows

16 Metal Panels Powder Coated

15 Aluminum Window Wall



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2016.04.29 Design Review

Materials Board

JOB NUMBER: 1607
DATE: Issue Date
SCALE:

- PRELIMINARY - NOT FOR CONSTRUCTION -

A5.01

LAKEHOUSE COMMONS PROJECT
CEQA ANALYSIS

LSA

May 2016

LAKEHOUSE COMMONS PROJECT
CEQA ANALYSIS

Submitted to:

City of Oakland
250 Frank H. Ogawa Plaza, Suite 2114
Oakland, California 94612

Prepared by:

LSA Associates, Inc.
2215 Fifth Street
Berkeley, California 94710
510.540.7331

LSA

May 2016

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APPENDICES

FIGURES AND TABLES

FIGURES

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LAKEHOUSE COMMONS PROJECT
CEQA ANALYSIS

Pursuant to California Resources Code Sections 21083.3, 21094.5.5, and 21166 and CEQA Guidelines Sections 15162, 15164, 15183, 15183.3, 15168, and 15180

Date:	May 27, 2016
Project Address:	East 12th Street and 2nd Avenue
Case Number:	PLN16128-ER01
Zoning:	Lake Merritt Station Area Plan District Urban Residential (D-LM-1)
General Plan:	LMSAP District Urban Residential (D-LM-1)
APNs:	019-0027-013-03
Lot Size:	0.92 acres
Applicant:	Michael E. Johnson, President UrbanCore Development, LLC 4096 Piedmont Avenue, Suite 313 Oakland, CA 94611
Staff Contact:	Neil Gray, Planner III 510.238.3878 ngray@oaklandnet.com

I. EXECUTIVE SUMMARY

The proposed Lakehouse Commons Project (project) includes the development of two distinct buildings with a continuous 4-level podium base, including an 8-story mid-rise residential building (South Commons Building) and a 26-story residential apartment tower (North Commons Building). The proposed project would provide a total of 361 residential units, 2,000 square feet of ground-level commercial space, and 330 parking spaces. The project site is located at the northwest corner of the East 12th Street and 2nd Avenue intersection (12th Street parcel) on Assessor's Parcel Number (APN) 019-0027-013-03 and is currently a vacant lot used for soil stockpiling and staging for nearby construction projects.

The proposed project is located within the Lake Merritt Station Area Plan (LMSAP or Station Area Plan). The City certified an Environmental Impact Report (LMSAP EIR) for the LMSAP in November 2014, pursuant to the California Environmental Quality Act (CEQA). The LMSAP EIR presented detailed potential development assumptions for certain "Opportunity Sites," which are properties considered "most likely to redevelop." The 12th Street parcel was identified as Opportunity Site #44 in the development program, which considered the development of a 20-story apartment building containing 357 residential units, 20,000 square feet of retail space and 0.13 acres of open space.

The 2014 LMSAP EIR analyzed the environmental impacts of adoption and implementation of the LMSAP. The analysis in the 2014 LMSAP EIR specifically included the proposed project site and provides the basis for use of an Addendum to the LMSAP EIR (per CEQA Guidelines Section 15164). Although the proposed project's building height and unit count are greater than what was set forth in the LMSAP development program, the level of development currently proposed for the site is within the broader development assumptions analyzed in the LMSAP EIR, and therefore providing CEQA clearance through an Addendum would be permissible as discussed throughout this CEQA Analysis document.

Additionally, environmental clearance under CEQA Guidelines Section 15183 also would be permissible as there are a number of separate and independently qualified planning level documents, specifically program-level EIRs that provide a basis for CEQA clearance of the proposed Lakehouse Commons Project. These program-level documents include the City of Oakland's 1998 General Plan Land Use and Transportation Element EIR (1998 LUTE EIR), the 2010 General Plan Housing Element EIR and 2014 Addendum (Housing Element EIR), and the 2011 Central District Urban Renewal Plan Amendments EIR (or "Redevelopment Plan EIR"). These are referred to collectively throughout the analysis in this document as "the Previous CEQA Documents."

In summary, based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR, as well as those of the 1998 LUTE EIR, the 2011 Redevelopment Plan EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element EIR and 2014 Addendum, the potential environmental impacts associated with the Lakehouse Commons Project have been adequately analyzed and covered in the planning-level LMSAP EIR and other Previous CEQA Documents. Therefore, no further review or analysis under CEQA is required.

II. BACKGROUND

A. PLANNING CONTEXT

The project site is located within the boundaries of the Lake Merritt Station Area Plan (LMSAP), for which the City of Oakland certified an Environmental Impact Report (EIR) in November 2014, pursuant to the California Environmental Quality Act (CEQA).

The LMSAP encompasses approximately 286 acres of area within a half-mile radius of the Lake Merritt Bay Area Rapid Transit (BART) Station. Its goal is to guide actions to improve the area's vitality and to accommodate and promote future growth over a 25-year period. The LMSAP aims to foster new, high-quality transit-oriented development that supports and helps connect existing neighborhood assets and provide enhanced neighborhood amenities. The LMSAP identifies 47 opportunity sites with development potential which comprise vacant or underutilized land. In total, the LMSAP EIR assume a development program of 4,900 new housing units, 4,100 new jobs, 404,000 square feet of retail, and 1,229,000 square feet of office uses within the 286-acre LMSAP area.

The project site is identified as Opportunity Site #44 (Draft EIR Figure 2.5-1[1]) and is within the Eastlake Gateway Plan District. The LMSAP changed the land use designation for the site from Institutional to Urban Residential and rezoned the site from Urban Residential Zone-3 (RU-3) to LMSAP District Urban Residential (D-LM-1). Appendix B of the LMSAP indicates that the project site is assumed to have the potential for development of an apartment building containing 357 residential units, 20,000 square feet of retail space and 0.13 acres of open space. The assumed height is approximately 20 stories.[2] Although the proposed project's building height and unit count are greater than what was set forth for Opportunity Site #44 in the LMSAP development program, the level of development currently proposed for the site is within the broader development assumptions analyzed in the EIR and is consistent with the zoning at the site, which implemented the LMSAP. As stated in the LMSAP EIR, deviation from the specific site-by-site assumptions in the development program may be considered minor as they are anticipated and analyzed in the EIR. Specifically, the LMSAP EIR allows for flexibility in future development and states that as long as the actual plan area buildout stays within the impact envelope analyzed in the EIR, there can be a mix-and-match between various land uses and they need not adhere specifically to the assumptions in the development program.

B. CEQA CONTEXT

The LMSAP EIR anticipated that the environmental review of specific development projects assumed as part of the LMSAP would be streamlined in accordance with CEQA. A previous version of the

[1] Oakland, City of, 2013. *Lake Merritt Station Area Plan Draft Environmental Impact Report,* November.

[2] Ibid, *Appendix B.*

proposed project evaluated in this document (referred to as the Lake Merritt Boulevard Apartments Project) was approved by the City and identified as Categorically Exempt from further CEQA review.[3] The Lake Merritt Boulevard Apartments Project proposed to construct a 298-unit, 24-story residential apartment building with a 2,000 square-foot ground-level café on the project site. However, this project was withdrawn and the currently proposed Lakehouse Commons Project, which is the subject of this CEQA analysis, is instead contemplated for the site.

In addition, several projects within the LMSAP have been completed, are under construction, or have been approved. These include the completed 116 6th Street Project (70 affordable senior housing units); the under construction 118 11th Street Project (71 affordable residential units and 18,000 square feet of health clinic/commercial space); and approved projects at 1331 Harrison Street (169 residential units and 3,600 square feet of retail space), 378/84 11th Street (95-room hotel; under appeal), and 327 7th Street (382 residential units and 9,000 square feet of commercial space).

The analysis in this environmental review document supports determinations that: 1) the proposed project qualifies for an exemption per CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan, General Plan, or Zoning); 2) the proposed project qualifies for streamlining provisions of CEQA under Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3 (Streamlining for Infill Projects); and 3) the proposed project qualifies for an Addendum to the 2014 LMSAP EIR pursuant to CEQA Guidelines Section 15164 (Addendum to an EIR) as none of the conditions requiring a supplemental or subsequent EIR, as specified in Public Resources Code section 21166 and CEQA Guidelines Sections 15162 (Subsequent EIRs) and 15163 (Supplement to an EIR), are present.

1. Lake Merritt Station Area Plan EIR

The analysis in the LMSAP EIR applies to the proposed project and provides the basis for its qualification for the aforementioned CEQA exemption and streamlining provisions. The LMSAP EIR is hereby incorporated by reference and can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California 94612, and/or located at: http://www2.oaklandnet.com/Government/o/PBN/OurServices/Plans/DOWD008198.

This CEQA Analysis document is considered to be an Addendum to the LMSAP EIR which provides the planning level analysis evaluating the potential significant impacts that could result from the reasonably foreseeable maximum development under the plan. As specified in CEQA Guidelines Section 15168, the LMSAP EIR is appropriate for a Specific Plan since the degree of specificity in an EIR corresponds to the degree of specificity in the underlying activity described in the EIR. Preparation of a planning-level document simplifies the task of preparing subsequent project-level environmental documents for future projects under the LMSAP for which the details are currently unknown. As such, the LMSAP EIR presents an analysis of the environmental impacts of adoption and implementation of the LMSAP. Specifically, it evaluates the physical and land use changes from potential development that could occur with adoption and implementation of the LMSAP. Further, where feasible, and where an adequate level of detail is available such that the potential environmental effects may be understood and analyzed, the LMSAP EIR provides a project-level analysis to

[3] Oakland, City of, 2015. *Final Lake Merritt Boulevard Apartments Project Environmental Review*. February 25.

eliminate or minimize the need for subsequent CEQA review of projects that could occur under the LMSAP.

The 2014 LMSAP EIR (including its Initial Study Checklist) determined that development consistent with the LMSAP would result in impacts related to the following topics that would be **reduced to a less-than-significant level with the implementation of mitigation measures and/or standard conditions of approval** (described in Section III): aesthetics (degradation of existing visual character, adversely affect scenic vistas, new light or glare); air quality (conflicts with the Bay Area Clean Air Plan [CAP]); cultural resources (archaeological, human remains, paleontological); greenhouse gases and global climate change (generation of greenhouse gas emissions); hazards and hazardous materials; geology and soils; hydrology and water quality (flooding, runoff in excess of existing capacity, groundwater depletion); noise (use and density incompatibilities, interior noise levels, violation of noise ordinance); utilities and service systems (impacts on existing stormwater, solid waste, and wastewater facilities); biological resources (fish or wildlife species, riparian habitat, wetlands, trees); public services (except as noted below as significant); and transportation/circulation (intersection operations Downtown).

Less-than-significant impacts were identified for the following topics in the 2014 LMSAP EIR and Initial Study: land use (adjacent land uses and land use policy); parks and recreation (expansion of existing park facilities on environment and increase demand for facilities); aesthetics (shadow, conflict with existing policies); noise (in excess of applicable standards); and hydrology and water quality (exposure to loss or risk of death). **No impacts** were identified for agricultural or forestry resources, and mineral resources.

Significant unavoidable impacts were identified for the following environmental topics in the 2014 LMSAP EIR: transportation/circulation (roadway segment operations); air quality (exposure of sensitive receptors to toxic air contaminants [TACs], cumulative impacts); and cultural resources (changes to historic resources). Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

2. Other Applicable Previous CEQA Documents/Program EIRs

The analysis in the 2014 LMSAP EIR directly applies to the Lakehouse Commons Project, providing the basis for use of an Addendum. The following describes the Program EIRs that constitute the Previous CEQA Documents considered in this CEQA Analysis. Each of the following documents are hereby incorporated by reference and can be obtained from the City of Oakland Bureau of Planning at 250 Frank H. Ogawa Plaza, Suite 2114, Oakland, California 94612, and/or located at: http://www2.oaklandnet.com/Government/o/PBN/OurServices/Plans/DOWD008198.

a. Land Use and Transportation Element EIR. The City certified the EIR for its General Plan Land Use and Transportation Element (LUTE) in 1998. The LUTE identifies policies for utilizing Oakland's land as change takes place and sets forth an action program to implement the land use policy through development controls and other strategies. The LUTE identifies five "Showcase Districts" targeted for continued growth; the project site is located within the "Downtown Showcase District" intended to promote a mixture of vibrant and unique districts with around-the-clock activity, continued expansion of job opportunities, and growing residential population. The 1998 LUTE EIR is designated a "Program EIR" under CEQA Guidelines Sections 15183 and 15183.3. As such,

subsequent activities under the LUTE are subject to requirements under each of the EIR CEQA Sections, which are described further in Section III.

Applicable mitigation measures identified in the 1998 LUTE EIR are largely the same as those identified in the other Program EIRs prepared after the 1998 LUTE EIR, either as mitigation measures or newer standard conditions of approval, the latter of which are described below in Section III.

The 1998 LUTE EIR (including its Initial Study Checklist) determined that development consistent with the LUTE would result in impacts related to the following topics that would **be reduced to a less-than-significant level with the implementation of mitigation measures and/or standard conditions of approval** (described in Section III): aesthetics (views, architectural compatibility and shadow only); air quality (construction dust [including PM10] and emissions Downtown, odors); cultural resources (except as noted below as less than significant); hazards and hazardous materials; land use (use and density incompatibilities); noise (use and density incompatibilities, including from transit/transportation improvements); population and housing (induced growth, policy consistency/clean air plan); public services (except as noted below as significant) ; and transportation/circulation (intersection operations Downtown).

Less-than-significant impacts were identified for the following topics in the 1998 LUTE EIR and Initial Study: aesthetics (scenic resources, light and glare); air quality (clean air plan consistency, roadway emissions in Downtown, energy use emissions, local/regional climate change); biological resources; cultural resources (historic context/settings, architectural compatibility); energy; geology and seismicity; hydrology and water quality; land use (conflicts in mixed-use projects and near transit); noise (roadway noise Downtown and citywide, multi-family near transportation/transit improvements); population and housing (exceeding household projections, housing displacement from industrial encroachment); public services (water demand, wastewater flows, stormwater quality, parks services); and transportation/circulation (transit demand). **No impacts** were identified for agricultural or forestry resources, and mineral resources.

Significant unavoidable impacts were identified for the following environmental topics in the 1998 LUTE EIR: air quality (regional emissions, roadway emissions Downtown); noise (construction noise and vibration in Downtown); public services (fire safety); transportation/circulation (roadway segment operations); wind hazards, and policy consistency (clean air plan). Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

b. Oakland Housing Element Update EIR and Addendum. The City has twice amended its General Plan to adopt updates to its Housing Element. The City certified a 2010 EIR for the 2007-2014 Housing Element, and a 2014 Addendum to the 2010 Housing Element EIR for the 2015-2023 Housing Element. The General Plan identifies the City's current and projected housing needs, and sets goals, policies, and programs to address those needs, as specified by the state's Regional Housing Needs Allocation (RHNA) process. The project site is specified as an "Additional Housing Opportunity Site" in the 2015-2023 Housing Element, and thus the Lakehouse Commons Project would contribute to the total number of housing units needed in the City of Oakland to meet its RHNA target**.** Applicable mitigation measures and SCAs identified in the 2014 Addendum to the 2010 EIR are considered in the analysis of the residential components of the Lakehouse Commons Project in this document, and are largely the same as those identified in the 2011 Redevelopment Plan

EIR (described below). The 2010 Housing Element EIR was designated a Program EIR under CEQA Guidelines Sections 15183 and 15183.3. As such, subsequent activities under the Housing Element that involve housing, are subject to requirements under each of the aforementioned EIR CEQA Sections, which are described further in Section III.

Applicable mitigation measures and standard conditions of approval (also described in Section III) identified in the 2010 Housing Element EIR and 2014 Addendum are considered in the analysis in this document and are largely the same as those identified in the other Program EIR documents described in this section.

The 2010 Housing Element EIR (including its Initial Study Checklist) and 2014 Addendum determined that housing developed pursuant to the Housing Element, which would include the project site, would result in impacts related to the following topics that would be **reduced to a less-than-significant level with the implementation of mitigation measures and/or standard conditions of approval** (described in Section III): aesthetics (visual character/quality and light/glare only); air quality (except as noted below); biological resources; cultural resources; geology and soils; greenhouse gas emissions; hazards and hazardous materials (except as noted below, and no impacts regarding airport/airstrip hazards and emergency routes); hydrology and water quality (except as noted below); noise; public services (police and fire only); and utilities and service systems (except as noted below).

Less-than-significant impacts were identified for the following topics in the Housing Element EIR and Addendum: hazards and hazardous materials (emergency plans and risk via transport/disposal); hydrology and water quality (flooding/flood flows, and inundation by seiche, tsunami or mudflow); land use (except no impact regarding community division or conservation plans); population and housing (except no impact regarding growth inducement); public services and recreation (except as noted above, and no impact regarding new recreation facilities); and utilities and service systems (landfill, solid waste, and energy capacity only, and no impact regarding energy standards). **No impacts** were identified for agricultural or forestry resources, and mineral resources.

Significant unavoidable impacts were identified for the following environmental topics in the Housing Element EIR and Addendum: air quality (toxic air contaminant exposure) and traffic delays. Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

c. Central District Urban Renewal Plan Amendments EIR (Redevelopment Plan EIR). The Lakehouse Commons Project site is located within the Central District Urban Renewal Plan area, which generally encompasses the entire Downtown: approximately 250 city blocks (828 acres) in an area generally bounded by Interstate 980 (I-980), Lake Merritt, 27th Street and the Embarcadero. The Oakland City Council adopted the Central District Urban Renewal Plan (Redevelopment Plan) for the project area in June 1969. The City prepared and certified an EIR for proposed amendments to the Urban Renewal Plan in 2011, and amended or supplemented the Plan on April 3, 2012. The 2011 Redevelopment Plan EIR was designated a Program EIR under CEQA Guidelines Section 15180; as such, subsequent activities are subject to requirements under CEQA Section 15168.

Applicable mitigation measures and standard conditions of approval (described in Section III) identified in the 2011 Redevelopment Plan EIR are considered in the analysis in this document and are also largely the same as those identified in the other Program EIRs described in this section.

The 2011 Redevelopment Plan EIR determined that development facilitated by the Proposed Amendments would result in impacts related to the following topics to the following resources that would be **reduced to a less-than-significant level with the implementation of identified mitigation measures and/or standard conditions of approval** (described in Section III): aesthetics (light/glare only); air quality (except as noted below as less than significant and significant); biological resources (except no impacts regarding wetlands or conservation plans); cultural resources (except as noted below as significant); geology and soils; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality (stormwater and 100-year flooding only); noise (exceeding standards – construction and operations only); traffic/circulation (safety and transit only); utilities and service systems (stormwater and solid waste only).

Less-than-significant impacts were identified for the following topics in the 2011 Redevelopment Plan EIR: aesthetics (except as noted above as less than significant with standard conditions of approval); air quality (clean air plan consistency); hydrology and water quality (except as noted above as less than significant with standard conditions of approval); land use and planning; population and housing; noise (roadway noise only); public services and recreation; traffic/circulation (air traffic and emergency access); and utilities and service systems (except as noted above as less than significant with standard conditions of approval). **No impacts** were identified for agricultural or forestry resources, and mineral resources.

The 2011 Redevelopment Plan EIR determined that the Proposed Amendments combined with cumulative development would have **significant unavoidable impacts** on the following environmental resources: air quality (toxic air contaminant exposure and odors); cultural resources (historic); and traffic/circulation (roadway segment operations). Due to the potential for significant unavoidable impacts, a Statement of Overriding Considerations was adopted as part of the City's approvals.

III. PURPOSE AND SUMMARY OF THIS DOCUMENT

The purpose of this document is to evaluate CEQA compliance of the proposed Lakehouse Commons Project. The 2014 LMSAP EIR analyzed the environmental impacts of development located within the LMSAP, which included the project site on the 12th Street parcel identified as Opportunity Site #44 in the development program. The LMSAP EIR anticipated that the environmental review of specific development projects assumed as part of the LMSAP would be streamlined in accordance with CEQA. An Addendum to the LMSAP EIR is considered to be suitable for CEQA clearance for the currently proposed Lakehouse Commons Project, as demonstrated by the CEQA Checklist presented in Section VI, herein. For comprehensive review and public information, the CEQA Checklist and its supporting attachments demonstrate that the Lakehouse Commons Project would qualify for certain other CEQA exemptions, as summarized below, which separately and independently also provide a basis for CEQA compliance.

1. CEQA Exemptions

1. **Addendum**. Public Resources Code Section 21166 and CEQA Guidelines Sections 15162 and 15164 (Subsequent EIRs, Supplements and Addenda to an EIR or Negative Declaration), state that an addendum to a certified EIR is allowed when minor changes or additions are necessary, and none of the conditions for preparation of a subsequent EIR or Negative Declaration per Sections 15162 and 15164 are satisfied.

   The analysis in the 2014 LMSAP EIR directly applies to the portion of the project site on the 12th Street parcel, providing the basis for use of an Addendum.

2. **Community Plan Exemption**. Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183 (Projects Consistent with a Community Plan or Zoning) allow streamlined environmental review for projects that are "consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified, except as might be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site." Section 15183(c) specifies that "if an impact is not peculiar to the parcel or to the proposed project, has been addressed as a significant effect in the prior EIR, or can be substantially mitigated by the imposition of uniformly applied development policies or standards…, then an EIR need not be prepared for the project solely on the basis of that impact."

   The analysis in the Program EIRs – the 1998 LUTE EIR and, for only the residential component of the Lakehouse Commons Project, the 2010 Housing Element EIR and its 2014 Addendum, as well as the 2011 Redevelopment Plan EIR and the 2014 LMSAP EIR – are applicable to the Lakehouse Commons Project and are the Previous CEQA Documents providing the basis for use of the Community Plan Exemption for CEQA compliance.

3. **Qualified Infill Exemption**. Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3 (Streamlining for Infill Projects) allow streamlining for certain qualified infill projects by limiting the topics subject to review at the project level, if the

effects of infill development have been addressed in a planning level decision, or by uniformly applicable development policies and standard conditions of approval. Infill projects are eligible if they are located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least 75 percent of the site's perimeter; satisfy the performance standards provided in CEQA Guidelines Appendix M; and are consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy. No additional environmental review is required if the infill project would not cause any new specific effects or more significant effects, or if uniformly applicable development policies or standards would substantially mitigate such effects.

The analysis in the Program EIRs noted above is applicable to the Lakehouse Commons Project and are the Previous CEQA Documents providing the basis for use of the Qualified Infill Exemption under CEQA Guidelines Section 15183.3.

4. **Program EIRs and Redevelopment Projects**. CEQA Guidelines Section 15168 (Program EIRs) and Section 15180 (Redevelopment Projects) provide that the 2011 Redevelopment Plan EIR can be used as a Program EIR in support of streamlining and/or tiering provisions under CEQA. The 2011 Redevelopment Plan EIR is a Program EIR for streamlining and/or tiering provisions by CEQA Section 15168. The section defines the "program EIR" as one prepared on a series of actions that can be characterized as one large project and are related geographically and by other shared characteristics. Section 15168 continues that "subsequent activities in the program EIR must be examined in the light of the program EIR to determine whether an additional environmental document must be prepared." If the agency finds that pursuant to CEQA Guidelines Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR and no new environmental document would be required.

   Further, CEQA Guidelines Section 15180 specifies that if a certified redevelopment plan EIR is prepared, no subsequent EIRs are required for individual components of the redevelopment plan unless a subsequent EIR or supplement to the EIR would be required by Section 15162 or 15163.

   The analysis in the Program EIRs and Redevelopment EIR noted above is applicable to the Lakehouse Commons Project and providing the basis for use of the Program EIRs and Redevelopment Projects streamlining provisions under CEQA Guidelines Sections 15168 and 15180.

2. Previous Mitigation Measures and Current Standard Conditions of Approval (SCAs)

The CEQA Checklist provided in Section VI of this document evaluates the potential project-specific environmental effects of the proposed Lakehouse Commons Project, and evaluates whether such impacts were adequately covered by the 2014 LMSAP EIR (as well as the Previous CEQA Documents previously described in Section II) to allow the above-listed provisions of CEQA to apply. The analysis conducted incorporates by reference the information contained in each of the Previous CEQA Documents. The Lakehouse Commons Project is legally required to incorporate and/or comply with the applicable requirements of the mitigation measures identified in the 2014 LMSAP EIR. Therefore, the mitigation measures herein are assumed to be included as part of the

proposed project, including those that have been modified to reflect the City's current standard language and requirements, as discussed below.

a. SCA Application in General. The City established its Standard Conditions of Approval and Uniformly Applied Development Standards (SCAs) in 2008, and they have since been amended and revised several times. The City's SCAs are incorporated into new and changed projects as conditions of approval regardless of a project's environmental determination. The SCAs incorporate policies and standards from various adopted plans, policies, and ordinances (such as the Oakland Planning and Municipal Codes, Oakland Creek Protection Ordinance, Stormwater Water Management and Discharge Control Ordinance, Oakland Protected Trees Ordinance, Oakland Grading Regulations, National Pollutant Discharge Elimination System (NPDES) permit requirements, Housing Element-related mitigation measures, California Building Code and Uniform Fire Code, among others), which have been found to substantially mitigate environmental effects. The SCAs are adopted as requirements of an individual project when it is approved by the City and are designed to, and will, substantially mitigate environmental effects.

b. SCA Application in this CEQA Analysis. Mitigation measures and SCAs identified in the 2014 LMSAP EIR that would apply to the Lakehouse Commons Project are listed in Attachment A to this document, which is incorporated by reference into this CEQA Analysis. Because the SCAs are mandatory City requirements, the impact analysis for the proposed project assumes that they will be imposed and implemented, which the project sponsor has agreed to do or ensure as part of the proposed project. If the CEQA Checklist (see Section VI) or its attachments inaccurately identifies or fails to list a mitigation measure or SCA, the applicability of that mitigation measure or SCA to the proposed project is not affected.

Most of the SCAs that are identified for the Lakehouse Commons Project were also identified in the 2014 LMSAP EIR, the 2011 Redevelopment Plan EIR, and the 2010 Oakland Housing Element EIR and 2014 Addendum; the 1998 LUTE EIR was developed prior to the City's application of SCAs. As discussed specifically in Attachment A to this document, since certification of the LMSAP EIR, the City of Oakland has revised its SCAs, and the most current SCAs are identified in this CEQA Analysis. All mitigation measures identified in the LMSAP EIR that would apply to the proposed project are also identified in Attachment A to this document.

3. Lakehouse Commons Project CEQA Compliance The Lakehouse Commons Project satisfies each of the CEQA provisions, as summarized below.

- **Addendum**. The analysis conducted in this document indicates that, pursuant to CEQA Guidelines Section 15162 through 15164, an Addendum to the 2014 LMSAP EIR applies; therefore, this CEQA Analysis is considered to be the Addendum to the 2014 LMSAP EIR. As discussed under Project Characteristics below, the Lakehouse Commons Project represents a minor change to the Opportunity Site #44 development from what was analyzed in the development program in the 2014 LMSAP EIR. The Lakehouse Commons Project would not represent a substantial change from what was described in the overall development program. Although the proposed building height and unit count are greater than what was set forth for Opportunity Site #44 in the development program, the level of development currently proposed for the site is within the broader development assumptions analyzed in the EIR. As stated in the LMSAP EIR, deviation from the specific site-by-site assumptions in the development program may be considered minor as they are anticipated

and analyzed in the EIR. Therefore, the Lakehouse Commons Project meets the requirements for an addendum, as evidenced in Attachment B to this document.

- **Community Plan Exemption**. Based on the analysis conducted in this document, and pursuant to CEQA Guidelines Section 15183, the Lakehouse Commons Project also qualifies for a community plan CEQA exemption. The project is permitted in the zoning district where the project site is located, and is consistent with the land uses envisioned for the site. The analysis herein considers the analysis in the 2010 Oakland Housing Element EIR and 2014 Addendum for the evaluation of the housing components of the Lakehouse Commons Project, and further reconsiders the analysis in the 1998 LUTE EIR and 2014 LMSAP EIR for the overall project. This CEQA Analysis concludes that the proposed project would not result in significant impacts that (1) are peculiar to the project or project site; (2) were not identified as significant project-level, cumulative, or offsite effects in the 2014 LMSAP EIR; or (3) were previously identified as significant effects, but are determined to have a more severe adverse impact than discussed in the LMSAP EIR. Findings regarding the proposed project's consistency with the zoning are included as Attachment C to this document.
- **Qualified Infill Exemption**. The analysis conducted indicates that the proposed project qualifies for a qualified CEQA infill exemption and, pursuant to CEQA Guidelines Section 1518.3, is generally consistent with the required performance standards provided in CEQA Guidelines Appendix M, as evaluated in Table D-1 in Attachment D to this document. This CEQA Analysis supports that the Lakehouse Commons Project would not cause any new specific effects or more significant effects than previously identified in applicable planning level EIRs, and uniformly applicable development policies or standards (SCAs) would substantially mitigate the project's effects. The Lakehouse Commons Project is proposed on a previously developed site in downtown Oakland and is surrounded by urban uses. Furthermore, the proposed project is generally consistent with the land use, density, building intensity, and applicable policies for the site. The analysis herein considers the analysis in the 2014 LMSAP EIR; the 2011Redevelopment Plan EIR; the 1998 LUTE EIR; and for the residential components of the Lakehouse Commons Project only, the 2010 Housing Element EIR and its 2014 Addendum.
- **Program EIRs and Redevelopment Projects**. The analysis in the 2011 Redevelopment Plan EIR and this CEQA Analysis demonstrates that the Lakehouse Commons Project would not result in substantial changes or involve new information that would warrant preparation of a subsequent EIR, per CEQA Guidelines Section 15162, because the level of development now proposed for the site is within the broader development assumptions analyzed in the EIR.

Overall, based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR, as well as those of the 1998 LUTE EIR, the 2011 Redevelopment Plan EIR, and for the housing components of the proposed project, the 2010 General Plan Housing Element EIR and 2014 Addendum-all of which are summarized in the CEQA Checklist in Section VI of this document-the potential environmental impacts associated with the Lakehouse Commons Project have been adequately analyzed and covered in the planning-level LMSAP EIR and other Previous CEQA Documents. Therefore, no further review or analysis under CEQA is required.

IV. PROJECT DESCRIPTION

This chapter provides an overview of the proposed Lakehouse Commons Project (project), including a description of existing conditions within and in the vicinity of the project site.

A. PROJECT AREA

The following provides an overview of the project site's regional and local context.

1. Project Location

The approximately 0.92-acre project site is located on the southeastern edge of the Lake Merritt district in the City of Oakland, Alameda County. Regional access to the project site is provided by I-880, which is located approximately 0.5 miles south of the site; I-580, which is located just over 1 mile northeast of the site; and I-980, which is located about 1.3 miles northwest of the site. The Lake Merritt Bay Area Rapid Transit (BART) Station is also located about 0.75 miles to the west. The triangular parcel is generally bounded by Lake Merritt Boulevard to the north, East 12th Street to the east, 2nd Avenue and a vacant building formerly occupied by the Oakland Unified School District (OUSD) to the south, and a recently re-vegetated 0.91-acre City park/water treatment basin installed as part of the East 12th Street Reconstruction Project and Lake Merritt Channel to the west. Lake Merritt is located immediately to the north of the site across Lake Merritt Boulevard. Figure 1 depicts the site's regional and local context. Figure 2 depicts an aerial view of the project site and vicinity.

2. Existing Site Conditions

The project site is generally level and consists of a vacant lot that was previously bisected by a portion of East 12th Street. This roadway was realigned as part of the East 12th Street Reconstruction Project[4] and all pavements have been removed. Current uses on the site include soil stockpiling and staging for nearby construction projects. Vegetation on the site is limited to a few scattered shrubs along the perimeter of the site and a few trees that border the site. The site is approximately 21 feet above sea level.

3. Surrounding Land Uses

The site vicinity is characterized as urban and consists of public, institutional, residential, and commercial uses. Public and institutional uses are among the most prominent land uses in the area and are largely concentrated along the Lake Merritt Channel and along 13th Street. As shown in Figure 2, these uses include the Dewey High School campus and the former OUSD administrative

[4] Oakland, City of, 2014. Lake Merritt Park Improvements, East 12th Street Project. Website: www2.oaklandnet.com/Government/o/PWA/o/EC/s/MeasureDD/OAK025946. August.

offices,[5, 6] the Laney College campus and sports fields, the Peralta Community College District Administration buildings, the Oakland Museum of California, the Kaiser Auditorium, the County Court and Offices, and the Public Library. Multi-unit apartment buildings ranging from 2 to 23 stories in height also exist in the area including the 18-story Merritt on 3rd residential building located southeast of the site on the corner of 3rd and East 12th Streets and the 23-story 1200 Lakeshore Apartments located immediately north of the site across Lake Merritt Boulevard.

B. PROPOSED PROJECT

The proposed project would develop the site with two distinct buildings with a continuous 4-level podium base, including an 8-story mid-rise residential building (South Commons Building) and a 26-story residential apartment tower (North Commons Building). The residential buildings would include a total of 361 residential units, 2,000 square feet of ground level commercial space, 330 parking spaces, and associated amenities and improvements. The proposed North Commons Building would be a maximum of 275 feet in height at the roof above the natural grade, including architectural and mechanical features that extend above the roofline. Conceptual site plans for the two below and partially-below ground garage levels and first two levels of the podium, which also include parking, are shown in Figures 3a, 3b, 3c and 3d. Figure 3e depicts the residential floor area plan (Level 3). Conceptual building elevations and sections are shown in Figures 4a and 4b and building cross sections are shown in Figure 5. Conceptual ground- and podium-level landscaping and common open space areas are shown in Figures 6a and 6b, respectively. The proposed project is described in more detail below.

1. Building Program

The proposed project would construct approximately 550,000 gross square feet of residential and commercial building area with associated amenities and infrastructure. A total of 91 residential units would be located within the South Commons Building, for a total residential floor area of 61,031 square feet. A total of 25 studio apartments, 36 one-bedroom units, 20 two-bedroom units, and 10 three-bedroom units would be included in this building. A total of 270 residential units would be located within the North Commons Building, for a total residential floor area of 217,224 square feet. A total of 86 studio apartments, 4 townhomes, 66 one-bedroom units, 86 two-bedroom units, 22 three-bedroom units, and 6 penthouse apartments would be included in this building. The South Commons Building would include 90 affordable housing units available to extremely low income and very low income residents between 30 percent and 60 percent of the average median income (AMI).[7] All units within the North Commons Building would be market-rate (18 units would be restricted to 80 to 120 percent of AMI.

[5] The existing Dewey High School campus and former OUSD administrative offices are surplus OUSD property and are currently proposed to be redeveloped with a 275-foot residential tower.

[6] Oakland Unified School District, 2014. Request for Developer Qualifications for New Development of Oakland Unified School District Properties, Including the Parcels Housing the Pail Robeson Administration Building, and Dewey High School. Available online at: www.ousd.k12.ca.us/cms/lib07/CA01001176/Centricity/Domain/95/RFQ%201025%202ND%20Ave.%20Jun%2024.pdf. June 24.

[7] Oakland, City of, 2015. 2015 Income Limits. Available online at: www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak053389.pdf.

A total of approximately 14,232 square feet of residential amenity space would be located throughout Levels 1 through 3 of both buildings and at the top (Level 26) of the North Commons Building for shared use by project residents. The ground level would include the building entrance, lobby, lounge area, and bike storage room; the second level would include additional bicycle storage rooms, and the third level would include an indoor fitness room. The third level (top of the podium) would include an approximately 11,224 square-foot open courtyard that would include a fire lounge, a wood deck with a wading pool and hot tub, a kitchen and grilling space, a theater and performance space, and several movable outdoor chairs and tables in addition to seating along planters (Figure 6b). In addition, the South Commons Building would include a 747 square-foot roof deck and the North Commons Building would include a 6,441 square-foot roof-top deck. Private balconies would also be located off of some residential units.

A 2,000-square-foot café and retail space would also be located at the ground level. The café would include an outdoor terrace and plaza with views towards Lake Merritt and the Lake Merritt Channel.

2. Landscaping

As shown in Figures 6a and 6b, a number of landscape features would be incorporated into the design of the proposed project. Street trees and other plantings would be located at the ground level where the site borders East 12th Street and the existing water treatment basin, at the third podium level within the outdoor open space area, and at the outdoor roof decks.

In addition, off-site improvements are proposed to the existing water treatment basin/park located adjacent to the site (0.91 acres). These improvements would include the installation of natural landscaping to the area north and northwest of the project site. This park is owned by the City and with the proposed improvements would function as a passive open green space consisting mostly of native plantings, groundcover, shrubs and trees. The groundcover would be low maintenance grasses and wildflowers requiring mowing once or twice a year. Temporary irrigation would be used for two or three years to establish the trees and shrubs. All plantings would adhere to Bay friendly practices and adhere to the State's Water Efficient Landscape Ordinance.

3. Access, Circulation and Parking

Vehicular access to the four-level parking garage would be provided by a single entrance on 2nd Avenue. The parking garage would include a total of 330 parking spaces, including mechanical stackers. Fifty feet of the curb along East 12th Street, from approximately the service entrance to the elevator core, would be striped for on-street loading.

Pedestrian access to the proposed apartments and common areas would be provided by a secured entrance located on East 12th Street. Access would also be available through the café that would be located at the corner of East 12th Street and Lake Merritt Boulevard. There would be an elevator to provide access from the sub-surface garage level and all levels of the building. Internal pathways and stairwells would provide access to various levels within the building.

4. Construction and Grading

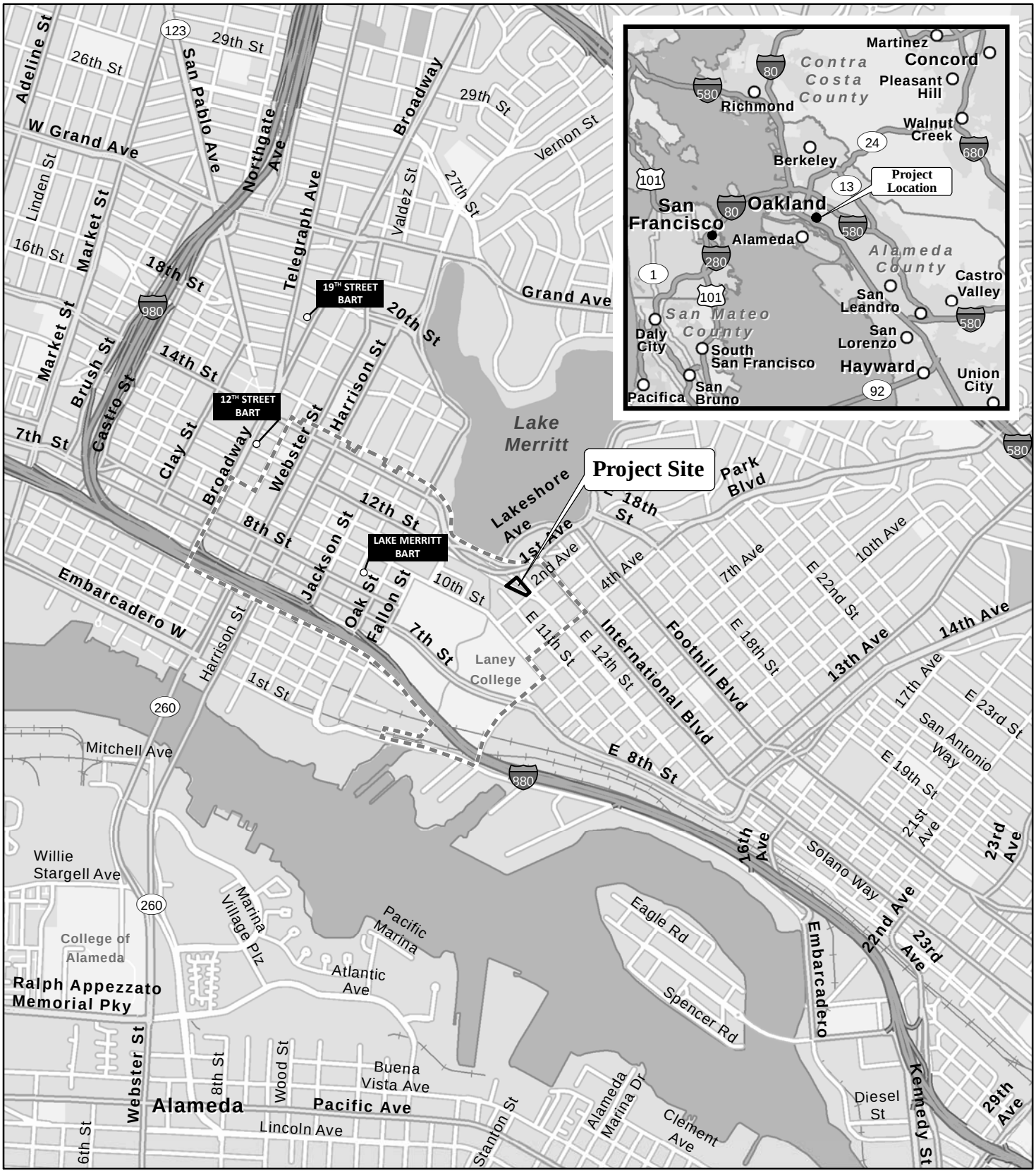
Subsurface excavation for the subsurface parking garage, foundations, and utilities would likely occur to a depth of approximately 28 feet below grade. Approximately 42,000 cubic yards of soil would also be off-hauled as part of site excavation for the subsurface parking garage and grading. The

construction period is expected to begin in mid-2017 and would occur over an approximately two-year period. Occupancy of the units could occur as early as the summer of 2019.

5. Discretionary Actions

The project sponsor requests, and the proposed project would require, a number of discretionary actions/approvals, as listed below:

- Conditional Use Permit (CUP) to allow the increase in building heights and density on the project site and reduction in loading berth size; and
- Design Review Approval.



LSA

FIGURE 1

Project Boundary

Lake Merritt Station Area Plan Boundary

0 1000 2000
FEET

SOURCE: ESRI StreetMap North America (2012).

Lakehouse Commons Project CEQA Analysis
Project Location and Regional Vicinity Map

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LSA

FIGURE 2

N

0 250 500
FEET

Project Site

Lake Merritt Station Area Plan Boundary

Lakehouse Commons Project CEQA Analysis

Aerial Photograph of the Project Site

SOURCES: GOOGLE EARTH, FEBRUARY 2014; LSA, 2016.

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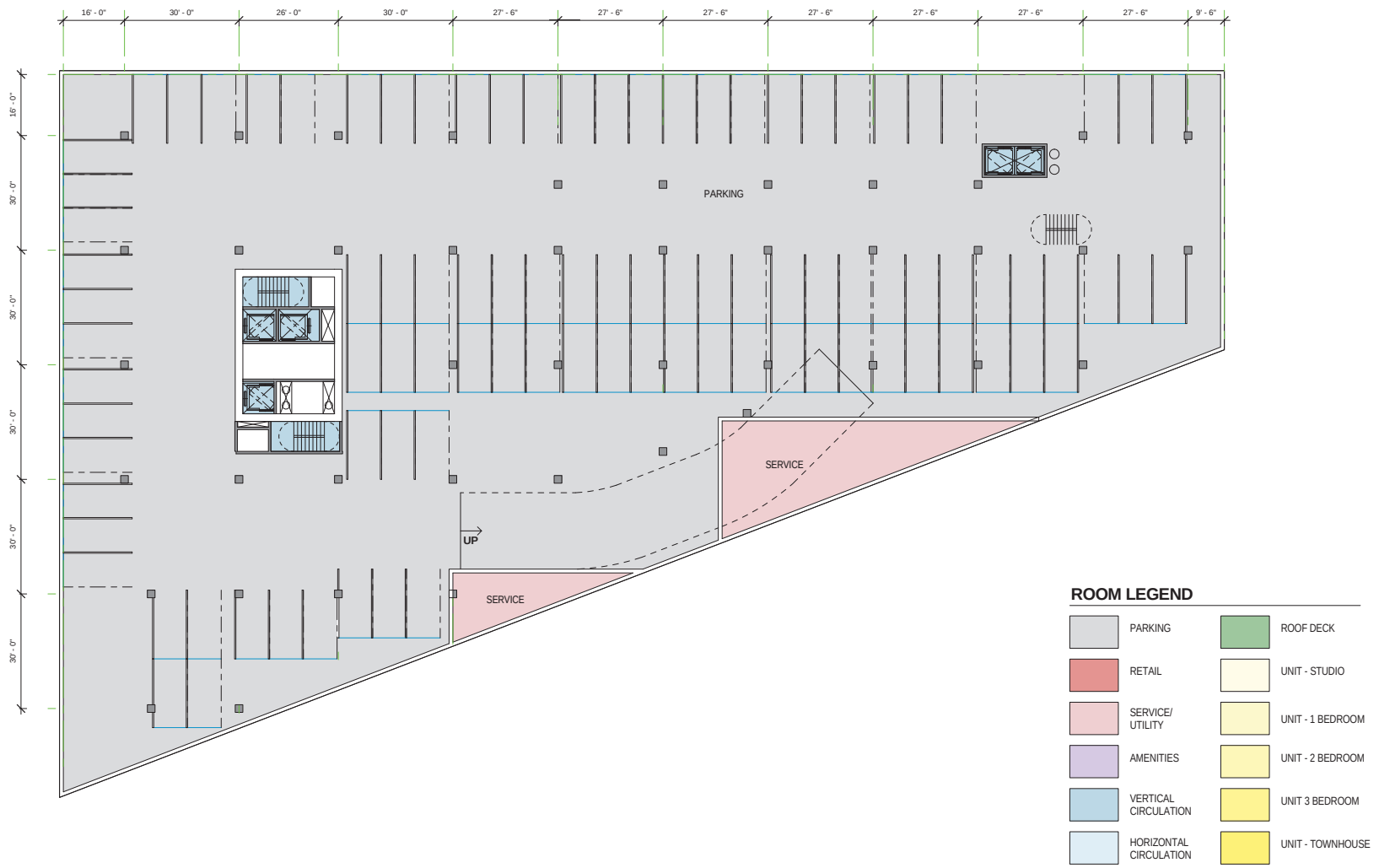

LSA

FIGURE 3a

NOT TO SCALE

SOURCE: PYATOK, APRIL 2016.

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Lakehouse Commons Project CEQA Analysis

Conceptual Below-Grade Parking Garage (Level B2) Plan

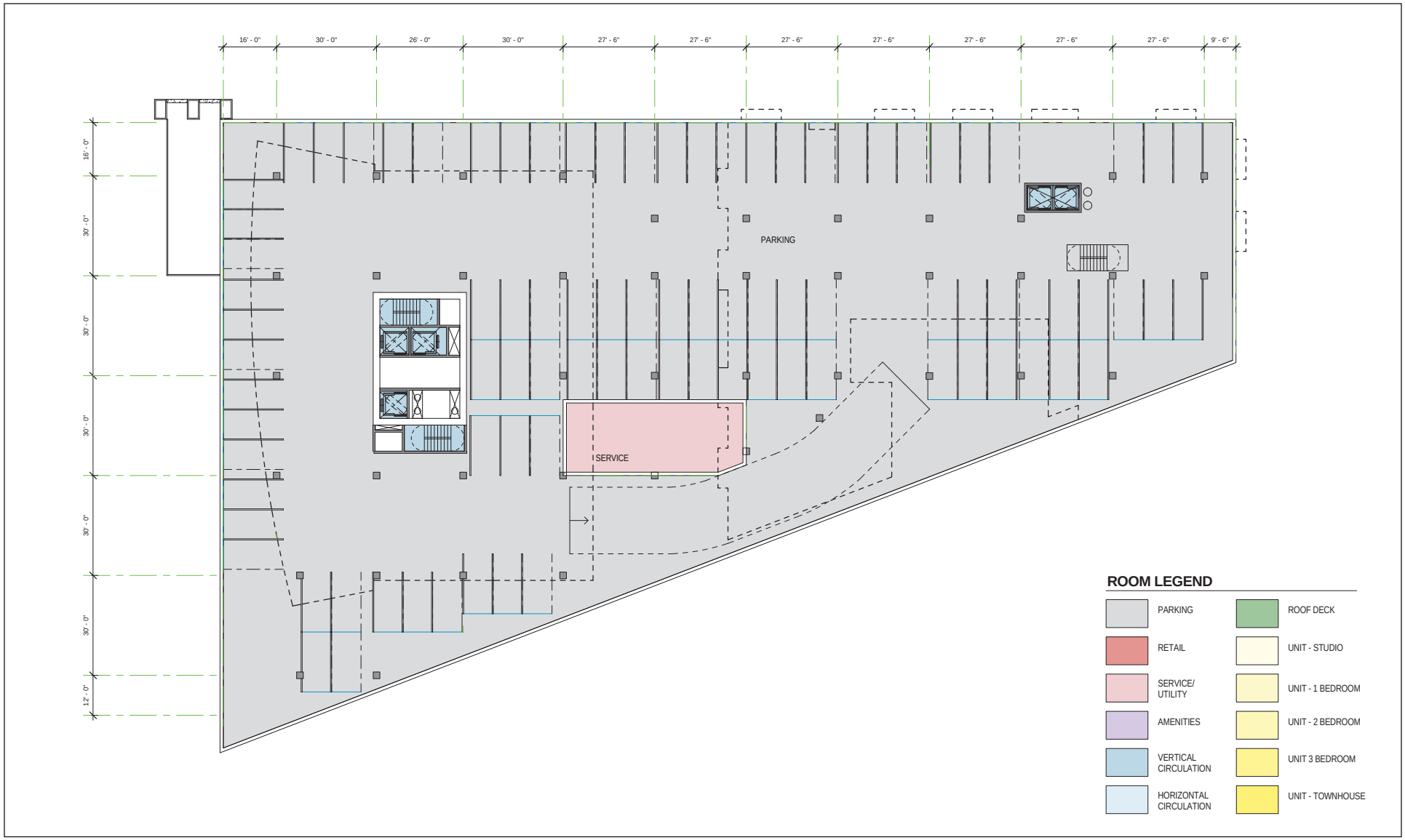

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FIGURE 3b

NOT TO SCALE

SOURCE: PYATOK, APRIL 2016.

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Lakehouse Commons Project CEQA Analysis

Conceptual Partially Below-Grade Parking Garage (Level B1) Plan

LSA

FIGURE 3c

NOT TO SCALE

Lakehouse Commons Project CEQA Analysis

Conceptual Ground Level (Level 1) Plan

SOURCE: PYATOK, APRIL 2016.

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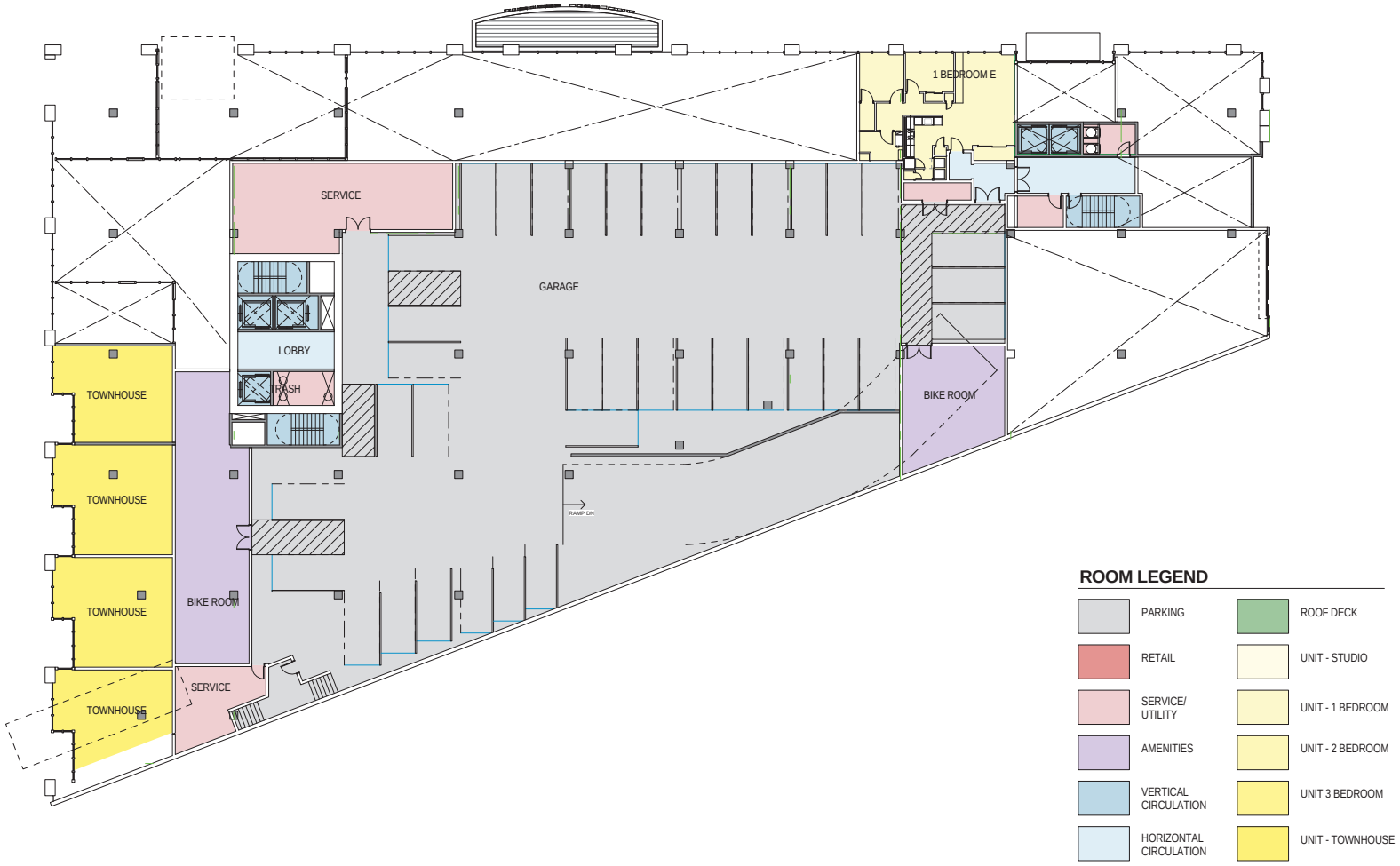

LSA

FIGURE 3d

NOT TO SCALE

Lakehouse Commons Project CEQA Analysis

Conceptual Podium Level (Level 2) Plan

SOURCE: PYATOK, APRIL 2016.

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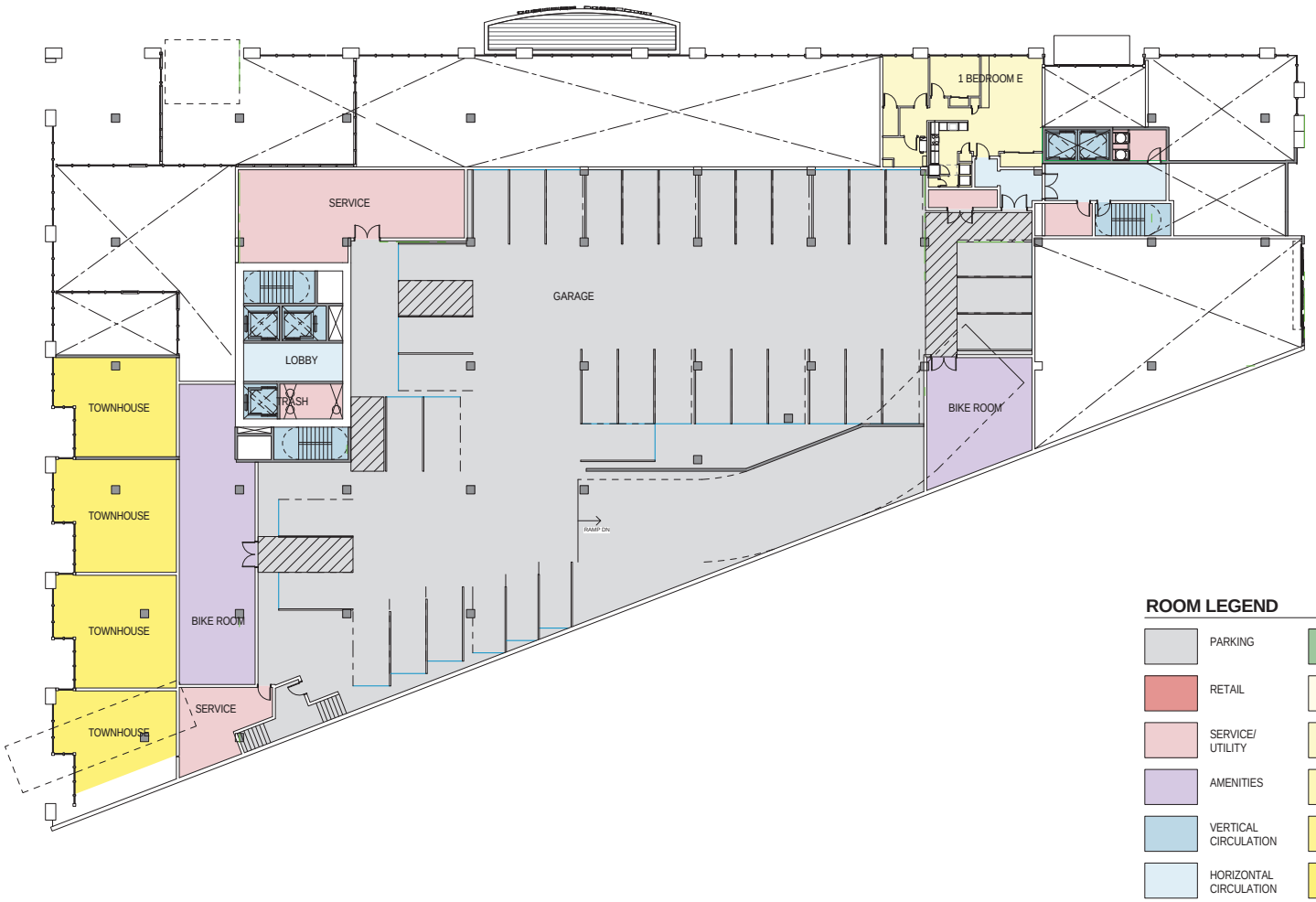

LSA

FIGURE 3e

NOT TO SCALE

Lakehouse Commons Project CEQA Analysis

Conceptual Residential Floor (Level 3) Plan

SOURCE: PYATOK, APRIL 2016.

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LAKE MERRITT BLVD ELEVATION (NORTH)

12TH STREET ELEVATION (WEST)

LSA

FIGURE 4a

NOT TO SCALE

Lakehouse Commons Project CEQA Analysis
Conceptual Building Elevations

SOURCE: PYATOK, APRIL 2016.

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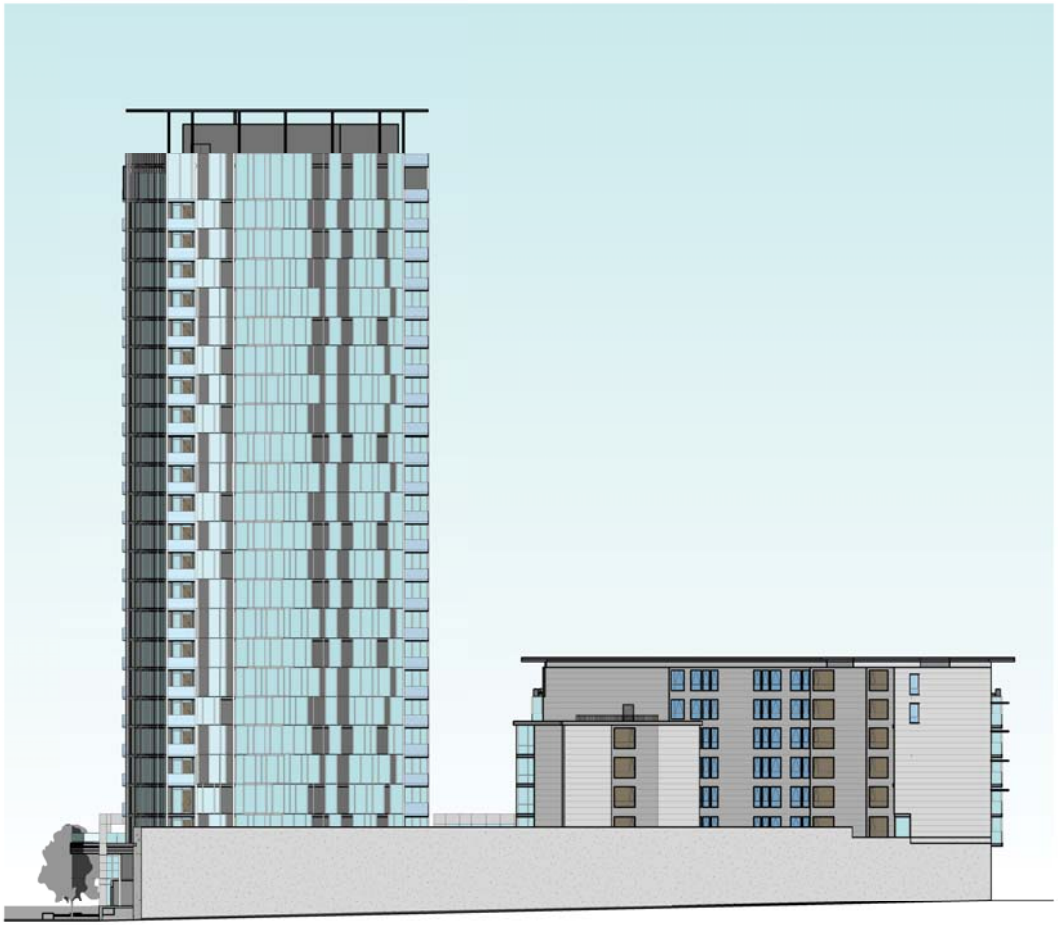
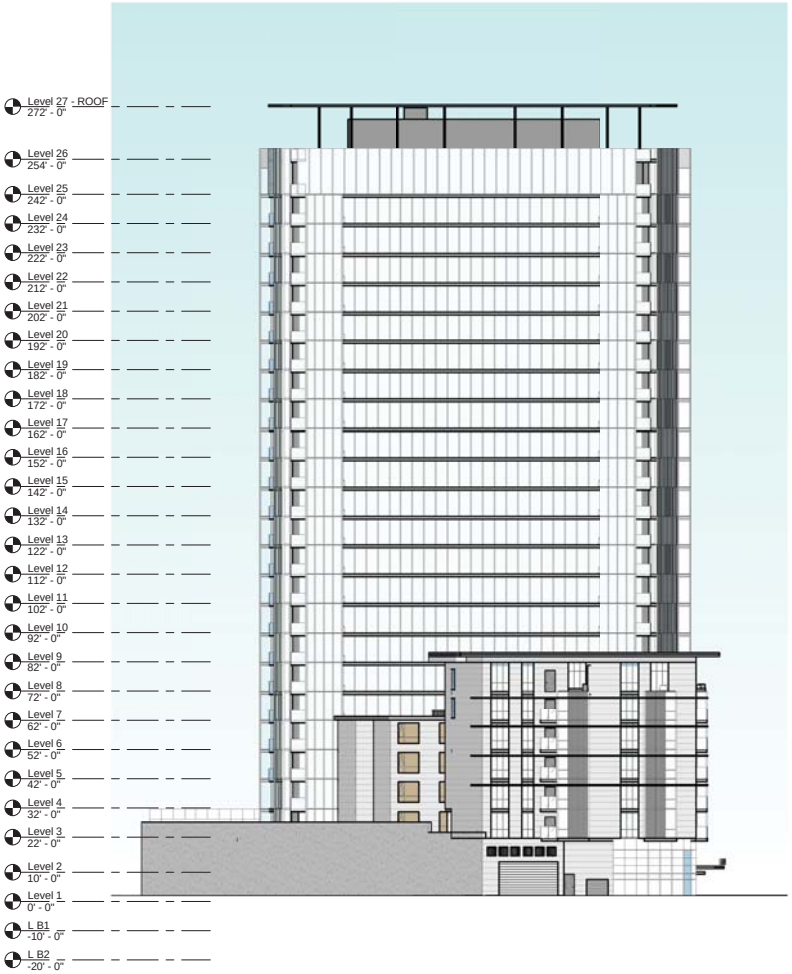


WEST ELEVATION



SOUTH ELEVATION

LSA

FIGURE 4b

NOT TO SCALE

SOURCE: PYATOK, APRIL 2016.

Lakehouse Commons Project CEQA Analysis
Conceptual Building Elevations

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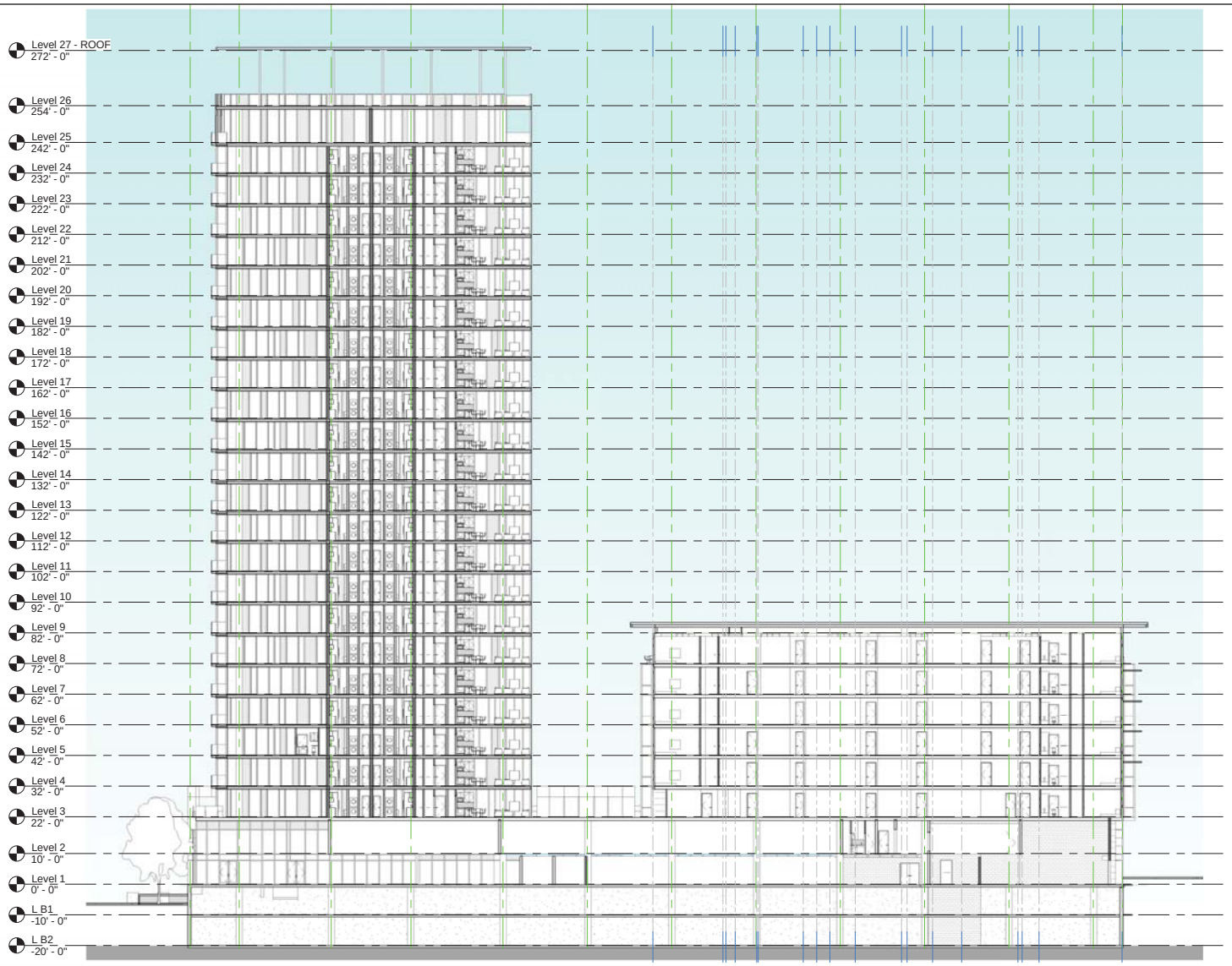

LONGITUDINAL SECTION

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FIGURE 5

NOT TO SCALE

Lakehouse Commons Project CEQA Analysis

Conceptual Building Section

SOURCE: PYATOK, APRIL 2016.

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LSA

FIGURE 6a

NOT TO SCALE

Lakehouse Commons Project CEQA Analysis

Conceptual Landscape Plan

SOURCE: PYATOK, APRIL 2016.

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LSA

FIGURE 6b

NOT TO SCALE

Lakehouse Commons Project CEQA Analysis

Conceptual Landscape Plan

SOURCE: PYATOK, APRIL 2016.

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V. SUMMARY OF FINDINGS

An evaluation of the proposed Lakehouse Commons Project (project) is provided in the CEQA Checklist in Section VI that follows. This evaluation concludes that this CEQA Analysis document qualifies as an Addendum to the LMSAP EIR to provide CEQA clearance for the proposed project and it is exempt from additional environmental review. The project is consistent with the development density and land use characteristics established by the City of Oakland General Plan and Planning Code, and any potential environmental impacts associated with development of the project were adequately analyzed and covered by the analysis in the 2014 LMSAP EIR, and in the applicable Program EIRs (Previous CEQA Documents discussed in Section II): the 1998 LUTE EIR, the 2011 Redevelopment Plan EIR, and for the housing components of the proposed project, the 2010 Housing Element EIR and 2014 Addendum.

The proposed project would be required to comply with the applicable mitigation measures and City of Oakland SCAs identified in the 2014 LMSAP EIR and presented in Attachment A to this document. With implementation of the applicable mitigation measures and SCAs, the proposed project would not result in a substantial increase in the severity of previously identified significant impacts in the 2014 LMSAP EIR, the applicable Program EIRs, or in any new significant impacts that were not previously identified in any of the Previous CEQA Documents.

In accordance with California Public Resources Code Sections 21083.3, 21094.5, and 21166; and CEQA Guidelines Sections 15183, 15183.3, 15162, 15164, 15168, and 15180, and as set forth in the CEQA Checklist below, this CEQA Analysis document qualifies as an Addendum to the LMSAP EIR and provides the basis for one or more CEQA exemptions because the following findings can be made:

- **Addendum**. The 2014 LMSAP EIR analyzed the impacts of development within the LMSAP. The proposed project would not result in substantial changes or involve new information not already analyzed in the 2014 LMSAP EIR because the level of development now proposed for the site is within the broader development assumptions analyzed in the EIR. The proposed project would not cause new significant impacts not previously identified in the 2014 LMSAP EIR, or result in a substantial increase in the severity of previously identified significant impacts. No new mitigation measures would be necessary to reduce significant impacts. No changes have occurred with respect to circumstances surrounding the LMSAP that would cause significant environmental impacts to which the proposed project would contribute considerably, and no new information has been put forward that shows that the proposed project would cause significant environmental impacts. Therefore, no supplemental environmental review is required in accordance with Public Resources Code Section 21166, and CEQA Guidelines Sections 15162 through 15164, as well as 15168 and 15180.
- **Community Plan Exemption**. The proposed project would not result in significant impacts that (1) are peculiar to the project or project site; (2) were not previously identified as significant project-level, cumulative, or offsite effects in the 2014 LMSAP EIR, or in the applicable Previous CEQA Documents: 1998 LUTE EIR, the 2011 Redevelopment Plan

EIR, and for the housing components of the proposed project, the 2010 Housing Element EIR and 2014 Addendum; or (3) were previously identified as significant effects, but-as a result of substantial new information not known at the time the 2014 LMSAP EIR was prepared, or when the Program EIRs were certified-would increase in severity beyond that described in those EIRs. Therefore, the proposed project would meet the criteria to be exempt from further environmental review in accordance with Public Resources Code Section 21083.3 and CEQA Guidelines Section 15183.

- **Qualified Infill Exemption**. The proposed project would not cause any new specific effects on the environment that were not already analyzed in the 2014 LMSAP EIR or in the applicable Program EIRs: the 1998 LUTE EIR, the 2011 Redevelopment Plan EIR, and for the housing components of the proposed project, the 2010 Housing Element EIR and 2014 Addendum. Further, the proposed project would not cause any new specific effects on the environment that are more significant than previously analyzed in the 2014 LMSAP EIR, or the aforementioned previously certified applicable Program EIRs. The effects of the proposed project have been addressed in the 2014 LMSAP EIR and Program EIRs, and no further environmental documents are required in accordance with Public Resources Code Section 21094.5 and CEQA Guidelines Section 15183.3.
- **Program EIRs and Redevelopment Projects.** The analysis in the 2011 Redevelopment Plan EIR and in this CEQA Analysis demonstrates that the Lakehouse Commons Project would not result in substantial changes or involve new information that would warrant preparation of a subsequent EIR, per CEQA Guidelines Section 15162, because the level of development now proposed for the site is within the broader development assumptions analyzed in the EIR. The effects of the proposed project have been addressed in that EIR and no further environmental documents are required in accordance with CEQA Guidelines Sections CEQA Guidelines Sections 15168 and 15180.

Each of the above findings provides a separate and independent basis for CEQA compliance.

Darin Ranelletti
Environmental Review Officer

Date

VI. CEQA CHECKLIST

OVERVIEW

The analysis in this CEQA Checklist provides a summary of the potential environmental impacts that may result from the proposed project. The analysis in this CEQA Checklist also summarizes the impacts and findings of the certified 2014 LMSAP EIR, as well as the Program EIRs that covered the environmental effects of various projects encompassing the project site and that are still applicable for the proposed project. As previously indicated, the Program EIRs are referred to collectively throughout this CEQA Analysis as the "Previous CEQA Documents" and include the 1998 Land Use and Transportation Element EIR (LUTE EIR), the 2011 Central District Urban Renewal Plan (or Redevelopment Plan) Amendments EIR (Redevelopment Plan EIR), and for the housing components of the proposed project, the 2010 General Plan Housing Element EIR (Housing Element EIR) and 2014 Addendum. Given the timespan between the preparations of these EIRs, there are variations in the specific environmental topics addressed and significance criteria; however, as discussed above in Section II and throughout this Checklist, the overall environmental effects identified in each are largely the same; any significant differences are noted.

Several SCAs would apply to the Lakehouse Commons Project because of the proposed project's characteristics and proposed "changes" to the maximum program of development identified for LMSAP Opportunity Site #44; the SCAs are triggered because the City is considering discretionary actions for the proposed project.

All SCAs identified in the 2014 LMSAP EIR that would apply to the Lakehouse Commons Project are listed in Attachment A to this document, which is incorporated by reference into this CEQA Analysis. Because the SCAs are mandatory City requirements, the impact analysis for the proposed project assumes that they will be imposed and implemented, which the project sponsor has agreed to do as part of the proposed project. If this CEQA Checklist or its attachments inaccurately identifies or fails to list a mitigation measure or SCA, the applicability of that mitigation measure or SCA to the proposed project is not affected.

Most of the SCAs that are identified for the Lakehouse Commons Project were also identified in the 2014 LMSAP EIR, the 2011 Redevelopment Plan EIR, and the 2010 Housing Element EIR and 2014 Addendum. The 1998 LUTE EIR was developed prior to the City's application of SCAs. As discussed specifically in Attachment A to this document, since certification of the LMSAP EIR, the City of Oakland has revised its SCAs, and the most current SCAs are identified in this CEQA Analysis. All mitigation measures identified in the LMSAP EIR that would apply to the proposed project are also identified in Attachment A to this document.

This CEQA Checklist hereby incorporates by reference the discussion and analysis of all potential environmental impact topics as presented in the certified 2014 LMSAP EIR and the Previous CEQA Documents. This CEQA Checklist provides a determination of whether the proposed project would result in:

- Equal or Less Severity of Impact Previously Identified in the Previous CEQA Documents;
- Substantial Increase in Severity of Previously Identified Significant Impact in the Previous CEQA Documents; or
- New Significant Impact

Where the severity of the impacts of the proposed project would be the same as or less than the severity of the impacts described in the 2014 LMSAP EIR and the Previous CEQA Documents, the checkbox for "Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents" is checked.

If the checkbox for "Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents" or "New Significant Impact" were checked, there would be significant impacts that are:

- Peculiar to the project or project site (per CEQA Guidelines Sections 15183 or 15183.3);
- Not identified in the previous 1998 LUTE EIR, 2010 Housing Element EIR and 2014 Addendum, Redevelopment Plan EIR, or 2014 LMSAP EIR (per CEQA Guidelines Sections 15183 or 15183.3), including offsite and cumulative impacts (per CEQA Guidelines Section 15183);
- Due to substantial changes in the project (per CEQA Guidelines Section 15162 and 15168);
- Due to substantial changes in circumstances under which the project will be undertaken (per CEQA Guidelines Sections 15162 and 15168); or
- Due to substantial new information not known at the time the Previous CEQA Documents were certified (per CEQA Guidelines Sections 15162, 15168, 15183, or 15183.3).

None of the aforementioned conditions were found for the proposed project, as demonstrated throughout the following CEQA Checklist and in its supporting attachments (Attachments A through D) that specifically describe how the proposed project meets the criteria and standards specified in the CEQA Guidelines sections identified above.

1. Aesthetics, Shadow, and Wind

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Have a substantial adverse effect on a public scenic vista; substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, located within a state or locally designated scenic highway; substantially degrade the existing visual character or quality of the site and its surroundings; or create a new source of substantial light or glare which would substantially and adversely affect day or nighttime views in the area;	☒	☐	☐
b. Introduce landscape that would now or in the future cast substantial shadows on existing solar collectors (in conflict with California Public Resource Code sections 25980-25986); or cast shadow that substantially impairs the function of a building using passive solar heat collection, solar collectors for hot water heating, or photovoltaic solar collectors;	☒	☐	☐
c. Cast shadow that substantially impairs the beneficial use of any public or quasi-public park, lawn, garden, or open space; or, cast shadow on an historical resource, as defined by CEQA Guidelines Section 15064.5(a), such that the shadow would materially impair the resource's historic significance;	☒	☐	☐
d. Require an exception (variance) to the policies and regulations in the General Plan, Planning Code, or Uniform Building Code, and the exception causes a fundamental conflict with policies and regulations in the General Plan, Planning Code, and Uniform Building Code addressing the provision of adequate light related to appropriate uses; or	☒	☐	☐
e. Create winds that exceed 36 mph for more than one hour during daylight hours during the year. The wind analysis only needs to be done if the project's height is 100 feet or greater (measured to the roof) and one of the following conditions exist: (a) the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown.	☒	☐	☐

Previous CEQA Documents Findings

Scenic vistas, scenic resources, visual character, light and glare, shadow, and wind were analyzed in each of the Previous CEQA Documents, which found that the effects to these topics would be less than significant. The Redevelopment Plan EIR and the Housing Element EIR cited applicable SCAs

that would ensure the less-than-significant visual quality effects result from implementation of the project. The 1998 LUTE EIR identified mitigation measures that are functionally equivalent to the SCAs to reduce certain potential effects to less than significant. The 1998 LUTE EIR also identified significant and unavoidable impacts regarding wind hazards.

LMSAP Findings

The 2014 LMASP EIR determined that individual projects would be subject to the design guidelines outlined in the LMSAP and would be required to comply with the height limits identified in the LMSAP. The 2014 LMSAP also determined that with implementation of SCAs, impacts related to aesthetics would be less than significant with development occurring under the LMSAP. Specifically, implementation of the LMSAP would not result in adverse effects to scenic resources within view of a scenic route; would not result in a substantially adverse effect on a scenic vista, would not substantially degrade the visual character or quality of the LMSAP area and its surroundings, and would not create a new source of substantial light or glare affecting day or nighttime views in the area. The 2014 LMASP EIR also determined that impacts related to increased shadows would be less than significant with development occurring under the LMSAP. Specifically, new development would not cast shadows that would impair the beneficial use of any public or quasi-public parks or other open spaces or require an exception to existing policies and regulations that address the provision of adequate light. The LMASP EIR did not include an evaluation of shadow impacts on solar heat collection or historic resources and assumed that more detailed analysis would be required as individual projects are proposed.

Potential wind impacts were not analyzed at a project-specific level of detail in the LMASAP EIR because it is not feasible to reasonably evaluate such impacts until individual development projects are proposed.

Project Analysis

Aesthetics (Criterion 1a)

On September 27, 2013, and after completion of the Draft EIR for the Station Area Plan, Governor Brown signed Senate Bill (SB) 743, which became effective on January 1, 2014 and added Section 21099 to the California Public Resources Code. Among other provisions, Public Resources Code Section 21099(d)(1) changed the typical analysis of aesthetics and parking impacts for urban infill projects, meeting certain criteria pursuant to CEQA. The proposed project meets the definition of a mixed-use residential project on an infill site within a transit priority area as specified by Section 21099(a). Accordingly, the topic of aesthetics does not need to be considered in determining the significance of the proposed project's physical environmental effects under CEQA. Nonetheless, for informational purposes, the discussion below provides an overview of the conclusions made in the LMSAP EIR and the change in visual conditions in and around the project site that would occur with implementation of the proposed project.

The project site is located within Height Area 4 as evaluated in the LMSAP Draft EIR (Figure 2.4-5). Building heights of up to 275 feet, with a 45-foot base were considered for these areas. However, subsequent to publication of the Draft EIR and as part of the Final EIR, the Station Area Plan was revised to permit a maximum building height of 85 feet within Height Area 4, including at the project site (LMSAP EIR Figure 2.3-2). However, exceptions to proposed total and base buildings heights

may be granted with a Conditional Use Permit. According to the Final EIR, a maximum of two buildings could be up to 175 feet in height and one building would be allowed up to 275 feet. In addition, the LMSAP EIR previously analyzed zoning within the Plan area and the proposed project is consistent with the zoning analyzed as part of the LMSAP EIR.

The proposed project would construct two distinct buildings with a continuous 4-level podium base, including an 8-story mid-rise residential building (South Commons Building) and a 26-story residential apartment tower (North Commons Building). The site is currently vacant and used for soil stockpiling and staging for nearby construction projects. The maximum height of the South Commons Building would be approximately 80 feet in height and the maximum height of the North Commons Building would be approximately 272 feet in height. The podium base would be approximately 32 feet above natural grade. The proposed project would be constructed on an existing parcel in an urban area and would not alter street patterns or obstruct views of existing scenic vistas. In addition, given the limited views in the area, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings. The proposed project also would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Although the proposed building would be taller than the development considered for the project site in the LMSAP EIR, as noted above, it would not obstruct views of existing scenic vistas or degrade the visual character or quality of the site and its surroundings. The proposed project would be required to obtain a Conditional Use Permit to exceed the height requirements specified in the LMSAP. Although the proposed project would exceed the height limits allowed in the Station Area Plan, the proposed height limit was evaluated in the Draft EIR and impacts related to building heights and massing were determined to be less than significant.

In addition, while the proposed project's building height is greater than what was set forth in the LMSAP development program, the level of development currently proposed for the site is within the broader development assumption analyzed in the LMSAP EIR. The LMSAP EIR determined that with implementation of SCAs, impacts related to aesthetics would less than significant with development occurring under the LMSAP, including the proposed project. The potential impacts of the proposed project on scenic vistas, scenic resources and visual character would be similar to those identified in the LMSAP EIR and the Previous CEQA Documents considered in this analysis.

As such, the potential impacts of the proposed project regarding aesthetics would be similar to, or less severe than, those identified in the LMSAP EIR and the Previous CEQA Documents considered in this analysis. No mitigation measures are required.

Shadow (Criteria 1b through 1d)

Except for the 1998 LUTE EIR, each of the Previous CEQA Documents found less-than-significant shadow effects, assuming incorporation of applicable SCAs. The 1998 LUTE EIR identified mitigation measures, functionally equivalent to the SCAs, to reduce potential shadow effects to less than significant.

Due to the proposed project's potential to cast new shadows in and around the vicinity of the site, which could affect public spaces, solar collectors, or historic resources, a project-specific shadow study was prepared (Appendix A) for the site.[8] Shadow simulations were prepared for March 21, June 21, September 21, and December 21, for 9:00 a.m. (morning), 12:00 p.m. (noon), and 3:00 p.m. (afternoon). A shadow simulation for June 21, at 6:00 p.m. (early evening) was also prepared. A brief summary of the results of this analysis is provided below.

- *March 21*. On March 21, the proposed project would cast a shadow on the adjacent City park/water quality basin and portions of the Lake Merritt Channel and adjacent pedestrian paths in the morning hours and on adjacent buildings in the afternoon.
- *June 21*. On June 21, the proposed project would cast a shadow on portions of the adjacent City park/water quality basin during the morning hours and on adjacent development (primarily a surface parking lot) in the early evening hours.
- *September 21*. On September 21, the proposed project would cast a shadow on the adjacent City park/water quality basin and portions of the Lake Merritt Channel and adjacent pedestrian paths in the morning hours and on adjacent development (primarily a surface parking lot) in the afternoon.
- *December 21*. On December 21, the proposed project would cast a shadow on the adjacent City park/water quality basin and portions of the Lake Merritt and adjacent pedestrian paths in the morning hours and on adjacent buildings in the noon and afternoon hours.

Peralta Park is located directly west across the channel from the project site, but shadows cast by the project would not reach the park. The proposed project would cast shadows on existing open space areas, including Lake Merritt, Lake Merritt Channel, and the adjacent open space throughout the year during the morning hours. Because the shadow would fall only during the morning hours and not during the afternoon, when open space areas are most in use, the proposed project would not substantially impair the beneficial use these areas, or of any other public or quasi-public park, lawn, garden, or open space. In addition, the proposed project would be subject to the City's Design Review process and would be subject to further evaluation of the building height and mass, including consideration of the design guidelines set forth in the LMSAP.

Within the project vicinity, the existing four-story apartment building located at the intersection of East 12th Street and 2nd Street, directly across from the project site, includes solar collectors at the building rooftop. The proposed project would only cast shadows on these solar facilities during the early evening hours (after 3:00 p.m.) in the summer months. The proposed project would not substantially impair the use of these solar collectors. The Lake Merritt Historic District is located immediately west of the project site and encompasses parts of the adjacent City-owned open space and the Lake Merritt Channel. In addition, buildings rated "A" (Highest Importance) or "B" (Major Importance) on the Oakland Cultural Heritage Survey are located south and west of the site, across Lake Merritt Channel (LMSAP EIR Figure 3.8-1). However, the proposed project would not cast new shadows on any historic structures, as none are located within the immediate vicinity of the site.

[8] Rowan William Davies & Irwin, Inc., 2016. *Lakehouse Commons Oakland, CA Sun/Shadow Study*. April 28.

As such, the potential impacts of the proposed project regarding shadows would be similar to, or less severe than, those identified in the LMSAP EIR and the Previous CEQA Documents considered in this analysis. No mitigation measures are required.

Wind (Criterion 1e)

A building's exposure, massing, and orientation can affect nearby ground-level wind accelerations, which can in turn affect the comfort of pedestrians. Under the City of Oakland's thresholds of significance, wind analysis is performed if the project's height is 100 feet or greater (measured to the roof) and one of the following conditions exists: the project is located adjacent to a substantial water body (i.e., Oakland Estuary, Lake Merritt, or San Francisco Bay) or the project is located in Downtown. The purpose of these thresholds is to ensure pedestrian comfort levels are maintained in areas that are subject to windy conditions. The City has determined that a building of over 100 feet in height in any of these locations could generate winds in excess of 36 miles per hour, which are well above typical wind conditions in the area and could in turn affect the comfort level of the pedestrian environment.

The proposed project both exceeds 100 feet in height and is near Lake Merritt. Therefore, a project-level pedestrian wind study was conducted (see Appendix B). The purpose of the study was to assess the wind environment around the development in terms of pedestrian comfort and hazards relative to wind metrics specified in the City of Oakland. The following four development configurations were tested:

- *Configuration A, Existing Conditions.* Configuration A includes all existing buildings within the surrounding area including the newly constructed five-story Lakeside Senior Apartments located at 116 15th Street;
- *Configuration B, Existing Plus Project Conditions.* Configuration B includes Existing Conditions plus the proposed project, without landscaping;
- *Configuration C, Existing Plus Project with Landscaping.* Configuration C includes Existing Conditions plus the proposed project and proposed landscaping; and
- *Configuration D, Cumulative Conditions Plus Project with Landscaping.* Configuration D includes anticipated future development within the vicinity of the project site, including the Oakland Unified School District (OUSD) property[9] just south of the site, in addition to the proposed project and proposed landscaping.

For Configuration A, Existing Conditions, wind speeds at two locations to the north of the project site (Locations 13 and 14 in Figure 4a in Appendix B) are expected to exceed the hazard criterion of 36 mile-per-hour winds, for a total of 3 hours.

For Configuration B, Existing Plus Project Conditions, wind speeds at three locations at grade level (Locations 6, 12 and 14 in Figure 4b in Appendix B) would exceed the hazard criterion for a total of 3 hours. Wind speeds at 12 locations on the podium of the proposed building (Locations 44 through 46,

[9] It should be noted that the massing for this project is generic as no plans are currently available for this future cumulative project.

48 and 50 through 54) would exceed the hazard criterion for a total of 76 hours. The above-grade locations are not public areas and these exceedances do not result in a significant impact under the City's criteria; therefore, design measures to improve these conditions could be developed as the project progresses. Two of the locations exceeding the hazard criterion at grade level are along sidewalks to the north of the project site, and another location is at the southeast corner of the proposed building. The hazard exceedance at two of these locations (Locations 6 and 12) are new compared to the Existing Conditions Configuration and, in the absence of proposed landscaping, would result in a significant impact related to wind hazards. However, with the addition of the existing and proposed landscaping on and around the proposed development (Configuration C), the total number of locations where winds exceed the hazard criterion at the grade level would be reduced to zero. Under Configuration C, eight locations would exceed the hazard criterion on the podium of the proposed building for a total of 64 hours (Locations 45, 46, 48 and 50 through 54, see Figure 4c in Appendix B). The above-grade locations are not public areas and these exceedances do not result in a significant impact under the City's criteria; therefore, design measures to improve these conditions could be developed as the project progresses. With proposed landscaping improvements, the proposed project would result in a less-than-significant impact related to wind hazard conditions under Existing Plus Project Conditions (Configuration C).

With the addition of the future buildings at and near the site, and including existing and proposed landscaping (Configuration D), wind speeds at one grade level location on the northeast corner of the proposed building (Location 1 in Figure 4d in Appendix B) would exceed the hazard criterion for a total of 1 hour. The exceedance location is a cumulative impact associated with the addition of the future OUSD building, and not the proposed project itself, that would only occur as part of Configuration D. Wind speeds at 7 locations on the podium of the proposed building (Locations 45, 46 and 50 through 54) are expected to exceed the hazard criterion for a total of 68 hours. The above-grade locations are not public areas and these exceedances do not result in a significant impact under the City's criteria; therefore, design measures to improve these conditions could be developed as the project progresses. With proposed landscaping improvements, the proposed project would result in a less-than-significant impact related to wind hazard conditions under Cumulative Plus Project Conditions.

Implementation of the proposed project would not significantly alter wind speeds on Lake Merritt. As part of the wind study, wind speeds were measured within a 1,500 feet radius of the project site including two locations north of the project site located immediately adjacent to Lake Merritt (Locations 56 and 57). In all four configurations analyzed as part of the wind study, wind speeds at these locations would not exceed the City of Oakland threshold of 36 miles per hour for one daylight hour during the year. Predicted wind speed, to be exceeded one hour per year at each of these locations, ranges from 30 to 32 miles per hour annually. In addition, wind speeds at these locations would not exceed the 11 miles per hour comfort threshold. As such, impacts associated with wind hazard conditions at Lake Merritt would be less than significant for all four project configurations.

With predicted wind conditions, the wind study concludes that the proposed project, with the presence of existing and proposed landscaping, would not have a significant impact under Existing or Cumulative Conditions on the wind conditions within the public areas around the project site, including Lake Merritt.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the LMSAP EIR and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the LMSAP EIR or the Previous CEQA Documents, nor would it result in new significant impacts related to aesthetics, shadow, or wind that were not identified in the LMSAP EIR or the Previous CEQA Documents. Implementation of SCA-16, SCA-17, SCA-18, and SCA-25 (see Attachment A) would ensure that impacts related to aesthetics, shadows, and wind would be less than significant. No mitigation measures are required.

2. Air Quality

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. During project construction result in average daily emissions of 54 pounds per day of ROG, NO_X, or $PM_{2.5}$ or 82 pounds per day of PM_{10}; during project operation result in average daily emissions of 54 pounds per day of ROG, NO_X, or $PM_{2.5}$, or 82 pounds per day of PM_{10}; result in maximum annual emissions of 10 tons per year of ROG, NO_X, or $PM_{2.5}$, or 15 tons per year of PM_{10}; or	☒	☐	☐
b. For new sources of Toxic Air Contaminants (TACs), during either project construction or project operation expose sensitive receptors to substantial levels of TACs under project conditions resulting in (a) an increase in cancer risk level greater than 10 in one million, (b) a noncancer risk (chronic or acute) hazard index greater than 1.0, or (c) an increase of annual average $PM_{2.5}$ of greater than 0.3 microgram per cubic meter; or, under cumulative conditions, resulting in (a) a cancer risk level greater than 100 in a million, (b) a noncancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average $PM_{2.5}$ of greater than 0.8 microgram per cubic meter; or expose new sensitive receptors to substantial ambient levels of Toxic Air Contaminants (TACs) resulting in (a) a cancer risk level greater than 100 in a million, (b) a noncancer risk (chronic or acute) hazard index greater than 10.0, or (c) annual average $PM_{2.5}$ of greater than 0.8 microgram per cubic meter.	☒	☐	☐

Previous CEQA Documents Findings

Construction and Operational Emissions and Odors. The 1998 LUTE EIR identified mitigation measures that would reduce operational emissions to less-than-significant levels, and it found significant and unavoidable cumulative effects regarding increased criteria pollutants from increased regional traffic. The Redevelopment Plan EIR found that emissions associated with construction and operations resulting from increased criteria pollutants would result in less-than-significant effects with incorporation of SCAs. The Redevelopment Plan EIR also identified effective SCAs to address potentially significant effects regarding dust, odors, and consistency with the applicable regional clean air plan.

Toxic Air Contaminants. The 1998 LUTE EIR did not quantify or address cumulative health risks. As such, an analysis was not required when that LUTE EIR was prepared. The Redevelopment Plan EIR identified significant and unavoidable impacts regarding cumulative health risks after the consideration of SCAs.

LMSAP Findings

The LMSAP EIR considered potential impacts of LMSAP implementation on local and regional air quality. The applicable air quality plan is the Bay Area Air Quality Management District's (BAAQMD) Bay Area 2010 Clean Air Plan (Clean Air Plan), which was adopted on September 15, 2010. Potential impacts related to consistency with the Clean Air Plan were identified as less than significant in the LMSAP EIR with implementation of SCA-19 (Construction-Related Air Pollution Controls, Dust and Equipment Emissions), SCA-20 (Exposure to Air Pollution, Toxic Air Contaminants), and SCA-71 (Parking and Transportation Demand Management).

Project Analysis

Construction and Operational Emissions (Criterion 2a)

As previously discussed, the LMSAP EIR identified the project site as Opportunity Site #44 in the development program, which considered the development of a 20-story apartment building containing 357 residential units, 20,000 square feet of retail space and 0.13 acres of open space. Although the proposed project would develop the site with four additional residential units as compared to what was considered in the 2014 LMSAP EIR, the site would be developed with approximately 18,000 fewer square feet of commercial space than anticipated. The proposed project along with five other development projects evaluated in the Transportation Assessment[10] (see Appendix C) would generate fewer vehicle trips than considered in the 2014 LMSAP EIR analysis. Therefore, the proposed project would also be consistent with and further implement the goals of the Clean Air Plan.

The level of development proposed for the site is within the broader development assumptions analyzed in the LMSAP EIR. Because the proposed project is consistent with the overall development assumptions analyzed in the LMSAP EIR, construction and operational emissions impacts would be consistent with the findings in the LMSAP EIR. As such, the proposed project would have less-than-significant impacts associated with project construction and operational emissions and would not result in a new or more severe significant impact compared with the LMSAP EIR.

Toxic Air Contaminants (Criterion 2b)

The LMSAP identified impacts associated with potential exposure of sensitive receptors to substantial health risks from toxic air contaminants (TACs) from sources including both diesel particulate matter (DPM) and gaseous emissions. The project site is located within 1,000 feet of at least three identified TAC stationary sources, including those that exceed the Risk Threshold (refer to Figure 3.3-1 in the LMSAP).[11] Compliance with SCA-20 (Exposure to Air Pollution, Toxic Air Contaminants) would ensure that exposure to DPM would be reduced; however, the risk from gaseous TACS may not be reduced with certainty and this impact is identified as both a Plan-level and cumulative-level significant and unavoidable impact in the LMSAP EIR. The project site is not located within the

[10] Fehr & Peers. 2016. Lakehouse Commons Project - Transportation Assessment Memorandum. May 24.

[11] TACs that exceed the Risk Threshold present an increased cancer risk of 10 in a million or exceed the ambient $PM_{2.5}$ increase of 0.3 $\mu g/m^3$ annual average.

vicinity of a site that emits gaseous TACs; however, and this impact would not apply to development of the project site.

The LMSAP EIR also identified potential impacts associated with the installation of back-up generators (a source of TACs) and identified SCAs to reduce the potential effect to less than significant. Moreover, the BAAQMD does not permit any new generators that may have emissions levels that pose adverse health impacts. The proposed project would not include a back-up generator that would emit TACs; therefore, this impact does not apply to the proposed project.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the LMSAP EIR and Previous CEQA Documents, implementation of the proposed project would not result in a new significant impacts related to air quality emissions identified in the LMSAP EIR. Implementation of SCA-19, SCA-20, and SCA-71 would ensure that the proposed project would not result in a new significant impact related to construction, operational, or cumulative TAC emissions, which were addressed in the LMSAP EIR and found to be significant and unavoidable. Therefore, no mitigation measures are required.

3. Biological Resources

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service; Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service; Have a substantial adverse effect on federally protected wetlands (as defined by Section 404 of the Clean Water Act) or state protected wetlands, through direct removal, filling, hydrological interruption, or other means; Substantially interfere with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;	☒	☐	☐
b. Fundamentally conflict with the City of Oakland Tree Protection Ordinance (Oakland Municipal Code [OMC] Chapter 12.36) by removal of protected trees under certain circumstances; or Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect biological resources.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents identified less-than-significant impacts related to biological resources, with the Redevelopment Plan EIR identifying applicable of City of Oakland SCAs. No mitigation measures were necessary.

LMSAP Findings

The LMSAP EIR identified 12 special-status species that are known to have the potential to occur within the LMSAP Area. Within the LMSAP area, Lake Merritt and the Lake Merritt Channel are places where there are particularly sensitive areas with regard to biological resources. The LMSAP EIR determined that with implementation of SCAs, impacts related to biological resources would be less than significant with development occurring under the Station Area Plan. Specifically, impacts to special-status animal and plant species, riparian habitats, protected wetlands, and movement of

migratory species would all be less than significant. In addition, new development is not anticipated to fundamentally conflict with the Oakland Tree Protection Ordinance or the Oakland Creek Protection Ordinance.

Project Analysis

Special-Status Species, Wildlife Corridors, Riparian and Sensitive Habitat, Wetlands, Tree and Creek Protection (Criteria 3a and 3b)

The project site is located within the vicinity of Lake Merritt and the Lake Merritt Channel, but is currently used for soil stockpiling and staging for nearby construction projects and therefore has minimal habitat suitable for special-status species.

Implementation of SCAs that ensure Low Impact Development (LID) to improve water quality (SCA-48 through SCA-50) would ensure that impacts to special-status species that occur within the vicinity of the project site would be less than significant. Implementation of SCA-25 (Bird Collision Reduction) would reduce incidents of bird and bat collision as a result of new building development adjacent to Lake Merritt and the Lake Merritt Channel.

Lake Merritt Channel is not considered a riparian corridor; however, the LMSAP requires a 100-foot setback from the eastern edge of the channel given that nesting habitat for native bird species exist in this area. The proposed project would be set back over 100 feet from the channel. Lake Merritt and Lake Merritt Channel are "waters of the U.S." and are subject to the Clean Water Act. A small portion of Lake Merritt Channel is classified as wetlands and recent improvements in the area will likely add new wetlands. Any development along Lake Merritt Channel must comply with the Creek Protection Ordinance under SCA-54 and SCA-55. All properties in the LMSAP area are subject to the Creek Protection Ordinance's provisions for limiting non-stormwater discharges and eliminating pollutants from stormwater.

The project site includes very little vegetation, although some mature trees border the southern site boundary. It is not anticipated that these trees would be affected by the proposed project; however, SCA-26 and SCA-27 may be required if construction activities have the potential to permanently or temporarily impact existing trees, including their root systems.

Conclusion

The proposed project would not result in any new or more severe significant impacts related to biological resources than those identified in the LMSAP EIR or Previous CEQA Documents. Implementation of SCA-25 SCA-26, SCA-27, SCA-48, SCA-49, SCA-50, SCA-54, and SCA-55 would ensure that potential impacts associated with biological resources would be less than significant. The LMSAP EIR did not identify any mitigation measures related to biological resources and no mitigation measures would be required for the proposed project.

4. Cultural Resources

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Cause a substantial adverse change in the significance of an historical resource as defined in CEQA Guidelines Section 15064.5. Specifically, a substantial adverse change includes physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the historical resource would be "materially impaired." The significance of an historical resource is "materially impaired" when a project demolishes or materially alters, in an adverse manner, those physical characteristics of the resource that convey its historical significance and that justify its inclusion on, or eligibility for inclusion on an historical resource list (including the California Register of Historical Resources, the National Register of Historic Places, Local Register, or historical resources survey form (DPR Form 523) with a rating of 1 5);	☒	☐	☐
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5;	☒	☐	☐
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or	☒	☐	☐
d. Disturb any human remains, including those interred outside of formal cemeteries.	☒	☐	☐

Previous CEQA Documents Findings

The 1998 LUTE EIR identified potentially significant impacts to historic resources, and identified mitigation measures to reduce the impacts to less-than-significant levels. The Redevelopment Plan EIR, which addresses much of the oldest part of Downtown Oakland, identified a significant and unavoidable impact to historic resources, even with the implementation of mitigation measures. Both of the Program EIRs identified less-than-significant effects to archaeological and paleontological resources and human remains, with the Redevelopment Plan EIR specifically identifying applicable City of Oakland SCAs.

LMSAP Findings

The 2014 LMSAP EIR does not include a project-level analysis of historic resources, indicating project-level analysis shall be conducted for individual development projects in the LMSAP. The LMSAP EIR further determined that impacts to archaeological resources, paleontological resources, and human remains would be less than significant with the implementation of applicable SCAs. The LMSAP EIR indicates that paleontological sensitivity of the geologic units underlying the LMSAP area is considered to be low to moderate.

Project Analysis

Historical Resources (Criterion 4a)

The project site consists of a vacant site and does not include any historic structures. Historic buildings near the project site include Oakland Unified School District's Paul Robeson Administration Building, located at 1025 2nd Avenue, and the Ethel Moore Building, located at 121 East 11th Street. The LMSAP EIR determined that demolition of these and other historic buildings within the Plan area would be a significant and unavoidable impact associated with the Plan's implementation. Although these buildings are in close proximity to the project site, construction of the project would not directly affect these resources, and this significant unavoidable impact would not apply to the proposed project.

Archaeological and Paleontological Resources and Human Remains (Criteria 4b through 4d)

The proposed project would involve grading and excavation activities up to depths of approximately 28 feet below grade to construct the building; therefore, there is the potential to impact unknown archaeological resources, as well as potential unknown paleontological resources or human remains, as noted in the LMSAP EIR and Previous CEQA Documents. However, implementation of SCA-29 (Archaeological and Paleontological Resources) and SCA-31 (Human Remains) would ensure that potential impacts related to the uncovering of archaeological resources, human remains and paleontological resources are reduced to less-than-significant levels during construction. Implementation of the SCAs also would require a qualified specialist to document a discovery and that appropriate procedures be followed in the event of a discovery, and would ensure that the appropriate procedures for handling and identifying identified resources are followed.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents considered throughout this analysis, the proposed project would not result in any more severe significant impacts identified in the LMSAP EIR or the Previous CEQA Documents, nor would it result in new significant impacts related to cultural resources that were not identified in the LMSAP EIR or the Previous CEQA Documents. Implementation of SCA-29 and SCA-31 would ensure that potential impacts associated with cultural resources would be less than significant. No mitigation measures are required.

5. Geology, Soils, and Geohazards

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Expose people or structures to substantial risk of loss, injury, or death involving: • Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map or Seismic Hazards Map issued by the State Geologist for the area or based on other substantial evidence of a known fault; • Strong seismic ground shaking; • Seismic-related ground failure, including liquefaction, lateral spreading, subsidence, collapse; or • Landslides;	☒	☐	☐
b. Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007, as it may be revised), creating substantial risks to life or property; result in substantial soil erosion or loss of topsoil, creating substantial risks to life, property, or creeks/waterways.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents identified that impacts to geology, soils, and geohazards would be less than significant, with the Redevelopment Plan EIR identifying applicable City of Oakland SCAs. No mitigation measures were necessary.

LMSAP Findings

The LMSAP EIR determined that with implementation of SCAs, impacts related to seismic hazards and unstable soils would be less than significant with development occurring under the LMSAP.

Project Analysis

Seismic Hazards, Expansive Soils, and Soil Erosion (Criteria 5a and 5b)

The LMSAP identified that much of the Plan area, particularly along the Lake Merritt Channel, is located in a severe shaking intensity zone in the San Francisco Bay Area. However, the project site is located outside of a seismic hazard zone and is in an area of low liquefaction susceptibility (LMSAP Draft EIR Figure 3.12-1). The site is generally level and is not located in a landslide area or in an area of known unstable soil conditions. SCA-34 (Soils Report) requires all project applicants to prepare a soils report and geotechnical report to ensure that individual development projects do not expose people or structures to an unacceptable level of risk during a large regional earthquake. The proposed project would also be required to comply with the California Building Code's current seismic standards, which require specific design parameters for construction in various seismic environments, and the project applicant would be required to complete a soils report per SCA-34.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents considered in this analysis, implementation of the proposed project would not result in any new or more significant impacts related to geology and soils than those identified in the LMSAP EIR or the Previous CEQA Documents. Implementation of SCA-33and SCA-34 would ensure that potential impacts associated with hazardous geologic and soils conditions would be less than significant. No mitigation measures are required.

6. Greenhouse Gas and Climate Change

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, specifically: • For a project involving a land use development, produce total emissions of more than 1,100 metric tons of CO_2e annually AND more than 4.64 metric tons of CO_2e per service population annually. The service population includes both the residents and the employees of the project. The project's impact would be considered significant if the emissions exceed BOTH the 1,100 metric tons threshold and the 4.6 metric tons threshold. Accordingly, the impact would be considered less than significant if the project's emissions are below EITHER of these thresholds.	☒	☐	☐
b. Fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions.	☒	☐	☐

Previous CEQA Documents Findings

Climate change and greenhouse gas emissions (GHG) were not expressly addressed in the 1998 LUTE EIR. The Redevelopment Plan EIR identified less-than-significant GHG impacts with the incorporation of applicable City of Oakland SCAs. No mitigation measures were necessary.

LMSAP Findings

The LMSAP EIR included GHG emissions and impacts analyses, and identified less-than-significant impacts with the incorporation of the applicable City of Oakland SCAs, and no mitigation measures were necessary. The LMSAP EIR determined that development occurring under the LMSAP would not generate greenhouse gas emissions, either directly or indirectly, that would have a significant impact on the environment at the plan level or at the project level. The estimate of emissions from service population annually, was less than the applicable significance threshold, and implementation of the LMSAP would not fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions. The LMSAP EIR determined that development of specific projects under the Plan would be subject to all applicable regulatory requirements adopted for the purpose of reducing greenhouse gas emissions.

Project Analysis

Greenhouse Gas Emissions and Consistency with GHG Emissions Plans and Policies (Criterion 6a and 6b)

The LMSAP EIR determined that development occurring under the LMSAP would not generate greenhouse gas emissions, either directly or indirectly, that would have a significant impact on the environment. Development within the LMSAP area would generate a total of approximately 3.05 CO_2e per service population annually, which is below the threshold of 4.6 metric tons of CO_2e.[12] Although the proposed project's building height and unit count are greater than what was set forth in the LMSAP development program, the level of development currently proposed for the site is within the broader development assumptions analyzed in the LMSAP EIR.[13] As such, the proposed project's impacts related to greenhouse gas emissions would also be less than significant.

Implementation of the LMSAP would not fundamentally conflict with an applicable plan, policy, or regulation adopted for the purposes of reducing greenhouse gas emissions and this impact would also be less than significant. The proposed project would comply with the City of Oakland Energy and Climate Action Plan, current City Sustainability Program and General Plan policies and regulations regarding GHG reductions and other local, regional and statewide plans, policies and regulations that are related to the reduction of GHG emissions and relevant to the proposed project. Implementation of the LMSAP, and projects developed under the Plan would be subject to all applicable regulatory requirements adopted for the purpose of reducing greenhouse gas emissions. The proposed project is consistent with the LMSAP and would also be required to implement applicable requirements adopted for the purpose of reducing greenhouse gas emissions.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents considered in this analysis, implementation of the proposed project would not result in any new or more significant impacts related to greenhouse gas emissions than those identified in the LMSAP EIR or the Previous CEQA Documents. Implementation of SCA-19 and SCA-38 would further ensure that impacts associated with greenhouse gas emissions would be less than significant. No mitigation measures are required.

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[12] CO_2e refers to "carbon dioxide equivalents."

[13] Fehr & Peers, 2016. Lakehouse Commons Project – Transportation Assessment. May 24.

7. Hazards and Hazardous Materials

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials; Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; Create a significant hazard to the public through the storage or use of acutely hazardous materials near sensitive receptors; Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 (i.e., the "Cortese List") and, as a result, would create a significant hazard to the public or the environment;	☒	☐	☐
b. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;	☒	☐	☐
c. Result in less than two emergency access routes for streets exceeding 600 feet in length unless otherwise determined to be acceptable by the Fire Chief, or his/her designee, in specific instances due to climatic, geographic, topographic, or other conditions; or Fundamentally impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents found less-than-significant effects regarding hazards and hazardous materials including risk of upset in proximity to a school and emergency response/evacuation plans, with the Redevelopment Plan EIR identifying applicable City of Oakland SCAs. The 1998 LUTE EIR identified mitigation measures to reduce potentially significant effects regarding exposing workers and the public to hazardous substances to a less-than-significant level. These mitigation measures are now incorporated into the applicable City of Oakland SCAs.

LMSAP Findings

The LMSAP EIR determined that with implementation of SCAs, impacts related to hazards and hazardous materials would be less than significant with development occurring under LMSAP. Specifically, impacts related to the routine transport, use, or disposal of hazardous materials; accidental release of hazardous materials to the environment; use of hazardous materials near

sensitive receptors; emission of hazardous materials near schools; emergency access; and impaired use of an emergency response plan would all be less than significant.

Project Analysis

Exposure to Hazards, Hazardous Materials Use, Storage and Disposal (Criterion 7a)

Petroleum hydrocarbon, lead, and/or other heavy metal contamination is known to occur within properties located within one-quarter of a mile from the Lake Merritt Channel, potentially including the proposed project site. Similarly, the northern portion of Lake Merritt Channel and the southern margin of Lake Merritt are also known to contain hazardous materials, such as metals, as a result of past industrial activities. The East 12th Street improvement area has been found to contain soluble lead above California hazardous waste thresholds and excavated soil may therefore constitute a California hazardous waste, once excavated.

In compliance with SCA-40 (Phase I Site Assessment Report), a Phase I Environmental Site Assessment was prepared for the proposed project and recommended that a soil vapor survey be conducted in the northern portion of the property to ascertain if a former gasoline service station located at the site affected soil or groundwater in such a way that vapor intrusion into the new development could occur.[14] In addition, near surface soil samples should be collected to ascertain if the long-term use of the property as a roadway resulted in soil contamination.

The City of Oakland's SCAs include a requirement for all construction sites to take all appropriate measures to protect human health and the environment if potential contamination is identified prior to construction or is accidently discovered during construction activities. Implementation of SCA-39 (Hazardous Materials Related to Construction), SCA-40 (Site Contamination), and SCA-41 (Hazardous Materials Business Plan) would ensure that impacts are reduced to a less-than- significant level. Because the site is undeveloped, demolition activities which may result in the release of lead and asbestos-containing building materials would not occur with the proposed project.

The project site is not located on a site included on a list of hazardous materials sites compiled pursuant to Government Code section 65962.5 (i.e., the Cortese List), although the nearby Dewey School site is listed as a contaminated site on the Leaking Underground Storage Tank List. The school site was previously determined to not have affected soil and groundwater and the California State Department of Toxics Substance Control (DTSC) determined that no further action is required at this time. Additionally, the transportation, use, and storage of all hazardous materials involved with the proposed project would be required to comply with federal, State and local hazardous materials regulations and would be required to submit a Hazardous Materials Management Plan (HMMP) and Hazardous Materials Business Plan (HMBP) as required by Alameda County and the City of Oakland SCAs. Since development of the proposed project would be subject to the SCAs pertaining to best management practices for hazardous materials, removal of asbestos and lead-based paint and other hazardous materials and wastes, including those found in the soil and groundwater, the potential impacts would be reduced to less-than-significant levels.

[14] Adanta, Inc., 2014. *Phase I Environmental Site Assessment, 12th Street West of 2nd Avenue, Oakland, California*. September 1.

Hazardous Materials within a Quarter Mile of a School (Criterion 7b)

The proposed project is located on a site that is close to sensitive receptors including residential areas, schools, public gathering places and parks, and civil facilities. More specifically, the proposed project is located immediately adjacent to Dewey High School and within 1,000 feet of La Escuelita Elementary School; however, the proposed project would be required to comply with existing regulations that require hazardous material handlers within 1,000 feet of a school or other sensitive receptors to prepare a Hazardous Material Assessment Report and Remediation Plan.

Emergency Access Routes (Criteria 7c)

The proposed project would not significantly interfere with emergency response plans or evacuation plans. More specifically, the proposed project would not permanently change the surrounding streets or roadways. As such, the proposed project would not result in any new or more severe impacts related to emergency access routes.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents, implementation of the proposed project would not result in any new or more severe significant impacts related to hazards and hazardous materials than those identified in the LMSAP EIR or the Previous CEQA Documents. Potential impacts associated with exposure to hazards and hazardous materials would be less than significant with implementation of SCA-39, SCA-40, and SCA-41. No mitigation measures are required.

8. Hydrology and Water Quality

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Violate any water quality standards or waste discharge requirements; Result in substantial erosion or siltation on- or off-site that would affect the quality of receiving waters; Create or contribute substantial runoff which would be an additional source of polluted runoff; Otherwise substantially degrade water quality; Fundamentally conflict with the City of Oakland Creek Protection Ordinance (OMC Chapter 13.16) intended to protect hydrologic resources.	☒	☐	☐
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or proposed uses for which permits have been granted);	☒	☐	☐
c. Create or contribute substantial runoff which would exceed the capacity of existing or planned stormwater drainage systems; Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course, or increasing the rate or amount of flow, of a creek, river, or stream in a manner that would result in substantial erosion, siltation, or flooding, both on- or off-site	☒	☐	☐
d. Result in substantial flooding on- or off-site; Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, that would impede or redirect flood flows; Place within a 100-year flood hazard area structures which would impede or redirect flood flows; or Expose people or structures to a substantial risk of loss, injury, or death involving flooding.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents found less-than-significant impacts related to hydrology or water quality, primarily given required adherence to existing regulatory requirements, many of which are

incorporated in the City of Oakland's SCAs. The Previous CEQA Documents found less-than-significant impacts related to flooding and risks from flooding. The 1998 LUTE EIR acknowledged that areas considered under that Program EIR could potentially occur within a 100-year flood boundary. Adherence to existing regulatory requirements that are incorporated in the City of Oakland's SCAs would address potentially significant effects regarding flooding. No mitigation measures were warranted.

LMSAP Findings

The LMSAP EIR determined that with implementation of SCAs, impacts related to hydrology and water quality, groundwater, and flooding would be less than significant with development occurring under the LMSAP. Specifically, development occurring under the Station Area Plan would not violate water quality standards or waste discharge requirements, deplete groundwater supplies, result in substantial erosion or siltation, result in substantial flooding, create or contribute substantial runoff exceeding the capacity of the storm drainage system or contributing to polluted runoff, expose people or structures to hazards associated with flooding, seiche, tsunami, or mudflows, substantially alter existing drainage patterns, or conflict with the regulations of the Creek Protection Ordinance that protect hydrological resources.

Project Analysis

Water Quality, Stormwater, and Drainages and Drainage Patterns (Criteria 8a and 8c)

Construction activities occurring at the site have the potential to impact water quality for receiving water bodies by generating polluted runoff or soils, particularly the nearby Lake Merritt Channel. However, these potential effects are addressed by existing regulations. Development projects that would disturb 1.0 acre or more are required to prepare and implement a Storm Water Pollution Prevention Plan (SWPPP), in accordance with the State Water Resources Control Board's (State Water Board) General Construction Permit. However, the project site is 0.92 acres and therefore a SWPPP is not required. For those project components that would disturb less than 1.0 acre of land, City of Oakland Municipal Code section 13.16.100 (City Of Oakland Creek Protection, Storm Water Management and Discharge Control Ordinance) would still be applicable. The ordinance requires the use of standard Best Management Practices to prevent pollution or erosion to creeks and/or storm drains. In addition, the City of Oakland has numerous SCAs relating to stormwater runoff from construction. These include SCA-33 (Construction Permits), SCA-34 (Soils Report), SCA-50 (NPDES Stormwater Requirements), and SCA-54 (Creek Protection Plan), which apply to all projects that require a Grading Permit except for those on steep slopes.

Operation period impacts to water quality may also result with development occurring under the LMSAP, including the proposed project. The project site is located on vacant land that is currently entirely covered with exposed, permeable soils; no permanent structures are located on the site. The proposed project would introduce approximately 26,279 square feet of impermeable surfaces to the site. Water quality in stormwater runoff is regulated locally by the Alameda Countywide Clean Water Program and the municipal stormwater requirements set by the Regional Water Quality Control Board. Adherence to these requirements would result in incorporation of treatment measures and other appropriate source control and site design features that reduce pollutants in runoff to the maximum extent practicable. Approximately 1,050 square feet of treatment area is required to treat runoff from the site before it is released to the storm drain system. The proposed project intends to

provide a minimum of 1,050 square feet of treatment areas at the podium level. Implementation of source control measures proposed by the project and compliance with existing regulations would ensure that impacts to operation period water quality would be less than significant.

Use of Groundwater (Criterion 8b)

The proposed project would not utilize groundwater resources and would not substantially affect groundwater recharge. Some dewatering may be required for construction of the proposed project, but the dewatering is not anticipated to substantially lower the groundwater level. Potable water is supplied by the East Bay Municipal Utility District (EBMUD), and groundwater is generally not considered potable and is not utilized in the public drinking water supply. The 2014 LMSAP EIR also assumed project compliance with existing City practices, which are stated City of Oakland SCAs that address all applicable regulatory standards and regulations pertaining to remediation and grading and excavation activities. The proposed project would adhere to these SCAs and therefore would have a less-than-significant impact on water quality or groundwater supplies, as identified in the LMSAP EIR and the Previous CEQA Documents.

Flooding and Substantial Risks from Flooding (Criteria 8d)

The project site is not located in either a 100-year or 500-year flood boundary. In addition, the project site is not located within a flood hazard zone or tsunami-inundation zone (LMSAP Draft EIR Figure 3.14-1). Therefore, the proposed project would not result in a significant impact with respect to flood-related risks.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents, implementation of the proposed project would not would not result in any new or more severe significant impacts related to hydrology and water quality, groundwater, and flooding than those identified in the LMSAP EIR or the Previous CEQA Documents. The proposed project would not result in any new or more significant impacts related to hydrology and water quality than those identified in the LMSAP EIR. The LMSAP EIR determined that implementation of SCA-33, SCA-34, SCA-50, and SCA-54 would ensure that potential impacts to hydrology and water quality would be less than significant. No mitigation measures are required.

9. Land Use, Plans, and Policies

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Physically divide an established community;	☒	☐	☐
b. Result in a fundamental conflict between adjacent or nearby land uses; or	☒	☐	☐
c. Fundamentally conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect and actually result in a physical change in the environment.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents considered in this analysis all found less-than-significant impacts related to land use, plans, and policies, and no mitigation measures were warranted. The 1998 LUTE EIR, however, identified a significant and unavoidable effect associated with inconsistencies with policies in the Clean Air Plan (resulting from significant and unavoidable increases in criteria pollutants from increased traffic regionally). It identified mitigation measures, which largely align with current City of Oakland SCAs involving Transportation Demand Management (TDM), which apply to all projects within the City of Oakland.

LMSAP Findings

The LMSAP EIR determined that impacts related to land use and planning would be less than significant with development occurring under the LMSAP. No mitigation measures were required and no City of Oakland SCAs apply to the proposed project. Compliance with LUTE Policies D10.2, N5.2, and N8.2 would ensure that development under the LMSAP would not conflict with surrounding land uses, or with existing plans, policies, and regulations adopted for the purpose of mitigating an environmental effect.

Project Analysis

Division of Existing Community, Conflict with Land Uses, or Land Use Plans (Criteria 9a through 9c)

The LMSAP changed the land use designation for the project site from Institutional to Urban Residential and rezoned the site from Urban Residential Zone-3 (RU-3) to Lake Merritt Station Area Plan District Urban Residential (D-LM-1). The intent of the D-LM-1 zone is to create, maintain, and enhance certain areas appropriate for high-density residential development with small-scaled compatible ground-level commercial uses. As previously discussed, the project site is identified as Opportunity Site #44 in the LMSAP. The LMSAP assumed that the project site would be developed with a 20-story apartment building including up to 357 residential units and 20,000 square feet of

retail space. The proposed project would develop the site with up to 361 residential units and 2,000 square feet of ground-floor commercial use, which is consistent with the type of development assumed for the project site in the LMSAP. As previously discussed, the proposed project would result in a greater height and unit count (but substantially less commercial square footage) than what was set forth for Opportunity Site #44 in the LMSAP development program; however, the level of development currently proposed for the site is within the broader development assumptions analyzed in the LMSAP EIR. As stated in the LMSAP EIR, deviation from the specific site-by-site assumptions in the development program may be considered minor if they are consistent with the overall development program analyzed in the LMSAP EIR.

The project would redevelop a vacant site and would not change the existing street network or otherwise introduce incompatible uses to the project area or create land use conflicts. Therefore, the proposed project would not result in any new or more significant impacts related to land use and planning than those identified in the LMSAP EIR. The project would continue to have less-than-significant land use and planning impacts as identified in the LMSAP EIR for the overall development program.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and Previous CEQA Documents, the proposed project would not result in any new or more severe significant impacts related to land use and planning than those identified in the LMSAP EIR or the Previous CEQA Documents. The LMSAP EIR did not identify any mitigation measures related to land use, and no City of Oakland SCAs directly addressing land use and planning apply to the proposed project.

10. Noise

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding construction noise, except if an acoustical analysis is performed that identifies recommend measures to reduce potential impacts. During the hours of 7 p.m. to 7 a.m. on weekdays and 8 p.m. to 9 a.m. on weekends and federal holidays, noise levels received by any land use from construction or demolition shall not exceed the applicable nighttime operational noise level standard; Generate noise in violation of the City of Oakland nuisance standards (Oakland Municipal Code Section 8.18.020) regarding persistent construction-related noise;	☒	☐	☐
b. Generate noise in violation of the City of Oakland Noise Ordinance (Oakland Planning Code Section 17.120.050) regarding operational noise;	☒	☐	☐
c. Generate noise resulting in a 5 dBA permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or, if under a cumulative scenario where the cumulative increase results in a 5 dBA permanent increase in ambient noise levels in the project vicinity without the project (i.e., the cumulative condition including the project compared to the existing conditions) and a 3-dBA permanent increase is attributable to the project (i.e., the cumulative condition including the project compared to the cumulative baseline condition without the project);	☒	☐	☐
d. Expose persons to interior L_{dn} or CNEL greater than 45 dBA for multi-family dwellings, hotels, motels, dormitories and long-term care facilities (and may be extended by local legislative action to include single-family dwellings) per California Noise Insulation Standards (CCR Part 2, Title 24); Expose the project to community noise in conflict with the land use compatibility guidelines of the Oakland General Plan after incorporation of all applicable Standard Conditions of Approval (see Figure 1); Expose persons to or generate noise levels in excess of applicable standards established by a regulatory agency (e.g., occupational noise standards of the Occupational Safety and Health Administration [OSHA]); or	☒	☐	☐

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
e. During either project construction or project operation expose persons to or generate ground-borne vibration that exceeds the criteria established by the Federal Transit Administration (FTA).	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents both identified less-than-significant impacts related to operational noise, primarily from roadway traffic, as well as noise compatibility. The 1998 LUTE EIR identified mitigation measures to address potential noise conflicts between different land uses. Regarding construction noise, the 1998 LUTE EIR identified a significant and unavoidable construction noise and vibration impact in Downtown, even after the incorporation of mitigation measures.

LMSAP Findings

The LMSAP EIR determined that with implementation of SCAs construction and operation period noise would be less than significant with development occurring under the LMSAP. The LMSAP EIR determined that while activities occurring under the Plan could expose residential uses near construction to noise levels exceeding the General Plan standard of 80 and 85 dBA, construction of individual development projects implemented under the LMSAP would be temporary in nature and that associated impacts would be less than significant with implementation of applicable SCAs.

The LMSAP EIR also determined that operation-period noise associated with projects developed under the Plan would be less than significant, and that implementation of applicable SCAs would ensure that operation noise is reduced to a less-than-significant level.

Project Analysis

Construction and Operational Noise and Vibration, Exposure of Receptors to Noise (Criteria 10a, 10b, 10c, 10d, and 10e)

Construction Period. The LMSAP EIR determined that construction activities occurring under the LMSAP could expose residential uses at 50 feet from construction sites to estimated temporary noise levels as high as 89 dB for typical machinery, or as high as 101 dB for pile drivers. This noise would exceed the General Plan standard of 80 and 85 dBA for short-term construction noise at receiving residential uses and commercial or industrial uses, respectively, for some distance around the construction sites. Construction activities for the proposed project would be expected to occur over approximately 24 months and would entail excavation and shoring, foundation and below-grade construction and construction of the buildings and finishing interiors. However, the LMSAP EIR determined that construction-period noise associated with construction of individual development projects implemented under the LMSAP would be temporary in nature and that associated impacts would be less than significant with implementation of City of Oakland SCAs. The proposed project is consistent with the level of development anticipated for the project site under the LMSAP and would

comply with applicable regulations in the Noise Ordinance, including applicable SCAs which regulate construction-period noise (SCA-58, SCA-59, SCA-60, SCA-61, and SCA-62).

Operation Period. The LMSAP EIR determined that operation-period noise levels associated with projects developed under the LMSAP would be less than significant. Operation of new buildings, including the proposed project, would include noise from mechanical equipment. However, this equipment would be standardized for noise reduction, and would not be expected to exceed Noise Ordinance thresholds. In addition, implementation of SCA-64 (Operational Noise) would ensure that operation noise is reduced to a less-than-significant level.

New development, including the proposed project, would generate additional traffic that would affect ambient noise levels. Noise analysis conducted for the LMSAP EIR found that the increase in traffic noise resulting from reasonably foreseeable maximum development under the LMSAP would be less than 5 dB on all roadway segments studied. The threshold of significance is considered to be 5dB or above; therefore, this impact would be less than significant.

Residential uses such as the proposed project are required to have interior noise levels no greater than 45 dBA, per City of Oakland standards. To achieve these indoor noise standards, the LMSAP EIR determined that many new buildings with residential uses will need to achieve substantial noise reduction from exterior noise levels. The City's SCA-63 mandates incorporation of noise reduction measures into project design to achieve an acceptable interior noise level for residential uses. Compliance with existing City SCAs will reduce potential impacts related to interior noise to a less-than-significant level.

Some locations within the Plan area would have community noise levels that would exceed General Plan guidelines for residential uses. According to Oakland's land use compatibility guidelines, residential uses are compatible with noise levels up to 60 dBA and conditionally compatible with noise levels up to 70 dBA. As shown in Table 3.10-8 of the Final EIR, noise levels above 70 dBA would occur on area roadways, including on Lake Merritt Boulevard, within the vicinity of the site. However, the LMSAP EIR determined that these exceedances would occur in the context of a community noise environment that currently exceeds standards in much of the Plan area. Implementation of SCA-63, which requires installation of noise reduction design features, would ensure that these impacts are less than significant.

Conclusion

The proposed project would not result in any new or more significant noise-related impacts than those identified in the LMSAP EIR. The less-than-significant construction-period noise impacts identified in the LMSAP EIR would be similar with development of the proposed project. Although the proposed project's building height and unit count are greater than what was set forth in the LMSAP development program, the level of development currently proposed for the site is within the broader development assumptions analyzed in the LMSAP EIR. As such, the operation-period noise impacts would be similar to those analyzed in the LMSAP EIR. Implementation of SCA-58, SCA-59, SCA-60, SCA-61, SCA-62, SCA-63, and SCA-64 would be applicable to and would be implemented by the proposed project and would further ensure that noise-related impacts associated with the proposed project would be less than significant.

11. Population and Housing

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Induce substantial population growth in a manner not contemplated in the General Plan, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extensions of roads or other infrastructure), such that additional infrastructure is required but the impacts of such were not previously considered or analyzed;	☒	☐	☐
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element; or Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere in excess of that contained in the City's Housing Element.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA Documents found less-than-significant impacts related to population and housing, as well as employment. The 1998 LUTE EIR identified mitigation measures to address unanticipated employment growth (compared to regional ABAG projections), and no other mitigation measures were warranted.

LMSAP Findings

The LMSAP EIR determined that impacts related to population and housing would be less than significant with development occurring under the LMSAP. No mitigation measures or SCAs would be required. Implementation of the LMSAP is intended to increase growth within an urban area and the LMSAP EIR assumes that approximately 4,900 new housing units would be added to the Plan area by 2035, with an associated household and population growth of 4,700 and 9,870, respectively. This projected growth is in line with regional growth projections including ABAG's 2009 growth forecast for 2035. Development at opportunity sites would largely occur as infill, in an urbanized and built-out city. The LMSAP would include a variety of changes to public infrastructure, but none that would increase the capacity of infrastructure outside the Plan area resulting in unplanned population growth.

Project Analysis

Population Growth and Displacement of Housing and People (Criteria 11a and 11b)

The project site is identified as Opportunity Site #44 in the LMSAP and up to 357 residential units are assumed for the site. The proposed project would result in slightly more growth than identified for the site in the LMSAP, with development of up to 361 units. However, as previously discussed, the level

of development currently proposed for the site is within the broader development assumptions analyzed in the EIR. As stated in the LMSAP EIR, deviation from the specific site-by-site assumptions in the development program may be considered minor as they are anticipated and analyzed in the LMSAP EIR. The site is vacant and would not displace housing or people. Therefore, the proposed project would not result in any new or more significant impacts related population and housing than those identified in the LMSAP EIR.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents, the proposed project would not result in any new or more severe significant impacts related to population and housing than those identified in the LMSAP EIR or the Previous CEQA Documents. The LMSAP EIR did not identify any mitigation measures related to population and housing, and none would be required for the proposed project. In addition, no SCAs would apply.

12. Public Services, Parks and Recreation Facilities

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: • Fire protection; • Police protection; • Schools; or • Other public facilities.	☒	☐	☐
b. Increase the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or Include recreational facilities or require the construction or expansion of recreational facilities which might have a substantial adverse physical effect on the environment.	☒	☐	☐

Previous CEQA Documents Findings

The Redevelopment Plan EIR found less-than-significant impacts related to public services and recreational facilities; no mitigation measures were warranted nor City of Oakland SCAs identified. The 1998 LUTE EIR identified a significant and unavoidable impact for fire safety, with mitigation measures pertaining to the North Oakland Hills area; the 1998 LUTE EIR also identified a significant and unavoidable impact regarding increased student enrollment, particularly in Downtown (and the Waterfront), and identified mitigation measures that would not reduce the effect to less than significant. Thus the impact was significant and unavoidable.

LMSAP Findings

The LMSAP EIR determined that the increase in demand for public services (i.e., fire, police, and schools) and park and recreation services from development under the LMSAP would be less than significant. The Oakland Police Department and Fire Department would adjust service capacity as needed and the City is responsible for coordinating service provisions to adjust to the expected increase in demand for these services. New development, including the proposed project, is required to adhere to appropriate building and fire code requirements that would be incorporated into project construction. The Plan area is exceptionally well-served by libraries, and the LMSAP includes the creation of new parks and open spaces, and improved access to the regional parks system. No mitigation measures or SCAs were required regarding public services or recreation.

Project Analysis

Public Services and Parks and Recreation (Criteria 12a and 12b)

The City of Oakland Police Department and Fire Department would adjust service capacity as needed and the City is responsible for coordinating service provisions to adjust to the expected increase in demand for these services. New development, including the proposed project, is required to adhere to appropriate building and fire code requirements that would be incorporated into project construction. The proposed project would be subject to plan review by the Oakland Fire Department to ensure proper life safety standards and compliance with the California State Fire Code, and adequate emergency response especially for onsite access, exits, and any necessary special equipment to assist firefighters on-site.

The LMSAP EIR determined that schools within the Plan area are currently over-enrolled by 380 students; however, impacts related to the provision of school services and capacity would be less than significant. If development under the Plan generates more students than the closest schools have a capacity for, these students could be accommodated by existing charter schools in the area, and/or schools outside the Plan area, which do have excess capacity. The Plan area is exceptionally well-served by libraries and there would be a less-than-significant impact to library services as a result of the increase in population under the Plan.

The City of Oakland's open space standards require new residential development in the Plan area, including the proposed project, to provide usable open space for project residents. The proposed project would provide 25,153 square feet of on-site open space for use by residents in the form of roof decks and terraces and would meet the City's open space requirements. The proposed project would also complete off-site landscaping improvements to the adjacent City park, which is being developed under the Station Area Plan and as part of the East 12th Street Reconstruction Project. The park would be a passive open green space consisting mostly of native plantings of groundcover, shrubs and trees.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents, the proposed project would not result in any new or more severe significant impacts related to public services and parks and recreation services than those identified in the LMSAP EIR and the Previous CEQA Documents. The LMSAP EIR did not identify any mitigation measures related to public services, and none would be required for the proposed project. In addition, no SCAs would apply.

13. Transportation and Circulation

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
Conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to, intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit, specifically:			
Traffic Load and Capacity Thresholds a. At a study, signalized intersection which is located **outside the Downtown area and that does not provide direct access to Downtown**, the project would cause the motor vehicle level of service (LOS) to degrade to worse than LOS D (i.e., LOS E or F) and cause the total intersection average vehicle delay to increase by four (4) or more seconds;	☒	☐	☐
b. At a study, signalized intersection which is located **within the Downtown area or that provides direct access to Downtown**, the project would cause the motor vehicle LOS to degrade to worse than LOS E (i.e., LOS F) and cause the total intersection average vehicle delay to increase by four (4) or more seconds;	☒	☐	☐
c. At a study, signalized intersection **outside the Downtown area and that does not provide direct access to Downtown** where the motor vehicle level of service is LOS E, the project would cause the total intersection average vehicle delay to increase by four (4) or more seconds;	☒	☐	☐
d. At a study, signalized intersection **outside the Downtown area and that does not provide direct access to Downtown** where the motor vehicle level of service is LOS E, the project would cause an increase in the average delay for any of the critical movements of six (6) seconds or more;	☒	☐	☐
e. At a study, signalized intersection for all areas where the level of service is LOS F, the project would cause (a) the overall volume-to-capacity ("V/C") ratio to increase 0.03 or more or (b) the critical movement V/C ratio to increase 0.05 or more;	☒	☐	☐
f. At a study, unsignalized intersection the project would add ten (10) or more vehicles to the critical movement and after project completion satisfy the California Manual on Uniform Traffic Control Devices (MUTCD) peak hour volume traffic signal warrant;	☒	☐	☐

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
g. For a roadway segment of the Congestion Management Program (CMP) Network, the project would cause (a) the LOS to degrade from LOS E or better to LOS F or (b) the V/C ratio to increase 0.03 or more for a roadway segment that would operate at LOS F without the project; or	☒	☐	☐
h. Cause congestion of regional significance on a roadway segment on the Metropolitan Transportation System (MTS) evaluated per the requirements of the Land Use Analysis Program of the CMP.	☒	☐	☐

Previous CEQA Documents Findings

The Previous CEQA documents considered for this analysis identified significant and unavoidable impacts regarding intersection and/or roadway segment operations. Various mitigation measures and City of Oakland SCAs are identified in the Program EIRs (except in the 1998 LUTE EIR, which does not identify SCAs). Other transportation/circulation impacts identified in each of the Previous CEQA documents are reduced to less-than-significant levels with adherence to the City of Oakland SCAs or mitigation measures.

The 1998 LUTE EIR identified significant unavoidable impacts regarding degradation of the level of service (LOS) for several roadway segments citywide. A mitigation measure was identified for one Downtown intersection to reduce the intersection operations to less than significant. The 1998 LUTE EIR did not identify any impacts at the intersections that are affected by the proposed project.

Both the Redevelopment Plan EIR and the Housing Element EIR identified significant unavoidable effects to roadway segment operations, as well as railroad crossing safety, after the implementation of identified mitigation measures. Neither of these Program EIRs identified any impacts at the intersections that are affected by the proposed project.

LMSAP Findings

The LMSAP EIR evaluated the potential impacts of the LMSAP on transportation, circulation, and parking conditions, including transit services, and pedestrian and bicycle facilities. The LMSAP EIR evaluated 45 intersections and 10 freeway segments within the vicinity of the LMSAP (including within the City of Alameda) for potential LOS impacts.

Under Existing Plus Project conditions, impacts to a total of seven intersections were identified during either or both peak hours. Impacts to three of these intersections would be reduced to less-than-significant levels with implementation of the recommended mitigation measures. However, impacts to the 1st Avenue/International Boulevard, Oak Street/10th Street, Oak Street/6th Street, and Jackson Street/5th Street intersections would be significant and unavoidable. Under Existing Plus Project conditions, impacts to the I-880 freeway segment between Oak Street and 5th Street would be significant and unavoidable. In addition, under Existing Plus Project conditions, impacts related to

pedestrian circulation at the Constitution Way/Marina Village Parkway and Constitution Way/Atlantic Avenue intersections would be significant and unavoidable because these intersections are located in the City of Alameda and the City of Oakland does not have the authority to construct recommended improvements.

Under Interim 2020 Plus Project conditions, significant unavoidable impacts were identified at a total of three intersections, including the Jackson Street/6th Street; Brush Street/12th Street; Oak Street/6th Street; and Oak Street/5th Street.

Under Cumulative 2035 Plus Project conditions, significant unavoidable impacts were identified at a total of 14 intersections, including: Grand Avenue/Broadway; Madison Street/14th Street; Madison Street/11th Street; Madison Street/10th Street; Oak Street/10th Street; Harrison Street/8th Street; Jackson Street/8th Street; Oak Street/8th Street; Jackson Street/7th Street; Oak Street/7th Street; 5th Avenue/7th Street/8th Street; Jackson Street/6th Street; Oak Street/ 6th Street; and Oak Street/5th Street. In addition, under Cumulative 2035 Plus Project conditions impacts to the segment of Oak Street between 2nd Street and Embarcadero would also be significant and unavoidable.

Standard Conditions of Approval related to transportation and circulation are required to be implemented for projects developed under the LMSAP.

Project Analysis

Impacts to the Circulation System (Criteria 13a through 13h)

A focused Transportation Assessment[15] was prepared for the proposed project to evaluate potential impacts associated with traffic and circulation (see Appendix C). The analysis evaluated the project's consistency with the LMSAP EIR, assessed the proposed access and circulation plan for potential safety impacts, and evaluated project impacts at two intersections that were not analyzed in the LMSAP EIR. The discussion below summarizes the project's potential impacts related to transportation and circulation. As summarized below, the proposed project would not conflict with any applicable measures of effectiveness for the performance of the circulation system; conflict with an applicable congestion management program; or substantially increase hazards due to a design feature. In addition, similar to the analysis presented in the LMSAP EIR, development of the proposed project would result in less-than-significant impacts related to construction-period traffic and circulation, changes to air traffic patterns, and inadequate emergency access. Standard Conditions of Approval related to transportation and circulation identified in the LMSAP EIR would also be required for the proposed project.

The LMSAP EIR identified up to 1,024 daily vehicle trips, including 55 AM peak hour trips and 78 PM peak hour trips, associated with development of the project site. Trip generation for the proposed project was calculated using the same methodology developed for the LMSAP EIR. As shown in Table 1 in Appendix C, the proposed project is estimated to generate 809 daily vehicle trips, with 60 trips occurring during the AM peak hour and 65 trips occurring during the PM peak hour. While the proposed project would generate five additional AM peak hour trips than analyzed in the LMSAP

[15] Fehr & Peers, 2016. Lakehouse Commons Project – Transportation Assessment. May 24.

EIR, the proposed project includes uses consistent with the assumptions in the LMSAP EIR. Furthermore, since the approval of the LMSAP, five developments, including the proposed project, have been proposed and are in various stages of the planning approval process. The five developments combined would generate about 5,614 daily trips, 303 AM peak hour, and 494 PM peak hour trips. The combined trip generation is less than the total trip generation evaluated in the LMSAP EIR. The total cumulative development contemplated and approved within the LMSAP EIR is a substantially larger amount than that which is currently proposed and under consideration within the LMSAP area. As such, the proposed project would not result in additional impacts on traffic operations at the intersections analyzed in the LMSAP EIR. Refer to Table 2 in the Transportation Assessment (Appendix C) for additional information.

The proposed project would add more than 20 peak hour trips to two intersections that were not evaluated in the LMSAP EIR. Therefore, operations at the following two intersections were evaluated under Existing and Cumulative 2035 conditions for the proposed project:

- Lake Merritt Boulevard/East 12th Street
- East 12th Street/2nd Avenue

Potential impacts associated with intersection operations under Existing Plus Project and Cumulative Plus Project conditions, site circulation and safety, bicycle access and parking, pedestrian access and circulation, transit access, and vehicle parking are described in this subsection. As described below, the proposed project would not result in any new or more significant impacts related to traffic or transportation than those identified in the LMSAP EIR.

Existing and Existing Plus Project Conditions. Traffic data for Existing conditions was collected for the two study area intersections from 7:00 a.m. to 9:00 a.m. (AM peak) and from 4:00 p.m. to 6:00 p.m. (PM peak) on September 16, 2014. As shown in Table 1, below, both of the study area intersections currently operate at an acceptable LOS B during both the AM and PM peak hours and would continue to operate at LOS B under Existing Plus Project conditions; therefore, the project would not result in a significant impact at these study area intersections during Existing Plus Project conditions.

Table 1: Intersection LOS Summary – Existing and Existing Plus Project Conditions

Intersection	Traffic Control[a]	Peak Hour	Existing Conditions		Existing Plus Project Conditions		Significant Impact?
			Delay[b] (seconds)	LOS	Delay[b] (seconds)	LOS	
Lake Merritt Boulevard/East 12th Street	Signal	AM	13.3	B	13.6	B	No
		PM	11.7	B	12.2	B	No
East 12th Street/2nd Avenue	Signal	AM	9.8	A	10.6	B	No
		PM	10.7	B	11.1	B	No

Bold indicates intersections operating at an unacceptable level. All intersection located in Downtown or on arterials that provide direct access to Downtown where LOS E (not LOS D) is the threshold.

[a] Signal = intersection is controlled by a traffic signal

[b] For signalized intersection, average intersection delay and LOS based on the 2010 HCM method is shown.

Source: Fehr & Peers, 2016.

Cumulative 2035 and Cumulative 2035 Plus Project Conditions. Cumulative 2035 conditions are based on the most recent Alameda County Transportation Commission (ACTC) Model, which uses

land use data consistent with the Association of Bay Area Governments (ABAG) Projections 2009. The 2035 Plus Project volumes are forecast by adding the project traffic to the 2035 No Project traffic volumes.

Cumulative 2035 conditions assume that the East Bay Bus Rapid Transit (BRT) Project would be completed. Adjacent to the project, BRT would operate along southbound East 12th Street, and convert the two southbound mixed-flow lanes to one bus-only lane and one mixed-flow lane. The BRT Project would also prohibit left-turns on East 12th Street at 2nd Avenue.

Table 2, below summarizes intersection LOS calculations for Cumulative 2035 and 2035 Plus Project conditions. Both study intersections would operate at LOS C or better during both AM and PM peak hours under Cumulative 2035 with and without project conditions. Therefore, the project would not result in a significant impact at either of these intersections.

Table 2: Intersection LOS Summary – 2035 Conditions

Intersection	Traffic Control[a]	Peak Hour	2035 No Project Conditions		2035 Plus Project Conditions		Significant Impact?
			Delay[b] (seconds)	LOS	Delay[b] (seconds)	LOS	
Lake Merritt Boulevard/East 12th Street	Signal	AM	16.6	B	17.0	B	No
		PM	19.3	B	20.0	C	No
East 12th Street/2nd Avenue	Signal	AM	10.1	B	10.8	B	No
		PM	15.4	B	16.4	B	No

Bold indicates intersections operating at an unacceptable level. All intersection located in Downtown or on arterials that provide direct access to Downtown where LOS E (not LOS D) is the threshold.

[a] Signal = intersection is controlled by a traffic signal

[b] For signalized intersection, average intersection delay and LOS based on the 2010 HCM method is shown.

Source: Fehr & Peers, 2016.

Vehicle Access and Circulation. The project would provide a four-level parking garage (two below grade, two above grade) which would be accessed through a full-access gated driveway on 2nd Avenue approximately 70 feet west of East 12th Street. The garage would accommodate at least 250 parking spaces through a combination of regular and tandem parking spaces.

Considering the proximity of the driveway on 2nd Avenue to East 12th Street, motorists exiting the garage may not have adequate sight distance of vehicles turning from East 12th Street onto Second Avenue. In addition, based on preliminary review of the site plan, motorists exiting the garage may not have adequate sight distance of pedestrians on the adjacent sidewalk.

Recommendation TRA-1: Although not required to address an impact under CEQA, the following should be considered as part of the final design for the project to improve vehicle access and circulation:

- To ensure adequate sight distance for vehicles exiting the garage, prohibit on-street parking along the project frontage on 2nd Avenue between the project driveway and East 12th Street and within 20 feet of the west side of the driveway.
- Redesign the project driveway on 2nd Avenue to provide adequate sight distance between motorists exiting the driveway and pedestrians on the sidewalk. If on-street parking is prohibited adjacent to the project site on 2nd Avenue, one potential design may be to widen

the sidewalk along the project frontage and install planter wells adjacent to the project driveway to move pedestrians away from the driveway, ensure adequate sight distance, and maintain sidewalk width.

As described above, the driveway for the proposed project would be on 2nd Avenue, about 70 feet west of East 12th Street. Based on the analysis above under the level of service analysis, the 95th percentile queues on eastbound 2nd Avenue at East 12th Street are expected to spill back beyond the project driveway during both AM and PM peak hours. However, these queues would clear at the end of each signal cycle and allow vehicles to turn into and out of the driveway.

Given the above, the proposed project would not result in any new or more significant impacts related to vehicle access and circulation than those identified in the LMSAP EIR.

Bicycle Access and Bicycle Parking. Chapter 17.117 of the Oakland Municipal Code requires long-term and short-term bicycle parking for new buildings. Long-term bicycle parking includes lockers or locked enclosures and short-term bicycle parking includes bicycle racks. The Code requires one long-term space for every four multi-family dwelling units and one short-term space for every 20 multi-family dwelling units. The Code requires the minimum level of bicycle parking, two long and short-term spaces, for the commercial component of the project.

The project is required to provide 93 long-term and 20 short-term parking spaces. The site plan shows long-term bicycle parking on Levels 1 and 2, but does not provide the amount of parking spaces. In addition, the site plan does not identify short-term bicycle parking. The long-term bicycle parking on the first level can be accessed through the Lobby on Lake Merritt Boulevard or the garage. Both long-term bicycle-parking areas on the second level of the garage can be accessed by elevators/stairs or biking through the garage. Using stairs or elevators to access bicycle parking on the second level may be inconvenient for bicyclists, and riding through the garage may result in potential conflicts between motorists and bicyclists.

Recommendation TRA-2: Although not required to address an impact under CEQA, the following should be considered as part of the final design for the project:

- Consider relocating the long-term bicycle parking from the second level to a more convenient location on the ground level.
- Identify location and amount of short-term bicycle parking, consistent with the City of Oakland Bicycle Parking Ordinance. Short-term bicycle parking should be near the entrances to the commercial and both residential components of the project.
- Ensure that the identified bike rooms accommodate at least 93 long-term bicycle parking spaces

Given the above, the proposed project would not result in any new or more significant impacts related to bicycle access and circulation than those identified in the LMSAP.

Pedestrian Access and Circulation. Each building would be accessed through a separate lobby that includes elevators and stairwells that connect to the residential levels and the garage. The 26-level north building would be accessed from the corner of Lake Merritt Boulevard/12th Street intersection.

The north building also includes four townhomes that can be directly accessed on Lake Merritt Boulevard. The eight-level south building would be accessed on 12th Street just north of 2nd Avenue.

The sidewalks along the project frontage were recently constructed as part of the 12th Street Bridge Reconstruction Project and the two signalized intersections adjacent to the project at Lake Merritt Boulevard/East 12th Street and East 12th Street/2nd Avenue provide striped crosswalks with countdown pedestrian signal heads, adequate crossing time, and directional curb ramps adjacent to the project site. The project would not alter the existing 12-foot sidewalk along East 12th Street and 10-foot sidewalk along 2nd Avenue. In addition, the proposed building would also have a 10-foot setback along East 12th Street.

Given the above, the proposed project would not result in any new or more significant impacts related to pedestrian access and circulation than those identified in the LMSAP EIR.

Transit Access. Transit service providers in the project vicinity include Bay Area Rapid Transit (BART) and AC Transit. BART provides regional rail service throughout the East Bay and across the Bay. The nearest BART station to project site is the Lake Merritt BART Station, about 0.5 miles west. The proposed project would not modify access between the project site and the BART Station.

AC Transit is the primary bus service provider in the City of Oakland. AC Transit operates the following routes in the vicinity of the project:

- Routes 1 and 1R operate along International Boulevard with the nearest stop at 2nd Avenue, about 350 feet east of the project site.
- Routes 11 and 62 operate along 10th Street with the nearest stop at 2nd Avenue, about 600 feet west of the project site.
- Routes 14, 18, 26, and 40 operate on Lake Merritt Boulevard with the nearest stop between International Boulevard and East 15th Street, about 600 feet east of the project site.

AC Transit is currently designing the East Bay Bus Rapid Transit (BRT) Project along the International Boulevard corridor, which would replace Routes 1 and 1R. The project would generally dedicate one travel lane in each direction to bus operations only, in order to provide a quicker and more reliable bus service. Adjacent to the project, BRT would operate along southbound East 12th Street, and convert the two southbound mixed-flow lanes to one bus-only lane and one mixed-flow lane. The BRT project would continue to maintain the existing Class 2 bicycle lanes and parking along East 12th Street adjacent to the project site.

The nearest BRT stop to the project site would be on southbound East 12th Street, just south of 2nd Avenue. The corresponding northbound stop would be on International Boulevard just south of 2nd Avenue, about 350 feet east of the project site. Both stops can be accessed from the project site by crossing at protected signalized intersections.

No changes to the other bus routes operating in the vicinity of the project are planned and the proposed project would not modify or prohibit access to or between the project site and these bus stops.

Given the above, the proposed project would not result in any new or more significant impacts related to transit access than those identified in the LMSAP EIR.

Parking. The proposed project would provide 330 parking spaces to serve the proposed development. The project would be required to comply with City regulations that apply to the provision of parking spaces to serve new development. The provision of parking is not considered to be an impact under CEQA.

Conclusion

The proposed project would not result in significant impacts to the project study intersections, either under the Existing Plus Project conditions or the Cumulative 2040 Plus Project conditions. Based on an examination of the analysis, findings and conclusions of the LMSAP EIR and Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the LMSAP EIR or the Previous CEQA Documents, nor would it result in new significant impacts related to transportation and circulation that were not identified in the LMSAP EIR or the Previous CEQA Documents.

Additionally, pedestrian, bicycle, transit, emergency access, and design and incompatible use impacts associated with the proposed project would be less than significant and consistent with those identified in the LMSAP EIR. The proposed project would not result in any other transportation-related significant impacts.

Further, implementation of SCA 68, SCA 69, SCA 70, and SCA 71 would be applicable to the proposed project and would ensure that transportation and circulation-related impacts associated with the proposed project would be less than significant. No mitigation measures are required. The project applicant would implement recommended measures identified in the transportation analysis completed for the proposed project that address vehicular access and safety, bicycle parking supply and access and pedestrian circulation and safety.

14. Utilities and Service Systems

Would the project:	Equal or Less Severity of Impact Previously Identified in Previous CEQA Documents	Substantial Increase in Severity of Previously Identified Significant Impact in Previous CEQA Documents	New Significant Impact
a. Exceed wastewater treatment requirements of the San Francisco Bay Regional Water Quality Control Board; Require or result in construction of new storm water drainage facilities or expansion of existing facilities, construction of which could cause significant environmental effects; Result in a determination by the wastewater treatment provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new wastewater treatment facilities or expansion of existing facilities, construction of which could cause significant environmental effects;	☒	☐	☐
b. Exceed water supplies available to serve the project from existing entitlements and resources, and require or result in construction of water facilities or expansion of existing facilities, construction of which could cause significant environmental effects;	☒	☐	☐
c. Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs and require or result in construction of landfill facilities or expansion of existing facilities, construction of which could cause significant environmental effects; Violate applicable federal, state, and local statutes and regulations related to solid waste;	☒	☐	☐
d. Violate applicable federal, state and local statutes and regulations relating to energy standards; or Result in a determination by the energy provider which serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the providers' existing commitments and require or result in construction of new energy facilities or expansion of existing facilities, construction of which could cause significant environmental effects.	☒	☐	☐

Previous CEQA Documents Findings

The Redevelopment Plan EIR found less-than-significant impacts related to water, wastewater, or stormwater facilities, solid waste, and energy finding no mitigation measures were warranted but adhering to certain City of Oakland SCAs. The 1998 LUTE EIR identified significant effects regarding these topics and identified mitigation measures that reduced the effects to less than significant.

LMSAP Findings

The LMSAP EIR identified less-than-significant impacts to utilities and service systems, with the incorporation of City of Oakland SCAs in certain instances where new infrastructure would be required to be constructed. The LMSAP EIR determined that the capacity of existing service systems would meet increased service demand of development analyzed for the LMSAP; wastewater demand would not exceed wastewater treatment requirements or capacity, surface water runoff would not exceed the capacity of the storm drain system, water demand would not exceed available water supplies, and solid waste generated would not exceed landfill capacity.

Project Analysis

Water, Wastewater, Stormwater, Solid Waste Services and Energy (Criteria 14a through 14c)

The capacity of existing service systems – wastewater, stormwater, water, solid waste, sewer, landfill and energy- were all determined to meet increased service demand as a result of development under the LMSAP. No new infrastructure would be required to be constructed to accommodate increased service demand. In the cases in which it is deemed necessary, SCA-75 requires that draft project plans be submitted to the City's Building Services and Public Works Agency to demonstrate that all proposed utilities would be underground. SCA-74 requires the proposed project to submit a Construction & Demolition (C&D) Waste Reduction and Recycling Plan (WRRP) and an Operational Diversion Plan (ODP) for review and approval by the Public Works Agency. The WRRP must specify the methods by which the project would divert C&D debris waste from landfill disposal in accordance with current City requirements.

The proposed project would result in less-than-significant impacts related to energy standards and use, and would comply with CALGreen regulations and be required to achieve at least a 15 percent reduction in energy usage when compared to Title 24. The proposed project would also be required to undergo review by PG&E. In addition, City of Oakland SCAs pertaining to compliance with the green building ordinance would require construction projects to incorporate energy-conserving design measures, which would ensure the proposed project's impacts on energy would remain less than significant.

Conclusion

Based on an examination of the analysis, findings, and conclusions of the 2014 LMSAP EIR and the Previous CEQA Documents, implementation of the proposed project would not substantially increase the severity of significant impacts identified in the LMSAP EIR or Previous CEQA Documents, nor would it result in new significant impacts related to utilities and service systems that were not identified in the LMSAP EIR or the Previous CEQA Documents. The LMSAP EIR did not identify any mitigation measures related to utilities and service systems, and none would be required for the proposed project. Implementation of SCA-68, SCA-69, SCA-70, SCA-71, SCA-74, SCA-75, SCA-77, and SCA-79, as well as compliance with Title 24 and CALGreen requirements would ensure that impacts to utilities and services would be less than significant.

VII. REFERENCES

(All references cited below are available at the Oakland Bureau of Planning, Agency, 250 Frank Ogawa Plaza, Suite 3330, Oakland, California, unless specified otherwise.)

Lake Merritt Station Area Plan EIR

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Metropolitan Transportation Commission and Association of Bay Area Governments, *Plan Bay Area, Strategy for a Sustainable Region*. Adopted July 18, 2014.

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City of Oakland, City of Oakland Planning Code. CEDA: Planning and Zoning. Available online at: www2.oaklandnet.com/oakca1/groups/ceda/documents/report/oak032032.pdf. February 2014.

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Oakland Unified School District, *Request for Developer Qualifications for New Development of Oakland Unified School District Properties, Including the Parcels Housing the Pail Robeson Administration Building, and Dewey High School*. Available online at: www.ousd.k12.ca.us/cms/lib07/CA01001176/Centricity/Domain/95/RFQ%201025%202ND%20Ave.%20Jun%2024.pdf. June 24, 2014.

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Rowan William Davies & Irwin, Inc., *Lakehouse Commons Oakland, CA Sun/Shadow Study*. April 28, 2016.

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ATTACHMENT A
Standard Conditions of Approval and Mitigation Monitoring and Reporting Program

This Standard Conditions of Approval ("SCAs") and Mitigation Monitoring and Reporting Program ("SCAMMRP") is based on the CEQA Analysis prepared for the Lakehouse Commons Project.

This SCAMMRP is in compliance with Section 15097 of the CEQA Guidelines, which requires that the Lead Agency "adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects." The SCAMMRP lists mitigation measures recommended in the 2014 LMSAP EIR that apply to the proposed project. The SCAMMRP also lists other SCAs that apply to the proposed project, most of which were identified in the LMSAP EIR and some of which have been subsequently updated or otherwise modified by the City. Specifically, on July 22, 2015, the City of Oakland released a revised set of all City of Oakland SCAs, which largely still include SCAs adopted by the City in 2008, along with supplemental, modified, and new SCAs. The SCAs are measures that would minimize potential adverse effects that could result from implementation of the proposed project, to ensure the conditions are implemented and monitored. The revised set of the City of Oakland SCAs includes new, modified, and reorganized SCAs; however, none of the revisions diminish or negate the ability of the SCAs considered "environmental protection measures" to minimize potential adverse environmental effects. As such, the SCAs identified in the SCAMMRP reflect the current SCAs only. Although the SCA numbers listed below may not correspond to the SCA numbers in the 2014 LMSAP EIR, all of the environmental topics and potential effects addressed by the SCAs in the LMSAP EIR are included in this SCAMMRP (as applicable to the Lakehouse Commons Project). This SCAMMRP also identifies the mitigation monitoring requirements for each mitigation measure and SCA.

This CEQA Analysis is also based on the analysis in the following Program EIRs that apply to the Lakehouse Commons Project: Oakland's 1998 General Plan Land Use and Transportation Element (LUTE) EIR (1998 LUTE EIR), the 2010 General Plan Housing Element EIR (Housing Element EIR) and 2014 Addendum, and the 2011 Central District Urban Renewal Plan Amendments EIR (Redevelopment Plan EIR). None of the mitigation measures or SCAs from these Program EIRs are included in this SCAMMRP because they, or an updated or equally effective mitigation measure or SCA, is identified in the 2014 LMSAP EIR, its addenda, or in this CEQA Analysis for the Lakehouse Commons Project.

To the extent that there is any inconsistency between any mitigation measures and/or SCAs, the more restrictive conditions shall govern; to the extent any mitigation measure and/or SCA identified in the CEQA Analysis were inadvertently omitted, they are automatically incorporated herein by reference.

The first column of the SCAMMRP table identifies the mitigation measure or SCA applicable to that topic in the CEQA Analysis. While a mitigation measure or SCA can apply to more than one topic, it is listed in its entirety only under its primary topic (as indicated in the mitigation or SCA designator). The SCAs are numbered to specifically apply to the Lakehouse Commons Project and this CEQA Analysis; however, the SCAs as presented in the City's Standard Conditions of Approval and

Uniformly Applied Development Standards documents are included in parenthesis for cross-reference purposes.

The second column identifies the monitoring schedule or timing applicable to the project. The third column names the party responsible for monitoring the required action for the project. The project sponsor is responsible for compliance with any recommendations identified in City-approved technical reports all applicable mitigation measures adopted, and with all SCAs set forth herein at its sole cost and expense, unless otherwise expressly provided in a specific mitigation measure or condition of approval, and subject to the review and approval of the City of Oakland. Overall monitoring and compliance with the mitigation measures will be the responsibility of the Bureau or Planning, Zoning Inspections Division. Prior to the issuance of a demolition, grading, and/or construction permit, the project sponsor shall pay the applicable mitigation and monitoring fee to the City in accordance with the City's Master Fee Schedule.

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Aesthetics, Shadow and Wind		
SCA-16 Graffiti Control Requirement: e. During construction and operation of the project, the project applicant shall incorporate best management practices reasonably related to the control of graffiti and/or the mitigation of the impacts of graffiti. Such best management practices may include, without limitation: i. Installation and maintenance of landscaping to discourage defacement of and/or protect likely graffiti-attracting surfaces. ii. Installation and maintenance of lighting to protect likely graffiti-attracting surfaces. iii. Use of paint with anti-graffiti coating. iv. Incorporation of architectural or design elements or features to discourage graffiti defacement in accordance with the principles of Crime Prevention Through Environmental Design (CPTED). v. Other practices approved by the City to deter, protect, or reduce the potential for graffiti defacement. f. The project applicant shall remove graffiti by appropriate means within seventy-two (72) hours. Appropriate means include the following: i. Removal through scrubbing, washing, sanding, and/or scraping (or similar method) without damaging the surface and without discharging wash water or cleaning detergents into the City storm drain system. ii. Covering with new paint to match the color of the surrounding surface. iii. Replacing with new surfacing (with City permits if required). When Required: Ongoing Initial Approval: N/A Monitoring/Inspection: Bureau of Building		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
SCA-17 Landscape Plan a. ***Landscape Plan Required*** Requirement: The project applicant shall submit a final Landscape Plan for City review and approval that is consistent with the approved Landscape Plan. The Landscape Plan shall be included with the set of drawings submitted for the construction-related permit and shall comply with the landscape requirements of chapter 17.124 of the Planning Code. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: N/A b. ***Landscape Installation*** Requirement: The project applicant shall implement the approved Landscape Plan unless a bond, cash deposit, letter of credit, or other equivalent instrument acceptable to the Director of City Planning, is provided. The financial instrument shall equal the greater of $2,500 or the estimated cost of implementing the Landscape Plan based on a licensed contractor's bid. When Required: Prior to building permit final Initial Approval: Bureau of Planning Monitoring/Inspection: Bureau of Building c. ***Landscape Maintenance*** Requirement: All required planting shall be permanently maintained in good growing condition and, whenever necessary, replaced with new plant materials to ensure continued compliance with applicable landscaping requirements. The property owner shall be responsible for maintaining planting in adjacent public rights-of-way. All required fences, walls, and irrigation systems shall be permanently maintained in good condition and, whenever necessary, repaired or replaced. When Required: Ongoing Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
SCA-18 Lighting Requirement: Proposed new exterior lighting fixtures shall be adequately shielded to a point below the light bulb and reflector to prevent unnecessary glare onto adjacent properties. When Required: Prior to building permit final Initial Approval: N/A Monitoring/Inspection: Bureau of Building		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
Air Quality		
SCA-19 Construction-Related Air Pollution Controls (Dust and Equipment Emissions) Requirement: The project applicant shall implement all of the following applicable air pollution control measures during construction of the project: **[BASIC CONTROLS (apply to ALL construction sites)]** a. Water all exposed surfaces of active construction areas at least twice daily. Watering should be sufficient to prevent airborne dust from leaving the site. Increased watering frequency may be necessary whenever wind speeds exceed 15 miles per hour. Reclaimed water should be used whenever feasible. b. Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer). c. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. d. Pave all roadways, driveways, sidewalks, etc. within one month of site grading or as soon as feasible. In addition, building pads should be laid within one month of grading or as soon as feasible unless seeding or soil binders are used. e. Enclose, cover, water twice daily, or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.). f. Limit vehicle speeds on unpaved roads to 15 miles per hour. g. Idling times on all diesel-fueled commercial vehicles over 10,000 lbs. shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne toxics control measure Title 13, Section 2485, of the California Code of Regulations). Clear signage to this effect shall be provided for construction workers at all access points. h. Idling times on all diesel-fueled off-road vehicles over 25 horsepower shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes and fleet operators must develop a written policy as required by Title 23, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations"). i. All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. j. Portable equipment shall be powered by electricity if available. If electricity is not available, propane or natural gas shall be used if feasible. Diesel engines shall only be used if electricity is not available and it is not feasible to use propane or natural gas. [**ENHANCED CONTROLS: All "Basic" controls listed above plus the following controls if the project involves**: • 114 or more single-family dwelling units; • 240 or more multi-family units; • Nonresidential uses that exceed the applicable screening size listed in the Bay Area Air Quality Management District's CEQA Guidelines; • Demolition permit; • Simultaneous occurrence of more than two construction phases (e.g., grading and building construction occurring simultaneously);		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
• Extensive site preparation (i.e., the construction site is four acres or more in size); or • Extensive soil transport (i.e., 10,000 or more cubic yards of soil import/export).] k. All exposed surfaces shall be watered at a frequency adequate to maintain minimum soil moisture of 12 percent. Moisture content can be verified by lab samples or moisture probe. l. All excavation, grading, and demolition activities shall be suspended when average wind speeds exceed 20 mph. m. Install sandbags or other erosion control measures to prevent silt runoff to public roadways. n. Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for one month or more). o. Designate a person or persons to monitor the dust control program and to order increased watering, as necessary, to prevent transport of dust offsite. Their duties shall include holidays and weekend periods when work may not be in progress. p. Install appropriate wind breaks (e.g., trees, fences) on the windward side(s) of actively disturbed areas of the construction site to minimize wind-blown dust. Wind breaks must have a maximum 50 percent air porosity. q. Vegetative ground cover (e.g., fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established. r. Activities such as excavation, grading, and other ground-disturbing construction activities shall be phased to minimize the amount of disturbed surface area at any one time. s. All trucks and equipment, including tires, shall be washed off prior to leaving the site. t. Site accesses to a distance of 100 feet from the paved road shall be treated with a 6 to 12 inch compacted layer of wood chips, mulch, or gravel. u. All equipment to be used on the construction site and subject to the requirements of Title 13, Section 2449, of the California Code of Regulations ("California Air Resources Board Off-Road Diesel Regulations") must meet emissions and performance requirements one year in advance of any fleet deadlines. Upon request by the City, the project applicant shall provide written documentation that fleet requirements have been met. v. Use low VOC (i.e., ROG) coatings beyond the local requirements (i.e., BAAQMD Regulation 8, Rule 3: Architectural Coatings). w. All construction equipment, diesel trucks, and generators shall be equipped with Best Available Control Technology for emission reductions of NOx and PM. x. Off-road heavy diesel engines shall meet the California Air Resources Board's most recent certification standard. y. Post a publicly-visible large on-site sign that includes the contact name and phone number for the project complaint manager responsible for responding to dust complaints and the telephone numbers of the City's Code Enforcement unit and the Bay Area Air Quality Management District. When contacted, the project complaint manager shall respond and take corrective action within 48 hours. When Required: During construction Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
[**The following condition applies to all projects that meet all of the following**		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
criteria:		
a. The project involves any of the following sensitive land uses:		
i. Residential uses (new dwelling units); or		
ii. New or expanded schools, daycare centers, parks, nursing homes, or medical facilities; and		
b. The project is located within 1,000' (or other distance as specified below) of one or more of the following sources of air pollution:		
i. Freeway;		
ii. Roadway with significant traffic (at least 10,000 vehicles/day);		
iii. Rail line (except BART) with over 30 trains per day;		
iv. Distribution center that accommodates more than 100 trucks per day, more than 40 trucks with operating Transportation Refrigeration Units (TRU) per day, or where the TRU unit operations exceed 300 hours per week;		
v. Major rail or truck yard (such as the Union Pacific rail yard adjacent to the Port of Oakland);		
vi. Ferry terminal;		
vii. Stationary pollutant source requiring a permit from BAAQMD (such as a diesel generator);		
viii. Within 0.5 miles of the Port of Oakland or Oakland Airport;		
ix. Within 300 feet of a gas station; or		
x. Within 300 feet of a dry cleaner with a machine using PERC (or within 500 feet of a dry cleaner with two or more machines using PERC); and		
c. The project exceeds the health risk screening criteria after a screening analysis is conducted in accordance with the Bay Area Air Quality Management (BAAQMD) CEQA Guidelines.]		
SCA-20 Exposure to Air Pollution (Toxic Air Contaminants)		
a. ***Health Risk Reduction Measures***		
Requirement: The project applicant shall incorporate appropriate measures into the project design in order to reduce the potential health risk due to exposure to toxic air contaminants. The project applicant shall choose one of the following methods:		
i. The project applicant shall retain a qualified air quality consultant to prepare a Health Risk Assessment (HRA) in accordance with California Air Resources Board (CARB) and Office of Environmental Health and Hazard Assessment requirements to determine the health risk of exposure of project residents/occupants/users to air pollutants. The HRA shall be submitted to the City for review and approval. If the HRA concludes that the health risk is at or below acceptable levels, then health risk reduction measures are not required. If the HRA concludes that the health risk exceeds acceptable levels, health risk reduction measures shall be identified to reduce the health risk to acceptable levels. Identified risk reduction measures shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other documentation submitted to the City.		
- or -		
ii. The project applicant shall incorporate the following health risk reduction measures into the project. These features shall be submitted to the City for review and approval and be included on the project drawings submitted for the construction-related permit or on other		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
documentation submitted to the City: • Installation of air filtration to reduce cancer risks and Particulate Matter (PM) exposure for residents and other sensitive populations in the project that are in close proximity to sources of air pollution. Air filter devices shall be rated MERV-13 [insert MERV-16 for projects located in the West Oakland Specific Plan area] or higher. As part of implementing this measure, an ongoing maintenance plan for the building's HVAC air filtration system shall be required. • Where appropriate, install passive electrostatic filtering systems, especially those with low air velocities (i.e., 1 mph). • Phasing of residential developments when proposed within 500 feet of freeways such that homes nearest the freeway are built last, if feasible. • The project shall be designed to locate sensitive receptors as far away as feasible from the source(s) of air pollution. Operable windows, balconies, and building air intakes shall be located as far away from these sources as feasible. If near a distribution center, residents shall be located as far away as feasible from a loading dock or where trucks concentrate to deliver goods. • Sensitive receptors shall be located on the upper floors of buildings, if feasible. • Planting trees and/or vegetation between sensitive receptors and pollution source, if feasible. Trees that are best suited to trapping PM shall be planted, including one or more of the following: Pine (Pinus nigra var. maritima), Cypress (X Cupressocyparis leylandii), Hybrid popular (Populus deltoids X trichocarpa), and Redwood (Sequoia sempervirens). • Sensitive receptors shall be located as far away from truck activity areas, such as loading docks and delivery areas, as feasible. • Existing and new diesel generators shall meet CARB's Tier 4 emission standards, if feasible. • Emissions from diesel trucks shall be reduced through implementing the following measures, if feasible: o Installing electrical hook-ups for diesel trucks at loading docks. o Requiring trucks to use Transportation Refrigeration Units (TRU) that meet Tier 4 emission standards. o Requiring truck-intensive projects to use advanced exhaust technology (e.g., hybrid) or alternative fuels. o Prohibiting trucks from idling for more than two minutes. o Establishing truck routes to avoid sensitive receptors in the project. A truck route program, along with truck calming, parking, and delivery restrictions, shall be implemented. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: Bureau of Building		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
b. ***Maintenance of Health Risk Reduction Measures*** Requirement: The project applicant shall maintain, repair, and/or replace installed health risk reduction measures, including but not limited to the HVAC system (if applicable), on an ongoing and as-needed basis. Prior to occupancy, the project applicant shall prepare and then distribute to the building manager/operator an operation and maintenance manual for the HVAC system and filter including the maintenance and replacement schedule for the filter. When Required: Ongoing Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
Biological Resources		
SCA-25 Bird Collision Reduction Measures Requirement: The project applicant shall submit a Bird Collision Reduction Plan for City review and approval to reduce potential bird collisions to the maximum feasible extent. The Plan shall include all of the following mandatory measures, as well as applicable and specific project Best Management Practice (BMP) strategies to reduce bird strike impacts to the maximum feasible extent. The project applicant shall implement the approved Plan. Mandatory measures include all of the following: i. For large buildings subject to federal aviation safety regulations, install minimum intensity white strobe lighting with three second flash instead of solid red or rotating lights. ii. Minimize the number of and co-locate rooftop-antennas and other rooftop structures. iii. Monopole structures or antennas shall not include guy wires. iv. Avoid the use of mirrors in landscape design. v. Avoid placement of bird-friendly attractants (i.e., landscaped areas, vegetated roofs, water features) near glass unless shielded by architectural features taller than the attractant that incorporate bird friendly treatments no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule), as explained below. vi. Apply bird-friendly glazing treatments to no less than 90 percent of all windows and glass between the ground and 60 feet above ground or to the height of existing adjacent landscape or the height of the proposed landscape. Examples of bird-friendly glazing treatments include the following: • Use opaque glass in window panes instead of reflective glass. • Uniformly cover the interior or exterior of clear glass surface with patterns (e.g., dots, stripes, decals, images, abstract patterns). Patterns can be etched, fritted, or on films and shall have a density of no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule). • Install paned glass with fenestration patterns with vertical and horizontal mullions no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule). • Install external screens over non-reflective glass (as close to the glass as possible) for birds to perceive windows as solid objects. • Install UV-pattern reflective glass, laminated glass with a patterned UV-reflective coating, or UV-absorbing and UV-reflecting film on the glass since most birds can see ultraviolet light, which is invisible to humans.		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
• Install decorative grilles, screens, netting, or louvers, with openings no more than two inches horizontally, four inches vertically, or both (the "two-by-four" rule). • Install awnings, overhangs, sunshades, or light shelves directly adjacent to clear glass which is recessed on all sides. • Install opaque window film or window film with a pattern/design which also adheres to the "two-by-four" rule for coverage. vii. Reduce light pollution. Examples include the following: • Extinguish night-time architectural illumination treatments during bird migration season (February 15 to May 15 and August 15 to November 30). • Install time switch control devices or occupancy sensors on non-emergency interior lights that can be programmed to turn off during non-work hours and between 11:00 p.m. and sunrise. • Reduce perimeter lighting whenever possible. • Install full cut-off, shielded, or directional lighting to minimize light spillage, glare, or light trespass. • Do not use beams of lights during the spring (February 15 to May 15) or fall (August 15 to November 30) migration. viii. Develop and implement a building operation and management manual that promotes bird safety. Example measures in the manual include the following: • Donation of discovered dead bird specimens to an authorized bird conservation organization or museums (e.g., UC Berkeley Museum of Vertebrate Zoology) to aid in species identification and to benefit scientific study, as per all federal, state and local laws. • Distribution of educational materials on bird-safe practices for the building occupants. Contact Golden Gate Audubon Society or American Bird Conservancy for materials. • Asking employees to turn off task lighting at their work stations and draw office blinds, shades, curtains, or other window coverings at end of work day. • Install interior blinds, shades, or other window coverings in windows above the ground floor visible from the exterior as part of the construction contract, lease agreement, or CC&Rs. • Schedule nightly maintenance during the day or to conclude before 11 p.m., if possible. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: Bureau of Building		
SCA-26 Tree Removal During Bird Breeding Season Requirement: To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its		

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sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest. When Required: Prior to removal of trees Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building		
SCA-26 Tree Removal During Bird Breeding Season Requirement: To the extent feasible, removal of any tree and/or other vegetation suitable for nesting of birds shall not occur during the bird breeding season of February 1 to August 15 (or during December 15 to August 15 for trees located in or near marsh, wetland, or aquatic habitats). If tree removal must occur during the bird breeding season, all trees to be removed shall be surveyed by a qualified biologist to verify the presence or absence of nesting raptors or other birds. Pre-removal surveys shall be conducted within 15 days prior to the start of work and shall be submitted to the City for review and approval. If the survey indicates the potential presence of nesting raptors or other birds, the biologist shall determine an appropriately sized buffer around the nest in which no work will be allowed until the young have successfully fledged. The size of the nest buffer will be determined by the biologist in consultation with the California Department of Fish and Wildlife, and will be based to a large extent on the nesting species and its sensitivity to disturbance. In general, buffer sizes of 200 feet for raptors and 50 feet for other birds should suffice to prevent disturbance to birds nesting in the urban environment, but these buffers may be increased or decreased, as appropriate, depending on the bird species and the level of disturbance anticipated near the nest. When Required: Prior to removal of trees Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building		
SCA-27 Tree Permit a. ***Tree Permit Required*** Requirement: Pursuant to the City's Tree Protection Ordinance (OMC chapter 12.36), the project applicant shall obtain a tree permit and abide by the conditions of that permit. When Required: Prior to approval of construction-related permit Initial Approval: Permit approval by Public Works Department, Tree Division; evidence of approval submitted to Bureau of Building Monitoring/Inspection: Bureau of Building b. ***Tree Protection During Construction*** Requirement: Adequate protection shall be provided during the construction period for any trees which are to remain standing, including the following, plus any recommendations of an arborist: i. Before the start of any clearing, excavation, construction, or other work on the site, every protected tree deemed to be potentially endangered by said site work shall be securely fenced off at a distance from the base of the tree to be determined by the project's consulting arborist. Such fences shall remain in place for duration of all such work. All trees to be removed shall be clearly marked. A scheme shall be established for the removal and disposal of logs, brush, earth and other debris which will avoid injury to any protected tree.		

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ii. Where proposed development or other site work is to encroach upon the protected perimeter of any protected tree, special measures shall be incorporated to allow the roots to breathe and obtain water and nutrients. Any excavation, cutting, filing, or compaction of the existing ground surface within the protected perimeter shall be minimized. No change in existing ground level shall occur within a distance to be determined by the project's consulting arborist from the base of any protected tree at any time. No burning or use of equipment with an open flame shall occur near or within the protected perimeter of any protected tree. iii. No storage or dumping of oil, gas, chemicals, or other substances that may be harmful to trees shall occur within the distance to be determined by the project's consulting arborist from the base of any protected trees, or any other location on the site from which such substances might enter the protected perimeter. No heavy construction equipment or construction materials shall be operated or stored within a distance from the base of any protected trees to be determined by the project's consulting arborist. Wires, ropes, or other devices shall not be attached to any protected tree, except as needed for support of the tree. No sign, other than a tag showing the botanical classification, shall be attached to any protected tree. iv. Periodically during construction, the leaves of protected trees shall be thoroughly sprayed with water to prevent buildup of dust and other pollution that would inhibit leaf transpiration. v. If any damage to a protected tree should occur during or as a result of work on the site, the project applicant shall immediately notify the Public Works Department and the project's consulting arborist shall make a recommendation to the City Tree Reviewer as to whether the damaged tree can be preserved. If, in the professional opinion of the Tree Reviewer, such tree cannot be preserved in a healthy state, the Tree Reviewer shall require replacement of any tree removed with another tree or trees on the same site deemed adequate by the Tree Reviewer to compensate for the loss of the tree that is removed. vi. All debris created as a result of any tree removal work shall be removed by the project applicant from the property within two weeks of debris creation, and such debris shall be properly disposed of by the project applicant in accordance with all applicable laws, ordinances, and regulations. When Required: During construction Initial Approval: Public Works Department, Tree Division Monitoring/Inspection: Bureau of Building		
c. **Tree Replacement Plantings** Requirement: Replacement plantings shall be required for tree removals for the purposes of erosion control, groundwater replenishment, visual screening, wildlife habitat, and preventing excessive loss of shade, in accordance with the following criteria: i. No tree replacement shall be required for the removal of nonnative species, for the removal of trees which is required for the benefit of remaining trees, or where insufficient planting area exists for a mature tree of the species being considered. ii. Replacement tree species shall consist of Sequoia sempervirens (Coast Redwood), Quercus agrifolia (Coast Live Oak), Arbutus menziesii (Madrone), Aesculus californica (California Buckeye), Umbellularia		

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californica (California Bay Laurel), or other tree species acceptable to the Tree Division. iii. Replacement trees shall be at least twenty-four (24) inch box size, unless a smaller size is recommended by the arborist, except that three fifteen (15) gallon size trees may be substituted for each twenty-four (24) inch box size tree where appropriate. iv. Minimum planting areas must be available on site as follows: • For Sequoia sempervirens, three hundred fifteen (315) square feet per tree; • For other species listed, seven hundred (700) square feet per tree. v. In the event that replacement trees are required but cannot be planted due to site constraints, an in lieu fee in accordance with the City's Master Fee Schedule may be substituted for required replacement plantings, with all such revenues applied toward tree planting in city parks, streets and medians. vi. The project applicant shall install the plantings and maintain the plantings until established. The Tree Reviewer of the Tree Division of the Public Works Department may require a landscape plan showing the replacement plantings and the method of irrigation. Any replacement plantings which fail to become established within one year of planting shall be replanted at the project applicant's expense. When Required: Prior to building permit final Initial Approval: Public Works Department, Tree Division Monitoring/Inspection: Bureau of Building		
Cultural Resources		
SCA-29 Archaeological and Paleontological Resources - Discovery During Construction Requirement: Pursuant to CEQA Guidelines section 15064.5(f), in the event that any historic or prehistoric subsurface cultural resources are discovered during ground disturbing activities, all work within 50 feet of the resources shall be halted and the project applicant shall notify the City and consult with a qualified archaeologist or paleontologist, as applicable, to assess the significance of the find. In the case of discovery of paleontological resources, the assessment shall be done in accordance with the Society of Vertebrate Paleontology standards. If any find is determined to be significant, appropriate avoidance measures recommended by the consultant and approved by the City must be followed unless avoidance is determined unnecessary or infeasible by the City. Feasibility of avoidance shall be determined with consideration of factors such as the nature of the find, project design, costs, and other considerations. If avoidance is unnecessary or infeasible, other appropriate measures (e.g., data recovery, excavation) shall be instituted. Work may proceed on other parts of the project site while measures for the cultural resources are implemented. In the event of data recovery of archaeological resources, the project applicant shall submit an Archaeological Research Design and Treatment Plan (ARDTP) prepared by a qualified archaeologist for review and approval by the City. The ARDTP is required to identify how the proposed data recovery program would preserve the significant information the archaeological resource is expected to contain. The ARDTP shall identify the scientific/historic research questions applicable to the expected resource, the data classes the resource is expected to possess, and how the expected data classes would address the applicable research questions. The ARDTP shall include the analysis and specify the curation and storage methods. Data recovery, in general, shall be limited to the portions of the archaeological resource that could be impacted by the proposed project.		

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Destructive data recovery methods shall not be applied to portions of the archaeological resources if nondestructive methods are practicable. Because the intent of the ARDTP is to save as much of the archaeological resource as possible, including moving the resource, if feasible, preparation and implementation of the ARDTP would reduce the potential adverse impact to less than significant. The project applicant shall implement the ARDTP at his/her expense. In the event of excavation of paleontological resources, the project applicant shall submit an excavation plan prepared by a qualified paleontologist to the City for review and approval. All significant cultural materials recovered shall be subject to scientific analysis, professional museum curation, and/or a report prepared by a qualified paleontologist, as appropriate, according to current professional standards and at the expense of the project applicant. When Required: During construction Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
SCA-31 Human Remains - Discovery During Construction Requirement: Pursuant to CEQA Guidelines section 15064.5(e)(1), in the event that human skeletal remains are uncovered at the project site during construction activities, all work shall immediately halt and the project applicant shall notify the City and the Alameda County Coroner. If the County Coroner determines that an investigation of the cause of death is required or that the remains are Native American, all work shall cease within 50 feet of the remains until appropriate arrangements are made. In the event that the remains are Native American, the City shall contact the California Native American Heritage Commission (NAHC), pursuant to subdivision (c) of section 7050.5 of the California Health and Safety Code. If the agencies determine that avoidance is not feasible, then an alternative plan shall be prepared with specific steps and timeframe required to resume construction activities. Monitoring, data recovery, determination of significance, and avoidance measures (if applicable) shall be completed expeditiously and at the expense of the project applicant. When Required: During construction Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
Geology, Soils and Geohazards		
SCA-33 Construction-Related Permit(s) Requirement: The project applicant shall obtain all required construction-related permits/approvals from the City. The project shall comply with all standards, requirements and conditions contained in construction-related codes, including but not limited to the Oakland Building Code and the Oakland Grading Regulations, to ensure structural integrity and safe construction. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building		

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SCA-34 Soils Report Requirement: The project applicant shall submit a soils report prepared by a registered geotechnical engineer for City review and approval. The soils report shall contain, at a minimum, field test results and observations regarding the nature, distribution and strength of existing soils, and recommendations for appropriate grading practices and project design. The project applicant shall implement the recommendations contained in the approved report during project design and construction. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building		
Greenhouse Gas Emissions		
SCA-38 Greenhouse Gas (GHG) Reduction Plan a. ***Greenhouse Gas (GHG) Reduction Plan Required*** Requirement: The project applicant shall retain a qualified air quality consultant to develop a Greenhouse Gas (GHG) Reduction Plan for City review and approval and shall implement the approved GHG Reduction Plan. The goal of the GHG Reduction Plan shall be to increase energy efficiency and reduce GHG emissions to below [INCLUDE THIS LANGUAGE IF SCENARIO A OR B:] at least one of the Bay Area Quality Management District's (BAAQMD's) CEQA Thresholds of Significance (1,100 metric tons of CO2e per year or 4.6 metric tons of CO2e per year per service population) [INCLUDE THIS LANGUAGE IF SCENARIO C:] the Bay Area Quality Management District's (BAAQMD's) CEQA Thresholds of Significance (10,000 metric tons of CO2e per year) [INCLUDE THIS LANGUAGE IF SCENARIO B] AND to reduce GHG emissions by 36 percent below the project's "adjusted" baseline GHG emissions (as explained below) to help achieve the City's goal of reducing GHG emissions. The GHG Reduction Plan shall include, at a minimum, (a) a detailed GHG emissions inventory for the project under a "business-as-usual" scenario with no consideration of project design features, or other energy efficiencies, (b) an "adjusted" baseline GHG emissions inventory for the project, taking into consideration energy efficiencies included as part of the project (including the City's Standard Conditions of Approval, proposed mitigation measures, project design features, and other City requirements), (c) a comprehensive set of quantified additional GHG reduction measures available to further reduce GHG emissions beyond the adjusted GHG emissions, and (d) requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented. If the project is to be constructed in phases, the GHG Reduction Plan shall provide GHG emission scenarios by phase. Potential GHG reduction measures to be considered include, but are not be limited to, measures recommended in BAAQMD's latest CEQA Air Quality Guidelines, the California Air Resources Board Scoping Plan (December 2008, as may be revised), the California Air Pollution Control Officers Association (CAPCOA) Quantifying Greenhouse Gas Mitigation Measures (August 2010, as may be revised), the California Attorney General's website, and Reference Guides on Leadership in Energy and Environmental Design (LEED) published by the U.S. Green Building Council. The types of allowable GHG reduction measures include the following (listed in order of City preference): (1) physical design features; (2) operational features; and (3) the payment of fees to fund GHG-reducing programs (i.e., the purchase of "carbon credits") as explained below.		

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The allowable locations of the GHG reduction measures include the following (listed in order of City preference): (1) the project site; (2) off-site within the City of Oakland; (3) off-site within the San Francisco Bay Area Air Basin; (4) off-site within the State of California; then (5) elsewhere in the United States. As with preferred locations for the implementation of all GHG reductions measures, the preference for carbon credit purchases include those that can be achieved as follows (listed in order of City preference): (1) within the City of Oakland; (2) within the San Francisco Bay Area Air Basin; (3) within the State of California; then (4) elsewhere in the United States. The cost of carbon credit purchases shall be based on current market value at the time purchased and shall be based on the project's operational emissions estimated in the GHG Reduction Plan or subsequent approved emissions inventory, which may result in emissions that are higher or lower than those estimated in the GHG Reduction Plan. For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be included on the drawings submitted for construction-related permits. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: N/A b. ***GHG Reduction Plan Implementation During Construction*** Requirement: The project applicant shall implement the GHG Reduction Plan during construction of the project. For physical GHG reduction measures to be incorporated into the design of the project, the measures shall be implemented during construction. For physical GHG reduction measures to be incorporated into off-site projects, the project applicant shall obtain all necessary permits/ approvals and the measures shall be included on drawings and submitted to the City Planning Director or his/her designee for review and approval. These off-site improvements shall be installed prior to completion of the subject project (or prior to completion of the project phase for phased projects). For GHG reduction measures involving the purchase of carbon credits, evidence of the payment/ purchase shall be submitted to the City for review and approval prior to completion of the project (or prior to completion of the project phase, for phased projects). When Required: During construction Initial Approval: Bureau of Planning Monitoring/Inspection: Bureau of Building c. ***GHG Reduction Plan Implementation After Construction*** Requirement: The project applicant shall implement the GHG Reduction Plan after construction of the project (or at the completion of the project phase for phased projects). For operational GHG reduction measures to be incorporated into the project or off-site projects, the measures shall be implemented on an indefinite and ongoing basis. The project applicant shall satisfy the following requirements for ongoing monitoring and reporting to demonstrate that the additional GHG reduction measures are being implemented. The GHG Reduction Plan requires regular periodic evaluation over the life of the project (generally estimated to be at least 40 years) to determine how the Plan is achieving required GHG emissions reductions over time, as well as the efficacy of the specific additional GHG reduction measures identified in the Plan.		

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Annual Report. Implementation of the GHG reduction measures and related requirements shall be ensured through compliance with Conditions of Approval adopted for the project. Generally, starting two years after the City issues the first Certificate of Occupancy for the project, the project applicant shall prepare each year of the useful life of the project an Annual GHG Emissions Reduction Report ("Annual Report"), for review and approval by the City Planning Director or his/her designee. The Annual Report shall be submitted to an independent reviewer of the City's choosing, to be paid for by the project applicant. The Annual Report shall summarize the project's implementation of GHG reduction measures over the preceding year, intended upcoming changes, compliance with the conditions of the Plan, and include a brief summary of the previous year's Annual Report results (starting the second year). The Annual Report shall include a comparison of annual project emissions to the baseline emissions reported in the GHG Plan. The GHG Reduction Plan shall be considered fully attained when project emissions are less than either applicable numeric BAAQMD CEQA Thresholds [INCLUDE THIS LANGUAGE IF SCENARIO B:] AND GHG emissions are 36 percent below the project's "adjusted" baseline GHG emissions, as confirmed by the City through an established monitoring program. Monitoring and reporting activities will continue at the City's discretion, as discussed below. **Corrective Procedure**. If the third Annual Report, or any report thereafter, indicates that, in spite of the implementation of the GHG Reduction Plan, the project is not achieving the GHG reduction goal, the project applicant shall prepare a report for City review and approval, which proposes additional or revised GHG measures to better achieve the GHG emissions reduction goals, including without limitation, a discussion on the feasibility and effectiveness of the menu of other additional measures ("Corrective GHG Action Plan"). The project applicant shall then implement the approved Corrective GHG Action Plan. If, one year after the Corrective GHG Action Plan is implemented, the required GHG emissions reduction target is still not being achieved, or if the project applicant fails to submit a report at the times described above, or if the reports do not meet City requirements outlined above, the City may, in addition to its other remedies, (a) assess the project applicant a financial penalty based upon actual percentage reduction in GHG emissions as compared to the percent reduction in GHG emissions established in the GHG Reduction Plan; or (b) refer the matter to the City Planning Commission for scheduling of a compliance hearing to determine whether the project's approvals should be revoked, altered or additional conditions of approval imposed. The penalty as described in (a) above shall be determined by the City Planning Director or his/her designee and be commensurate with the percentage GHG emissions reduction not achieved (compared to the applicable numeric significance thresholds) or required percentage reduction from the "adjusted" baseline. In determining whether a financial penalty or other remedy is appropriate, the City shall not impose a penalty if the project applicant has made a good faith effort to comply with the GHG Reduction Plan. The City would only have the ability to impose a monetary penalty after a reasonable cure period and in accordance with the enforcement process outlined in Planning Code Chapter 17.152. If a financial penalty is imposed, such penalty sums shall be used by the City solely toward the implementation of the GHG Reduction Plan.		

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Timeline Discretion and Summary. The City shall have the discretion to reasonably modify the timing of reporting, with reasonable notice and opportunity to comment by the applicant, to coincide with other related monitoring and reporting required for the project. When Required: Ongoing Initial Approval: Bureau of Planning Monitoring/Inspection: Bureau of Planning		
Hazards and Hazardous Materials		
SCA-39 Hazardous Materials Related to Construction Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential negative effects on groundwater, soils, and human health. These shall include, at a minimum, the following: a. Follow manufacture's recommendations for use, storage, and disposal of chemical products used in construction; b. Avoid overtopping construction equipment fuel gas tanks; c. During routine maintenance of construction equipment, properly contain and remove grease and oils; d. Properly dispose of discarded containers of fuels and other chemicals; e. Implement lead-safe work practices and comply with all local, regional, state, and federal requirements concerning lead (for more information refer to the Alameda County Lead Poisoning Prevention Program); and f. If soil, groundwater, or other environmental medium with suspected contamination is encountered unexpectedly during construction activities (e.g., identified by odor or visual staining, or if any underground storage tanks, abandoned drums or other hazardous materials or wastes are encountered), the project applicant shall cease work in the vicinity of the suspect material, the area shall be secured as necessary, and the applicant shall take all appropriate measures to protect human health and the environment. Appropriate measures shall include notifying the City and applicable regulatory agency(ies) and implementation of the actions described in the City's Standard Conditions of Approval, as necessary, to identify the nature and extent of contamination. Work shall not resume in the area(s) affected until the measures have been implemented under the oversight of the City or regulatory agency, as appropriate. When Required: During construction Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
SCA-40 Site Contamination a. ***Environmental Site Assessment Required*** Requirement: The project applicant shall submit a Phase I Environmental Site Assessment report, and Phase II Environmental Site Assessment report if warranted by the Phase I report, for the project site for review and approval by the City. The report(s) shall be prepared by a qualified environmental assessment professional and include recommendations for remedial action, as appropriate, for hazardous materials. The project applicant shall implement the approved recommendations and submit to the City evidence of approval for any proposed remedial action and required clearances by the applicable local, state, or federal regulatory agency. When Required: Prior to approval of construction-related permit Initial Approval: Oakland Fire Department Monitoring/Inspection: Oakland Fire Department		

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b. ***Health and Safety Plan Required*** Requirement: The project applicant shall submit a Health and Safety Plan for the review and approval by the City in order to protect project construction workers from risks associated with hazardous materials. The project applicant shall implement the approved Plan. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building c. ***Best Management Practices (BMPs) Required for Contaminated Sites*** Requirement: The project applicant shall ensure that Best Management Practices (BMPs) are implemented by the contractor during construction to minimize potential soil and groundwater hazards. These shall include the following: i. Soil generated by construction activities shall be stockpiled on-site in a secure and safe manner. All contaminated soils determined to be hazardous or non-hazardous waste must be adequately profiled (sampled) prior to acceptable reuse or disposal at an appropriate off-site facility. Specific sampling and handling and transport procedures for reuse or disposal shall be in accordance with applicable local, state, and federal requirements. ii. Groundwater pumped from the subsurface shall be contained on-site in a secure and safe manner, prior to treatment and disposal, to ensure environmental and health issues are resolved pursuant to applicable laws and policies. Engineering controls shall be utilized, which include impermeable barriers to prohibit groundwater and vapor intrusion into the building. When Required: During construction Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
SCA-41 Hazardous Materials Business Plan Requirement: The project applicant shall submit a Hazardous Materials Business Plan for review and approval by the City, and shall implement the approved Plan. The approved Plan shall be kept on file with the City and the project applicant shall update the Plan as applicable. The purpose of the Hazardous Materials Business Plan is to ensure that employees are adequately trained to handle hazardous materials and provides information to the Fire Department should emergency response be required. Hazardous materials shall be handled in accordance with all applicable local, state, and federal requirements. The Hazardous Materials Business Plan shall include the following: a. The types of hazardous materials or chemicals stored and/or used on-site, such as petroleum fuel products, lubricants, solvents, and cleaning fluids. b. The location of such hazardous materials. c. An emergency response plan including employee training information. d. A plan that describes the manner in which these materials are handled, transported, and disposed. When Required: Prior to building permit final Initial Approval: Oakland Fire Department Monitoring/Inspection: Oakland Fire Department		

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Hydrology and Water Quality		
SCA-50 NPDES C.3 Stormwater Requirements for Regulated Projects a. ***Post-Construction Stormwater Management Plan Required*** Requirement: The project applicant shall comply with the requirements of Provision C.3 of the Municipal Regional Stormwater Permit issued under the National Pollutant Discharge Elimination System (NPDES). The project applicant shall submit a Post-Construction Stormwater Management Plan to the City for review and approval with the project drawings submitted for site improvements, and shall implement the approved Plan during construction. The Post-Construction Stormwater Management Plan shall include and identify the following: i. Location and size of new and replaced impervious surface; ii. Directional surface flow of stormwater runoff; iii. Location of proposed on-site storm drain lines; iv. Site design measures to reduce the amount of impervious surface area; v. Source control measures to limit stormwater pollution; vi. Stormwater treatment measures to remove pollutants from stormwater runoff, including the method used to hydraulically size the treatment measures; and vii. Hydromodification management measures, if required by Provision C.3, so that post-project stormwater runoff flow and duration match pre-project runoff. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning; Bureau of Building Monitoring/Inspection: Bureau of Building b. ***Maintenance Agreement Required*** Requirement: The project applicant shall enter into a maintenance agreement with the City, based on the Standard City of Oakland Stormwater Treatment Measures Maintenance Agreement, in accordance with Provision C.3, which provides, in part, for the following: i. The project applicant accepting responsibility for the adequate installation/construction, operation, maintenance, inspection, and reporting of any on-site stormwater treatment measures being incorporated into the project until the responsibility is legally transferred to another entity; and ii. Legal access to the on-site stormwater treatment measures for representatives of the City, the local vector control district, and staff of the Regional Water Quality Control Board, San Francisco Region, for the purpose of verifying the implementation, operation, and maintenance of the on-site stormwater treatment measures and to take corrective action if necessary. The maintenance agreement shall be recorded at the County Recorder's Office at the applicant's expense. When Required: Prior to building permit final Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building		

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[The following condition applies to all projects involving either of the following: a. **Projects that create or replace at least 2,500 square feet, but less than 10,000 square feet, of new or existing impervious, except projects considered Regulated Projects under the NPDES C.3 requirements (see other condition for NPDES C.3 Regulated Projects); or** b. **Individual single-family home projects that create or replace at least 2,500 square feet of new or existing impervious.]** **SCA-54 Creek Protection Plan** a. ***Creek Protection Plan Required*** Requirement: The project applicant shall submit a Creek Protection Plan for review and approval by the City. The Plan shall be included with the set of project drawings submitted to the City for site improvements and shall incorporate the contents required under section 13.16.150 of the Oakland Municipal Code including Best Management Practices ("BMPs") during construction and after construction to protect the creek. Required BMPs are identified below in sections (b), (c), and (d). When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: N/A b. ***Construction BMPs*** Requirement: The Creek Protection Plan shall incorporate all applicable erosion, sedimentation, debris, and pollution control BMPs to protect the creek during construction. The measures shall include, but are not limited to, the following: i. On sloped properties, the downhill end of the construction area must be protected with silt fencing (such as sandbags, filter fabric, silt curtains, etc.) and hay bales oriented parallel to the contours of the slope (at a constant elevation) to prevent erosion into the creek. ii. The project applicant shall implement mechanical and vegetative measures to reduce erosion and sedimentation, including appropriate seasonal maintenance. One hundred (100) percent degradable erosion control fabric shall be installed on all graded slopes to protect and stabilize the slopes during construction and before permanent vegetation gets established. All graded areas shall be temporarily protected from erosion by seeding with fast growing annual species. All bare slopes must be covered with staked tarps when rain is occurring or is expected. iii. Minimize the removal of natural vegetation or ground cover from the site in order to minimize the potential for erosion and sedimentation problems. Maximize the replanting of the area with native vegetation as soon as possible. iv. All work in or near creek channels must be performed with hand tools and by a minimum number of people. Immediately upon completion of this work, soil must be repacked and native vegetation planted. v. Install filter materials (such as sandbags, filter fabric, etc.) acceptable to the City at the storm drain inlets nearest to the project site prior to the start of the wet weather season (October 15); site dewatering activities; street washing activities; saw cutting asphalt or concrete; and in order to retain any debris flowing into the City storm drain system. Filter materials shall be maintained and/or replaced as necessary to ensure effectiveness and prevent street flooding.		

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vi. Ensure that concrete/granite supply trucks or concrete/plaster finishing operations do not discharge wash water into the creek, street gutters, or storm drains. vii. Direct and locate tool and equipment cleaning so that wash water does not discharge into the creek. viii. Create a contained and covered area on the site for storage of bags of cement, paints, flammables, oils, fertilizers, pesticides, or any other materials used on the project site that have the potential for being discharged to the creek or storm drain system by the wind or in the event of a material spill. No hazardous waste material shall be stored on site. ix. Gather all construction debris on a regular basis and place it in a dumpster or other container which is emptied or removed at least on a weekly basis. When appropriate, use tarps on the ground to collect fallen debris or splatters that could contribute to stormwater pollution. x. Remove all dirt, gravel, refuse, and green waste from the sidewalk, street pavement, and storm drain system adjoining the project site. During wet weather, avoid driving vehicles off paved areas and other outdoor work. xi. Broom sweep the street pavement adjoining the project site on a daily basis. Caked-on mud or dirt shall be scraped from these areas before sweeping. At the end of each workday, the entire site must be cleaned and secured against potential erosion, dumping, or discharge to the creek, street, gutter, or storm drains. xii. All erosion and sedimentation control measures implemented during construction activities, as well as construction site and materials management shall be in strict accordance with the control standards listed in the latest edition of the Erosion and Sediment Control Field Manual published by the Regional Water Quality Control Board (RWQCB). xiii. Temporary fencing is required for sites without existing fencing between the creek and the construction site and shall be placed along the side adjacent to construction (or both sides of the creek if applicable) at the maximum practical distance from the creek centerline. This area shall not be disturbed during construction without prior approval of the City. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: N/A		
c. ***Post-Construction BMPs*** Requirement: The project shall not result in a substantial increase in stormwater runoff volume or velocity to the creek or storm drains. The Creek Protection Plan shall include site design measures to reduce the amount of impervious surface to maximum extent practicable. New drain outfalls shall include energy dissipation to slow the velocity of the water at the point of outflow to maximize infiltration and minimize erosion. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: N/A		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
d. ***Creek Landscaping*** Requirement: The project applicant shall include final landscaping details for the site on the Creek Protection Plan, or on a Landscape Plan, for review and approval by the City. Landscaping information shall include a planting schedule, detailing plant types and locations, and a system to ensure adequate irrigation of plantings for at least one growing season. Plant and maintain only drought-tolerant plants on the site where appropriate as well as native and riparian plants in and adjacent to riparian corridors. Along the riparian corridor, native plants shall not be disturbed to the maximum extent feasible. Any areas disturbed along the riparian corridor shall be replanted with mature native riparian vegetation and be maintained to ensure survival. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: N/A e. ***Creek Protection Plan Implementation*** Requirement: The project applicant shall implement the approved Creek Protection Plan during and after construction. During construction, all erosion, sedimentation, debris, and pollution control measures shall be monitored regularly by the project applicant. The City may require that a qualified consultant (paid for by the project applicant) inspect the control measures and submit a written report of the adequacy of the control measures to the City. If measures are deemed inadequate, the project applicant shall develop and implement additional and more effective measures immediately. When Required: During construction; ongoing Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
Noise		
SCA-58 Construction Days/Hours Requirement: The project applicant shall comply with the following restrictions concerning construction days and hours: a. Construction activities are limited to between 7:00 a.m. and 7:00 p.m. Monday through Friday, except that pier drilling and/or other extreme noise generating activities greater than 90 dBA shall be limited to between 8:00 a.m. and 4:00 p.m. b. Construction activities are limited to between 9:00 a.m. and 5:00 p.m. on Saturday. In residential zones and within 300 feet of a residential zone, construction activities are allowed from 9:00 a.m. to 5:00 p.m. only within the interior of the building with the doors and windows closed. No pier drilling or other extreme noise generating activities greater than 90 dBA are allowed on Saturday. c. No construction is allowed on Sunday or federal holidays. Construction activities include, but are not limited to, truck idling, moving equipment (including trucks, elevators, etc.) or materials, deliveries, and construction meetings held on-site in a non-enclosed area. Any construction activity proposed outside of the above days and hours for special activities (such as concrete pouring which may require more continuous amounts of time) shall be evaluated on a case-by-case basis by the City, with criteria including the urgency/emergency nature of the work, the proximity of residential or other sensitive uses, and a consideration of nearby residents'/ occupants' preferences. The project applicant shall notify property owners and		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
occupants located within 300 feet at least 14 calendar days prior to construction activity proposed outside of the above days/hours. When submitting a request to the City to allow construction activity outside of the above days/hours, the project applicant shall submit information concerning the type and duration of proposed construction activity and the draft public notice for City review and approval prior to distribution of the public notice. When Required: During construction Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
SCA 59 Construction Noise Requirement: The project applicant shall implement noise reduction measures to reduce noise impacts due to construction. Noise reduction measures include, but are not limited to, the following: a. Equipment and trucks used for project construction shall utilize the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds) wherever feasible. b. Except as provided herein, impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electrically powered to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used, if such jackets are commercially available, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever such procedures are available and consistent with construction procedures. c. Applicant shall use temporary power poles instead of generators where feasible. d. Stationary noise sources shall be located as far from adjacent properties as possible, and they shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, or use other measures as determined by the City to provide equivalent noise reduction. e. The noisiest phases of construction shall be limited to less than 10 days at a time. Exceptions may be allowed if the City determines an extension is necessary and all available noise reduction controls are implemented. When Required: During construction Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
SCA-60 Extreme Construction Noise a. ***Construction Noise Management Plan Required*** Requirement: Prior to any extreme noise generating construction activities (e.g., pier drilling, pile driving and other activities generating greater than 90dBA), the project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction impacts associated with extreme noise generating activities. The project applicant shall implement the approved Plan during construction. Potential attenuation measures include, but are not limited to, the following:		

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i. Erect temporary plywood noise barriers around the construction site, particularly along on sites adjacent to residential buildings; ii. Implement "quiet" pile driving technology (such as pre-drilling of piles, the use of more than one pile driver to shorten the total pile driving duration), where feasible, in consideration of geotechnical and structural requirements and conditions; iii. Utilize noise control blankets on the building structure as the building is erected to reduce noise emission from the site; iv. Evaluate the feasibility of noise control at the receivers by temporarily improving the noise reduction capability of adjacent buildings by the use of sound blankets for example and implement such measure if such measures are feasible and would noticeably reduce noise impacts; and v. Monitor the effectiveness of noise attenuation measures by taking noise measurements. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building b. ***Public Notification Required*** Requirement: The project applicant shall notify property owners and occupants located within 300 feet of the construction activities at least 14 calendar days prior to commencing extreme noise generating activities. Prior to providing the notice, the project applicant shall submit to the City for review and approval the proposed type and duration of extreme noise generating activities and the proposed public notice. The public notice shall provide the estimated start and end dates of the extreme noise generating activities and describe noise attenuation measures to be implemented. When Required: During construction Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building		
SCA-61 Project-Specific Construction Noise Reduction Measures Requirement: The project applicant shall submit a Construction Noise Management Plan prepared by a qualified acoustical consultant for City review and approval that contains a set of site-specific noise attenuation measures to further reduce construction noise impacts. The project applicant shall implement the approved Plan during construction. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building		
SCA-62 Construction Noise Complaints Requirement: The project applicant shall submit to the City for review and approval a set of procedures for responding to and tracking complaints received pertaining to construction noise, and shall implement the procedures during construction. At a minimum, the procedures shall include: a. Designation of an on-site construction complaint and enforcement manager for the project; b. A large on-site sign near the public right-of-way containing permitted construction days/hours, complaint procedures, and phone numbers for the project complaint manager and City Code Enforcement unit; c. Protocols for receiving, responding to, and tracking received complaints; and		

Standard Conditions of Approval/Mitigation Measures	Mitigation Implementation/ Monitoring	
	Schedule	**Responsibility**
d. Maintenance of a complaint log that records received complaints and how complaints were addressed, which shall be submitted to the City for review upon the City's request. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building		
SCA-63 Exposure to Community Noise Requirement: The project applicant shall submit a Noise Reduction Plan prepared by a qualified acoustical engineer for City review and approval that contains noise reduction measures (e.g., sound-rated window, wall, and door assemblies) to achieve an acceptable interior noise level in accordance with the land use compatibility guidelines of the Noise Element of the Oakland General Plan. The applicant shall implement the approved Plan during construction. To the maximum extent practicable, interior noise levels shall not exceed the following: a. 45 dBA: Residential activities, civic activities, hotels b. 50 dBA: Administrative offices; group assembly activities c. 55 dBA: Commercial activities d. 65 dBA: Industrial activities When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: Bureau of Building		
SCA-64 Operational Noise Requirement: Noise levels from the project site after completion of the project (i.e., during project operation) shall comply with the performance standards of chapter 17.120 of the Oakland Planning Code and chapter 8.18 of the Oakland Municipal Code. If noise levels exceed these standards, the activity causing the noise shall be abated until appropriate noise reduction measures have been installed and compliance verified by the City. When Required: Ongoing Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
Transportation/Traffic		
SCA-68 Construction Activity in the Public Right-of-Way a. ***Obstruction Permit Required*** Requirement: The project applicant shall obtain an obstruction permit from the City prior to placing any temporary construction-related obstruction in the public right-of-way, including City streets and sidewalks. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building b. ***Traffic Control Plan Required*** Requirement: In the event of obstructions to vehicle or bicycle travel lanes, the project applicant shall submit a Traffic Control Plan to the City for review and approval prior to obtaining an obstruction permit. The project applicant shall submit evidence of City approval of the Traffic Control Plan with the application for an obstruction permit. The Traffic Control Plan shall contain a set of comprehensive traffic control measures for auto, transit, bicycle, and pedestrian detours, including detour signs if required, lane closure procedures, signs, cones for drivers, and designated construction access routes. The project applicant shall		

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	Schedule	Responsibility
implement the approved Plan during construction. When Required: Prior to approval of construction-related permit Initial Approval: Public Works Department, Transportation Services Division Monitoring/Inspection: Bureau of Building c. ***Repair of City Streets*** Requirement: The project applicant shall repair any damage to the public right-of way, including streets and sidewalks caused by project construction at his/her expense within one week of the occurrence of the damage (or excessive wear), unless further damage/excessive wear may continue; in such case, repair shall occur prior to approval of the final inspection of the construction-related permit. All damage that is a threat to public health or safety shall be repaired immediately. When Required: Prior to building permit final Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
SCA-69 Bicycle Parking Requirement: The project applicant shall comply with the City of Oakland Bicycle Parking Requirements (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall demonstrate compliance with the requirements. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building		
SCA-70 Transportation Improvements Requirement: The project applicant shall implement the recommended on- and off-site transportation-related improvements contained within the Transportation Impact Study for the project (e.g., signal timing adjustments, restriping, signalization, traffic control devices, roadway reconfigurations, and pedestrian and bicyclist amenities). The project applicant is responsible for funding and installing the improvements, and shall obtain all necessary permits and approvals from the City and/or other applicable regulatory agencies such as, but not limited to, Caltrans (for improvements related to Caltrans facilities) and the California Public Utilities Commission (for improvements related to railroad crossings), prior to installing the improvements. To implement this measure for intersection modifications, the project applicant shall submit Plans, Specifications, and Estimates (PS&E) to the City for review and approval. All elements shall be designed to applicable City standards in effect at the time of construction and all new or upgraded signals shall include these enhancements as required by the City. All other facilities supporting vehicle travel and alternative modes through the intersection shall be brought up to both City standards and ADA standards (according to Federal and State Access Board guidelines) at the time of construction. Current City Standards call for, among other items, the elements listed below: a. 2070L Type Controller with cabinet accessory b. GPS communication (clock) c. Accessible pedestrian crosswalks according to Federal and State Access Board guidelines with signals (audible and tactile) d. Countdown pedestrian head module switch out e. City Standard ADA wheelchair ramps f. Video detection on existing (or new, if required)		

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g. Mast arm poles, full activation (where applicable) h. Polara Push buttons (full activation) i. Bicycle detection (full activation) j. Pull boxes k. Signal interconnect and communication with trenching (where applicable), or through existing conduit (where applicable), 600 feet maximum l. Conduit replacement contingency m. Fiber switch n. PTZ camera (where applicable) o. Transit Signal Priority (TSP) equipment consistent with other signals along corridor p. Signal timing plans for the signals in the coordination group When Required: Prior to building permit final or as otherwise specified Initial Approval: Bureau of Building; Public Works Department, Transportation Services Division Monitoring/Inspection: Bureau of Building		
SCA-71 Transportation and Parking Demand Management a. ***Transportation and Parking Demand Management (TDM) Plan Required*** Requirement: The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City. i. The goals of the TDM Plan shall be the following: • Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable, consistent with the potential traffic and parking impacts of the project. • Achieve the following project vehicle trip reductions (VTR): • Projects generating 50-99 net new a.m. or p.m. peak hour vehicle trips: 10 percent VTR • Projects generating 100 or more net new a.m. or p.m. peak hour vehicle trips: 20 percent VTR • Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate. • Enhance the City's transportation system, consistent with City policies and programs. ii. TDM strategies to consider include, but are not limited to, the following: • Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement. • Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping. • Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project. • Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan.		

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• Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements. • Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency). • Provision of a transit subsidy to employees or residents, determined by the project applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes. • Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle service; and 3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3). • Guaranteed ride home program for employees, either through 511.org or through separate program. • Pre-tax commuter benefits (commuter checks) for employees. • Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants. • On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools. • Distribution of information concerning alternative transportation options. • Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties. • Parking management strategies including attendant/valet parking and shared parking spaces. • Requiring tenants to provide opportunities and the ability to work off-site. • Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week). • Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours. The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: N/A		

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b. ***TDM Implementation – Physical Improvements*** Requirement: For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project. When Required: Prior to building permit final Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building c. ***TDM Implementation – Operational Strategies*** Requirement: For projects that generate 100 or more net new a.m. or p.m. peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved. When Required: Ongoing Initial Approval: Bureau of Planning Monitoring/Inspection: Bureau of Planning		
Utilities and Service Systems		
SCA-74 Construction and Demolition Waste Reduction and Recycling Requirement: The project applicant shall comply with the City of Oakland Construction and Demolition Waste Reduction and Recycling Ordinance (chapter 15.34 of the Oakland Municipal Code) by submitting a Construction and Demolition Waste Reduction and Recycling Plan (WRRP) for City review and approval, and shall implement the approved WRRP. Projects subject to these requirements include all new construction, renovations/alterations/modifications with construction values of $50,000 or more (except R-3 type construction), and all demolition (including soft demolition) except demolition of type R-3 construction. The WRRP must specify the methods by which the project will divert construction and demolition debris waste from landfill disposal in accordance with current City requirements. The WRRP may be submitted electronically at www.greenhalosystems.com or manually at the City's Green Building Resource Center. Current standards, FAQs, and forms are available on the City's website and in the Green Building Resource Center. When Required: Prior to approval of construction-related permit Initial Approval: Public Works Department, Environmental Services Division Monitoring/Inspection: Public Works Department, Environmental Services Division		
SCA-75 Underground Utilities Requirement: The project applicant shall place underground all new utilities serving the project and under the control of the project applicant and the City, including all new gas, electric, cable, and telephone facilities, fire alarm conduits, street light wiring, and other wiring, conduits, and similar facilities. The new		

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facilities shall be placed underground along the project's street frontage and from the project structures to the point of service. Utilities under the control of other agencies, such as PG&E, shall be placed underground if feasible. All utilities shall be installed in accordance with standard specifications of the serving utilities. When Required: During construction Initial Approval: N/A Monitoring/Inspection: Bureau of Building		
SCA-76 Recycling Collection and Storage Space Requirement: The project applicant shall comply with the City of Oakland Recycling Space Allocation Ordinance (chapter 17.118 of the Oakland Planning Code). The project drawings submitted for construction-related permits shall contain recycling collection and storage areas in compliance with the Ordinance. For residential projects, at least two cubic feet of storage and collection space per residential unit is required, with a minimum of ten cubic feet. For nonresidential projects, at least two cubic feet of storage and collection space per 1,000 square feet of building floor area is required, with a minimum of ten cubic feet. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Planning Monitoring/Inspection: Bureau of Building		
SCA-77 Green Building Requirements a. ***Compliance with Green Building Requirements During Plan-Check*** Requirement: The project applicant shall comply with the requirements of the California Green Building Standards (CALGreen) mandatory measures and the applicable requirements of the City of Oakland Green Building Ordinance (chapter 18.02 of the Oakland Municipal Code). i. The following information shall be submitted to the City for review and approval with the application for a building permit: • Documentation showing compliance with Title 24 of the current version of the California Building Energy Efficiency Standards. • Completed copy of the final green building checklist approved during the review of the Planning and Zoning permit. • Copy of the Unreasonable Hardship Exemption, if granted, during the review of the Planning and Zoning permit. • Permit plans that show, in general notes, detailed design drawings, and specifications as necessary, compliance with the items listed in subsection (ii) below. • Copy of the signed statement by the Green Building Certifier approved during the review of the Planning and Zoning permit that the project complied with the requirements of the Green Building Ordinance. • Signed statement by the Green Building Certifier that the project still complies with the requirements of the Green Building Ordinance, unless an Unreasonable Hardship Exemption was granted during the review of the Planning and Zoning permit. • Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. ii. The set of plans in subsection (i) shall demonstrate compliance with the following: • CALGreen mandatory measures. • All pre-requisites per the green building checklist approved during the review of the Planning and Zoning permit, or, if applicable, all the green building measures approved as part of the Unreasonable		

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Hardship Exemption granted during the review of the Planning and Zoning permit. • **[INSERT: Green building point level/certification requirement: (See Green Building Summary Table; for New Construction of Residential or Non-residential projects that remove a Historic Resource (as defined by the Green Building Ordinance) the point level certification requirement is 53 points for residential and LEED Gold for non-residential)]** per the appropriate checklist approved during the Planning entitlement process. • All green building points identified on the checklist approved during review of the Planning and Zoning permit, unless a Request for Revision Plan-check application is submitted and approved by the Bureau of Planning that shows the previously approved points that will be eliminated or substituted. • The required green building point minimums in the appropriate credit categories. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Building Monitoring/Inspection: N/A b. ***Compliance with Green Building Requirements During Construction*** Requirement: The project applicant shall comply with the applicable requirements of CALGreen and the Oakland Green Building Ordinance during construction of the project. The following information shall be submitted to the City for review and approval: i. Completed copies of the green building checklists approved during the review of the Planning and Zoning permit and during the review of the building permit. ii. Signed statement(s) by the Green Building Certifier during all relevant phases of construction that the project complies with the requirements of the Green Building Ordinance. iii. Other documentation as deemed necessary by the City to demonstrate compliance with the Green Building Ordinance. When Required: During construction Initial Approval: N/A Monitoring/Inspection: Bureau of Building c. ***Compliance with Green Building Requirements After Construction*** Requirement: Within sixty (60) days of the final inspection of the building permit for the project, the Green Building Certifier shall submit the appropriate documentation to **[INSERT: Build It Green or Green Building Certification Institute]** and attain the minimum required certification/point level. Within one year of the final inspection of the building permit for the project, the applicant shall submit to the Bureau of Planning the Certificate from the organization listed above demonstrating certification and compliance with the minimum point/certification level noted above. When Required: After project completion as specified Initial Approval: Bureau of Planning Monitoring/Inspection: Bureau of Building		

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SCA-79 Sanitary Sewer System Requirement: The project applicant shall prepare and submit a Sanitary Sewer Impact Analysis to the City for review and approval in accordance with the City of Oakland Sanitary Sewer Design Guidelines. The Impact Analysis shall include an estimate of pre-project and post-project wastewater flow from the project site. In the event that the Impact Analysis indicates that the net increase in project wastewater flow exceeds City-projected increases in wastewater flow in the sanitary sewer system, the project applicant shall pay the Sanitary Sewer Impact Fee in accordance with the City's Master Fee Schedule for funding improvements to the sanitary sewer system. When Required: Prior to approval of construction-related permit Initial Approval: Public Works Department, Department of Engineering and Construction Monitoring/Inspection: N/A		
SCA-80 Storm Drain System Requirement: The project storm drainage system shall be designed in accordance with the City of Oakland's Storm Drainage Design Guidelines. To the maximum extent practicable, peak stormwater runoff from the project site shall be reduced by at least 25 percent compared to the pre-project condition. When Required: Prior to approval of construction-related permit Initial Approval: Bureau of Building Monitoring/Inspection: Bureau of Building		

ATTACHMENT B
Criteria for Use of Addendum, Per CEQA Guidelines Sections 15162, 15164 and 15168

Section 15164(a) of the California Environmental Quality Act (CEQA) Guidelines states that "a lead agency or responsible agency shall prepare an addendum to a previously certified EIR [Environmental Impact Report] if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred." Section 15164(e) states that "a brief explanation of the decision not to prepare a subsequent EIR pursuant to Section 15162 should be included in an addendum to an EIR."

As discussed in detail in Section III of this document, this CEQA Analysis document is considered an Addendum to the 2014 LMSAP EIR for the assessment of the project under Sections 15162 and 15164. The 1998 LUTE EIR, and for the housing components of the proposed project, the 2010 Housing Element EIR and 2014 Addendum are Program EIRs considered for this CEQA assessment of the project, pursuant to Section 15162 and 15164. The 2011 Redevelopment Plan EIR analysis is a Program EIR specifically considered for this assessment, pursuant to CEQA Guidelines Section 15168 and Section 15180.

A. PROJECT MODIFICATIONS

In November 2014, the Oakland Planning Commission certified the LMSAP EIR. The LMSAP EIR analyzed the LMSAP "development program," which was the assumed future development for the Plan with up to 4,900 new housing units, 4,100 new jobs, 404,000 square feet of retail use, and l.3 million square feet of office uses. The LMSAP EIR also presented detailed potential development assumptions for certain "Opportunity Sites," which are properties considered "most likely to redevelop." The project site is located on a vacant parcel at the southwest corner of East 12th Street and 2nd Avenue and is identified as Opportunity Site #44 in the LMSAP development program.

B. CONDITIONS FOR ADDENDUM

None of the following conditions for preparation of a subsequent EIR per Sections 15162(a) and 15168 apply to the proposed project:

(1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

(2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

C. PROJECT CONSISTENCY WITH SECTIONS 15162 AND 15168 OF THE CEQA GUIDELINES

Since certification of the 2014 LMSAP EIR, no changes have occurred in the circumstances under which the proposed project would be implemented that would change the severity of the proposed project's physical impacts, as explained in the CEQA Checklist in Section VI of this document. No new information has emerged that would materially change the analyses or conclusions set forth in the LMSAP EIR.

Furthermore, as demonstrated in the CEQA Checklist, the proposed project would not result in any new significant environmental impacts, result in any substantial increases in the significance of previously identified effects, or necessitate implementation of additional or considerably different mitigation measures than those identified in the 2014 LMSAP EIR, nor render any mitigation measures or alternatives found not to be feasible, feasible. The effects of the proposed project would be substantially the same as those reported in the 2014 LMSAP EIR.

The analysis presented in this CEQA Checklist, combined with the prior 2014 LMSAP EIR analysis, demonstrates that the proposed project would not result in significant impacts that were not previously identified in the LMSAP EIR. The proposed project would not result in a substantial increase in the significance of impacts, nor would the proposed project contribute considerably to cumulative effects that were not already accounted for in the certified 2014 LMSAP EIR. Overall, the proposed project's impacts are similar to those identified and discussed in the 2014 LMSAP EIR, as described in the CEQA Checklist, and the findings reached in the LMSAP EIR are applicable.

ATTACHMENT C
Project Consistency with Community Plan or Zoning, Per CEQA Guidelines Section 15183

Section 15183(a) of the California Environmental Quality Act (CEQA) Guidelines states that "…projects which are consistent with the development density established by the existing zoning, community plan, or general plan policies for which an Environmental Impact Report (EIR) was certified shall not require additional environmental review, except as may be necessary to examine whether there are project-specific significant effects which are peculiar to the project or its site." As discussed in detail in Section III of this document, the analysis in the 2011 Redevelopment Plan EIR, the 1998 LUTE EIR and, for only the residential components of the proposed project, the 2010 Housing Element EIR and its 2014 Addendum, are considered the qualified planning level CEQA documents for exempting the project from further CEQA analysis, pursuant to CEQA Guidelines Section 15183, as discussed below.

A. PROPOSED PROJECT

The proposed project would be located in developed, urbanized Downtown Oakland. The proposed project would develop the vacant site with two distinct buildings with a continuous 4-level podium base, including an 8-story mid-rise residential building and a 26-story residential apartment tower. Combined, the two buildings would provide 361 residential units, 2,000 square feet of ground level commercial space and 330 parking spaces. The project site is currently vacant and utilized for construction staging and soil stockpiling.

B. PROJECT CONSISTENCY

As determined by the City of Oakland Bureau of Planning, the proposed land uses are permitted in the zoning district in which the project is located, and land uses envisioned for the project site in Downtown Oakland, as outlined below.

- The General Plan land use designation for the site is Urban Residential (RU-3). This designation applies to areas suitable for multi-unit, low-rise or mid-rise residential structures at somewhat higher densities than RU-2, and neighborhood businesses where appropriate in locations with good access to transportation and other services. The proposed residential mixed-use project would be consistent with this designation.
- The site is zoned Lake Merritt Station Area Plan District Mixed Residential Zone (D-LM-1). The proposed project would be consistent with the purposes of the D-LM-1 district, which is generally intended to create, maintain, and enhance areas of the Lake Merritt Station Area Plan District appropriate for high-density residential development with compatible commercial activities. The proposed project would develop the vacant site with ground-floor commercial retail space with upper level residential use.

Therefore, the proposed project is eligible for consideration of an exemption under California Public Resources Code Section 21083.3, and Section 15183 of the CEQA Guidelines.

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ATTACHMENT D
Infill Performance Standards, Per CEQA Guidelines Section 15183.3

California Environmental Quality Act (CEQA) Guidelines Section 15183.3(b) and CEQA Guidelines Appendix M establish eligibility requirements for projects to qualify as infill projects. Table D-1, below, shows how the proposed project satisfies each of the applicable requirements.

As discussed in detail in Section III of this document, the analysis in the 2011 Redevelopment Plan EIR, the 1998 LUTE EIR and, for only the residential components of the proposed project, the 2010 Housing Element EIR and its 2014 Addendum, are considered the Program EIRs for this assessment, pursuant to CEQA Guidelines Section 15183.3.

Table D-1: Project Infill Eligibility

CEQA Eligibility Criteria		Eligible?/Notes for Proposed Project
1.	Be located in an urban area on a site that either has been previously developed or that adjoins existing qualified urban uses on at least seventy-five percent of the site's perimeter. For the purpose of this subdivision "adjoin" means the infill project is immediately adjacent to qualified urban uses or is only separated from such uses by an improved right-of-way. (CEQA Guidelines Section 15183.3[b][1])	Yes. The project site is currently vacant used for construction staging and soil stockpiling. However, the site is surrounded by urban uses including public, institutional, residential, and commercial uses, as described in Section IV, Project Description.
2.	Satisfy the performance Standards provided in Appendix M (CEQA Guidelines Section 15183.3[b][2]) as presented in 2a and 2b below:	—
	2a. Performance Standards Related to Project Design. All projects must implement all of the following:	—
	Renewable Energy. Non-Residential Projects. All nonresidential projects shall include onsite renewable power generation, such as solar photovoltaic, solar thermal, and wind power generation, or clean back-up power supplies, where feasible. Residential Projects. Residential projects are also encouraged to include such on site renewable power generation.	Yes. The proposed project would comply with CALGreen regulations and be required to achieve at least a 15 percent reduction in energy usage when compared to Title 24. In addition, the proposed project would comply with the Green Building ordinance and requirements. The project applicant may consider, but is not required to provide, renewable power generation.

Table D-1: Project Infill Eligibility

CEQA Eligibility Criteria		Eligible?/Notes for Proposed Project
	Soil and Water Remediation. If the project site is included on any list compiled pursuant to Section 65962.5 of the Government Code, the project shall document how it has remediated the site, if remediation is completed. Alternatively, the project shall implement the recommendations provided in a preliminary endangerment assessment or comparable document that identifies remediation appropriate for the site.	A Phase I Environmental Site Assessment was prepared for the project site.[16] The assessment revealed no evidence of recognized environmental conditions in connection with the property although a soil vapor survey and collection of near surface soil samples was recommended to identify whether the site's past use as a gasoline service station and roadway resulted in soil contamination. In addition, the property was not listed in any of the databases searched as part of the Phase I Report.
	Residential Units Near High-Volume Roadways and Stationary Sources. If a project includes residential units located within 500 feet, or other distance determined to be appropriate by the local agency or air district based on local conditions, of a high volume roadway or other significant sources of air pollution, the project shall comply with any policies and standards identified in the local general plan, specific plan, zoning code, or community risk reduction plan for the protection of public health from such sources of air pollution. If the local government has not adopted such plans or policies, the project shall include measures, such as enhanced air filtration and project design, that the lead agency finds, based on substantial evidence, will promote the protection of public health from sources of air pollution. Those measures may include, among others, the recommendations of the California Air Resources Board, air districts, and the California Air Pollution Control Officers Association.	Yes. According to BAAQMD's conservative screening-level tool for Alameda County, there are three stationary TAC sources within 1,000 feet of the project site. As previously discussed, the proposed project is not located within the vicinity of a site that emits gaseous TACs. The LMSAP EIR also identified potential impacts associated with the installation of back-up generators (a source of TACs) and identified SCAs to reduce the potential effect to less than significant. The proposed project would not include a back-up generator that would emit TACs; therefore, this impact does not apply to the proposed project. The nearest "high-volume roadway" with 100,000 vehicles per day, as defined by Section II of CEQA Appendix M, is Interstate 880 (I-880). I-880 is approximately 0.4 miles south of the project site.
	2b. Additional Performance Standards by Project Type. In addition to implementing all the features described in 2a above, the project must meet eligibility requirements provided below by project type.	
	Residential. A residential project must meet one of the following: A. Projects achieving below average regional per capita vehicle miles traveled (VMT). A residential project is eligible if it is located in a "low vehicle travel area" within the region; B. Projects located within ½ mile of an Existing Major Transit Stop or High Quality Transit Corridor. A residential project is eligible if it is located within ½ mile of an existing major transit stop or an existing stop along a high quality transit	Yes. The proposed project is eligible under Section (B). The proposed project site is served by multiple transit providers. Transit service providers in the project vicinity include Bay Area Rapid Transit (BART) and Alameda-Contra Costa (AC) Transit. The nearest BART station to the project site is the Lake Merritt BART Station, approximately 0.4 miles west of the project site. AC Transit operates bus lines multiple major bus routes on International Boulevard, approximately one block east of the project site.

[16] Adanta, Inc. 2014. *Phase I Environmental Site Assessment 12th Street West of 2nd Avenue Oakland, California*. September 1.

Table D-1: Project Infill Eligibility

CEQA Eligibility Criteria		Eligible?/Notes for Proposed Project
	corridor; or C. Low - Income Housing. A residential or mixed-use project consisting of 300 or fewer residential units all of which are affordable to low income households is eligible if the developer of the development project provides sufficient legal commitments to the lead agency to ensure the continued availability and use of the housing units for lower income households, as defined in Section 50079.5 of the Health and Safety Code, for a period of at least 30 years, at monthly housing costs, as determined pursuant to Section 50053 of the Health and Safety Code.	
	Commercial/Retail. A commercial/retail project must meet one of the following: A. Regional Location. A commercial project with no single-building floor-plate greater than 50,000 square feet is eligible if it locates in a "low vehicle travel area"; or B. Proximity to Households. A project with no single-building floor-plate greater than 50,000 square feet located within ½ mile of 1,800 households is eligible.	Not Applicable.
	Office Building. An office building project must meeting one of the following: A. Regional Location. Office buildings, both commercial and public, are eligible if they locate in a low vehicle travel area; or B. Proximity to a Major Transit Stop. Office buildings, both commercial and public, within ½ mile of an existing major transit stop, or ¼ mile of an existing stop along a high quality transit corridor, are eligible.	Not Applicable.
	Schools. Elementary schools within 1 mile of 50 percent of the projected student population are eligible. Middle schools and high schools within 2 miles of 50 percent of the projected student population are eligible. Alternatively, any school within ½ mile of an existing major transit stop or an existing stop along a high quality transit corridor is eligible. Additionally, to be eligible, all schools shall provide parking and storage for bicycles and scooters, and shall comply with the requirements of Sections 17213, 17213.1, and 17213.2 of the California Education Code.	Not Applicable.
	Transit. Transit stations, as defined in Section 15183.3(e)(1), are eligible.	Not Applicable
	Small Walkable Community Projects. Small walkable community projects, as defined in Section 15183.3, subdivision (e)(6), that implement the project features in 2a above are eligible.	Not Applicable

Table D-1: Project Infill Eligibility

CEQA Eligibility Criteria		Eligible?/Notes for Proposed Project
3.	Be consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy, except as provided in CEQA Guidelines Sections 15183.3(b)(3)(A) or (b)(3)(B) below: (b)(3)(A). Only where an infill project is proposed within the boundaries of a metropolitan planning organization for which a sustainable communities strategy or an alternative planning strategy will be, but is not yet in effect, a residential infill project must have a density of at least 20 units per acre, and a retail or commercial infill project must have a floor area ratio of at least 0.75; or (b)(3)(B). Where an infill project is proposed outside of the boundaries of a metropolitan planning organization, the infill project must meet the definition of a "small walkable community project" in CEQA Guidelines §15183.3(f)(5). (CEQA Guidelines Section 15183.3[b][3])	Yes (see explanation below table)

Note:

a Where a project includes some combination of residential, commercial and retail, office building, transit station, and/or schools, the performance standards in this section that apply to the predominant use shall govern the entire project.

EXPLANATION FOR ELIGIBILITY CRITERION 3 (FROM TABLE D-1 ABOVE)

The adopted Plan Bay Area (2014) serves as the sustainable communities strategy for the Bay Area, per Senate Bill 375. As defined by the Plan, Priority Development Areas (PDAs) are areas where new development will support the needs of residents and workers in a pedestrian-friendly environment served by transit. The Lakehouse Commons Project is located within the "Oakland Transit Oriented Development Corridors" PDA – which comprises the majority of the City of Oakland's land area except the areas around the Macarthur Transit Village, Downtown Oakland and Colosseum. The proposed project is consistent with the City of Oakland General Plan and the Planning Code, as discussed in Attachment C and noted below.

- The General Plan land use designation for the site is Urban Residential (RU-3). This designation applies to areas suitable for multi-unit, low-rise or mid-rise residential structures at somewhat higher densities than RU-2, and neighborhood businesses where appropriate in locations with good access to transportation and other services. The proposed residential mixed-use project would be consistent with this designation.
- The site is zoned Lake Merritt Station Area Plan District Mixed Residential Zone (D-LM-1). The proposed project would be consistent with the purposes of the D-LM-1 district, which is generally intended to create, maintain, and enhance areas of the Lake Merritt Station Area Plan District appropriate for high-density residential development with compatible commercial activities. The proposed project would develop the vacant site with ground-floor commercial retail space with upper level residential use.

APPENDIX A

Lakehouse Commons Sun/Shadow Study

Lakehouse Commons

Oakland, CA

Sun/Shadow Study

RWDI # 1401361
April 28, 2016

SUBMITTED TO

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3D Model of the proposed project and surroundings (View from south)

1. Introduction

Rowan Williams Davies & Irwin Inc. (RWDI) was retained by LSA Associates Inc. to conduct a Sun/Shadow Study for the proposed Lakehouse Commons in Oakland, CA. The objectives of this study were to illustrate the sun and shadow patterns for various times and dates and to determine the potential exposure to sunlight and shadow on and around the study site.

This study involved the use of a three-dimensional (3D) computer model of the project site with the existing surroundings and the proposed development in place. The 3D model was used to produce renderings of the shadows cast around the project site by the proposed development. The following report provides a discussion of the methodology and graphic results of the Sun/Shadow Study.

2. Building and Site Information

The proposed development will be located on the south side of Lake Merritt, bordered by E 12th Street on the east and 2nd Avenue on the south, in Oakland, California. The development consists of a 23-story tower and an 6-story building on top of a 2-story podium. Image 1 shows a rendering of the project.

Image 2 shows an aerial view of the site and its immediate surroundings. Currently the site is an unoccupied lot, surrounded by fairly low institutional, mixed-use, and residential buildings between two and five stories in height. Two taller, approximately 22-story towers are located to the immediate north and south of the site. Downtown Oakland is to the northwest across Lake Merritt.

Image 1: Rendering of the proposed project
(Courtesy of Urban Core / Pyatok Architects)

Image 2: Aerial View of Site and Surroundings
(Courtesy of GoogleEarth™)

3. Methodology

The shadow patterns illustrated in this report were generated with the aid of a computer graphics program and are shown in Section 4. Simulation Results. A Computer Aided Design (CAD) three-dimensional computer model of the study site was created by our graphics department to reflect the design of the proposed development in accordance with architectural drawings prepared by Pyatok Architects forwarded by LSA Associates Inc., received as of April 14, 2016.

The analysis in this study relies on discussion of the magnitude of the shade created by the proposed development. The CAD generated 3D model was incorporated into a computer graphics program with the appropriate settings to simulate the geographic characteristics and solar angles for Oakland. The computer generated renderings exhibit the simulated shadow conditions anticipated to occur in the vicinity of the study site. The tests conducted in this study assume bright sunlight from sunrise to sunset, in order to properly identify shadow patterns created by the proposed structure.

Table 1 identifies the dates and times shadow conditions were simulated. The times listed are either Pacific Standard Time (PST) or Pacific Daylight Saving Time (PDT), whichever is in effect on the dates specified.

Table 1 – Dates and Times Studied

Date	Time
March 21st (PDT)	9:00am, 12:00 noon, 3:00pm
June 21st (PDT)	9:00am, 12:00 noon, 3:00pm, 6:00pm
September 21st (PDT)	9:00am, 12:00 noon, 3:00pm
December 21st (PST)	9:00am, 12:00 noon, 3:00pm

The approximate sunrise and sunset times for the four times of the year studied are included in Table 2 as they may be of interest when assessing the shadow conditions.

Table 2 –Sunrise and Sunset Times for 2016

Date	Sunrise Time	Sunset Time
March 21st (PDT)	7:10am	7:23pm
June 21st (PDT)	5:47am	8:35pm
September 21st (PDT)	6:57am	7:07pm
December 21st (PST)	7:21am	4:54pm

4. Simulation Results – March 21st (PDT)

9:00 am

12:00 noon

3:00 pm

4. Simulation Results – June 21st (PDT)

9:00 am

12:00 noon

3:00 pm

6:00 pm

4. Simulation Results – September 21st (PDT)

9:00 am

12:00 noon

3:00 pm

4. Simulation Results – December 21st (PST)

9:00 am

12:00 noon

3:00 pm

5. Summary

The renderings included in this report illustrate the shadows cast by the proposed Lakehouse Commons project on the 21st day of March, June, September and December.

6. Applicability of Results

The results presented in this report pertain to the model of the proposed Lakehouse Commons project generated using the architectural design drawings listed in Appendix A. Should there be any design changes that deviate from this list of drawings, the results presented may change. Therefore, if changes in the design are made, it is recommended that RWDI be contacted and requested to review their potential effects on sun/shadow conditions.

APPENDIX B

Wind Study

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Lakehouse Commons

Oakland, California

Report

Pedestrian Wind Conditions Consultation
Wind Tunnel Tests

RWDI # 1401361
May 17, 2016

SUBMITTED TO

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Appendices

1. INTRODUCTION

Rowan Williams Davies & Irwin Inc. (RWDI) was retained by LSA Associates, Inc. to provide consultation on the Pedestrian Wind Conditions for the Lakehouse Commons development in Oakland, California. The purpose of the study was to assess the wind environment around the development in terms of pedestrian wind comfort and wind hazard relative to wind metrics specified in the City of Oakland Significant Wind Impact Criterion. The study objective was achieved through the wind tunnel testing of a 1:400 (1" = 33') scale model for the following four development configurations:

A – Existing: all existing buildings on-site and in the surroundings including the newly constructed 5-story Lakeside Senior Apartments located at 116 15th Street E.;

B – Existing plus Project: proposed Lakehouse Commons project present with existing surrounding buildings, in the absence of landscaping;

C – Existing plus Project plus Landscaping: proposed Lakehouse Commons project present with existing surrounding buildings and existing and proposed landscaping; and,

D – Project plus Landscaping plus Cumulative: proposed Lakehouse Commons project with existing surrounding buildings and existing and proposed landscaping, as well as anticipated future development at the OUSD property just south of the site.

The project site is located in Oakland, California. The development site is located at the intersection of Lake Merritt Boulevard and East 12th St. The proposed project consists of two buildings sitting on a concrete podium garage. The podium includes 2 levels above grade and 2 grades below grade. One building is a 26-story residential tower that is approximately 272 ft. tall and the other building is an 8-story mid-rise. The test model was constructed using the design information and drawings listed in Appendix A.

This report summarizes the methodology of the wind tunnel studies for the pedestrian wind conditions, describes the wind comfort and wind hazard criteria associated with wind force used in the current study, and presents the test results.

The placement for wind measurement locations was based on our experience and understanding of pedestrian usage for this site, and was reviewed by LSA Associates prior to the wind tunnel test.

2. PRINCIPAL RESULTS

The results of the tests are discussed in detail in Section 5 of this report and may be summarized as follows:

- Wind speeds for the Existing Configuration are generally acceptable with the exception of two locations (out of total of 46) along Lake Merritt Boulevard to the north of the project site, where winds are expected to exceed the hazard criterion.

- Similar wind conditions are expected with the addition of the proposed project, with 3 locations at grade level exceeding the hazard criterion.

- The addition of the landscape improves the wind conditions, with all grade level locations satisfying the hazard criterion.

- The addition of the anticipated development at the OUSD property results in an increased wind condition at the northeast corner of the proposed building, where the hazard criterion is exceeded.

3. METHODOLOGY

3.1 Wind Tunnel Testing

As shown in Figures 1a through 1d, the wind tunnel model included the project site and all relevant surrounding buildings and topography within a 1500 ft radius of the study site. The mean speed profile and turbulence of the natural wind approaching the modelled area were simulated in RWDI's boundary-layer wind tunnel. The model was instrumented with 58 wind speed sensors to measure mean and gust wind speeds at a full-scale height of approximately 5 ft above grade. Ten locations (Locations 43 to 54) are located on the study building itself; therefore no results have been presented for the Existing Configuration. These measurements were recorded for 36 equally incremented wind directions.

3.2 Local Climate

Wind statistics recorded at the Metropolitan Oakland International Airport between 1984 and 2014 and between the hours of 7:00 am and 6:00 pm were analyzed for annual wind conditions. Figure 2 graphically depicts the directional distributions of annual wind frequencies and speeds. Winds are frequent from the west-northwest through west-southwest directions throughout the year, as indicated by the wind rose. Strong winds of a mean speed greater than 20 mph measured at the airport (at an anemometer height of 33ft) occur 3.5% of the time annually.

Wind statistics from the Metropolitan Oakland International Airport were combined with the wind tunnel data in order to predict the frequency of occurrence of full-scale wind speeds. The full-scale wind predictions were then compared with the City of Oakland Significant Wind Impact Criterion for pedestrian comfort and safety.

3.3 Planning Code Requirements

For the purposes of this study, the City of Oakland considers a significant wind impact to occur if a project were to "Create winds exceeding 36 mph for more than one hour during daylight hours during the year". A wind analysis is required if the project's height is 100 feet or greater (measured to the roof) and one of the following conditions exists: (a) the project is located adjacent to a substantial water body (i.e. Oakland Estuary, Lake Merritt or San Francisco Bay); or (b) the project is located in Downtown. Since the proposed project exceeds 100 feet in height and is located adjacent to Lake Merritt, it is subject to the thresholds of significance.

The equivalent wind speeds were calculated according to the specifications in the City of Oakland Significant Wind Impact Criterion, whereby the mean hourly wind speed is increased when the turbulence intensity is greater than 15% according to the following formula:

$$\boldsymbol{EWS = V_m \times (2 \times TI + 0.7)}$$

where $\boldsymbol{EWS}$ = equivalent wind speed
$\boldsymbol{V_m}$ = mean pedestrian-level wind speed
$\boldsymbol{TI}$ = turbulence intensity

4. TEST RESULTS

Wind speed measurements were taken at 46 locations at grade level for Configuration A. In addition to these 46 grade-level location, 12 above-grade locations were instrumented for the remaining three configurations. Table 1, located in the tables section of this report, presents the wind comfort results for these four configurations. For each measurement point, the measured 10% exceeded (90th percentile) equivalent wind speed and the percentage of time that the wind speed exceeds 11 mph are shown for areas considered to be used primarily for walking. A letter "e" in the last column of each configuration indicates a wind comfort exceedance.

Table 2 presents the wind hazard results, and lists the predicted wind speed to be exceeded one hour per year. The predicted number of hours per year that the City of Oakland Significant Wind Impact Criterion (one minute wind speed of 36 mph) is exceeded is also provided. A letter "e" in the last column of each configuration indicates a wind hazard exceedance.

4.1 Wind Comfort Conditions (non-CEQA threshold)

4.1.1 Grade level

A total of 46 sensors were installed at grade level to measure the wind conditions around the project site and its vicinity.

For the Existing Configuration, wind speeds exceeding the 11mph comfort threshold are expected at 22 out of 46 locations, along Lake Merritt Boulevard and 12th Street as well as at the area to the north of the project site (Figure 3a and Table 1). Wind speeds at the remaining areas are considered appropriate. The average wind speed at all 46 locations is 12 mph.

With the addition of the proposed project (Configuration B), lower wind speeds are expected along Lake Merritt Boulevard, to the south of the project site, however wind speeds are expected to slightly increase along 2nd Avenue. Wind speeds exceeding the 11mph comfort threshold are expected at 19 out of 46 locations, with the average wind speeds at all 46 locations to be 11 mph (Figure 3b and Table 1).

With the addition of the existing and proposed landscaping around the project site (Configuration C), wind conditions are generally expected to remain similar to Configuration B with lower localized wind speeds at areas close to the landscaping. Wind speeds exceeding the 11mph comfort threshold are expected at 17 out of 46 locations with the average wind speeds at all 46 locations to be 11 mph (Figure 3c and Table 1).

With the addition of the future OUSD property to the south of the site (Configuration D) wind conditions are generally expected to remain similar to Configuration C. However, the addition of the future development leads to local wind increase at the intersection of 11th Street and 2nd Avenue. Wind speeds exceeding the 11mph comfort threshold are expected at 18 out of 46 locations. The average wind speed at all 46 locations is 11 mph (Figures 3d and Table 1).

4.1.2 Above-Grade level

Twelve sensors were located above-grade to measure the wind speed conditions at amenities located at level 2 podium as well as at levels 7 and 26 terraces.

For all three configurations (Configurations B, C and D), 10 out of 12 locations exceed the 11mph comfort threshold (Figures 3b to 3d and Table 1). The average wind speed at all 12 above-grade locations is 16mph for Configuration B and 15mph for Configurations C and D.

4.2 Wind Hazard Conditions (CEQA threshold)

For the existing conditions (Configuration A), wind speeds at two locations to the north of the project site (Locations 13 and 14 in Figure 4a and Table 2) are expected to exceed the hazard criterion, for a total of 3 hours.

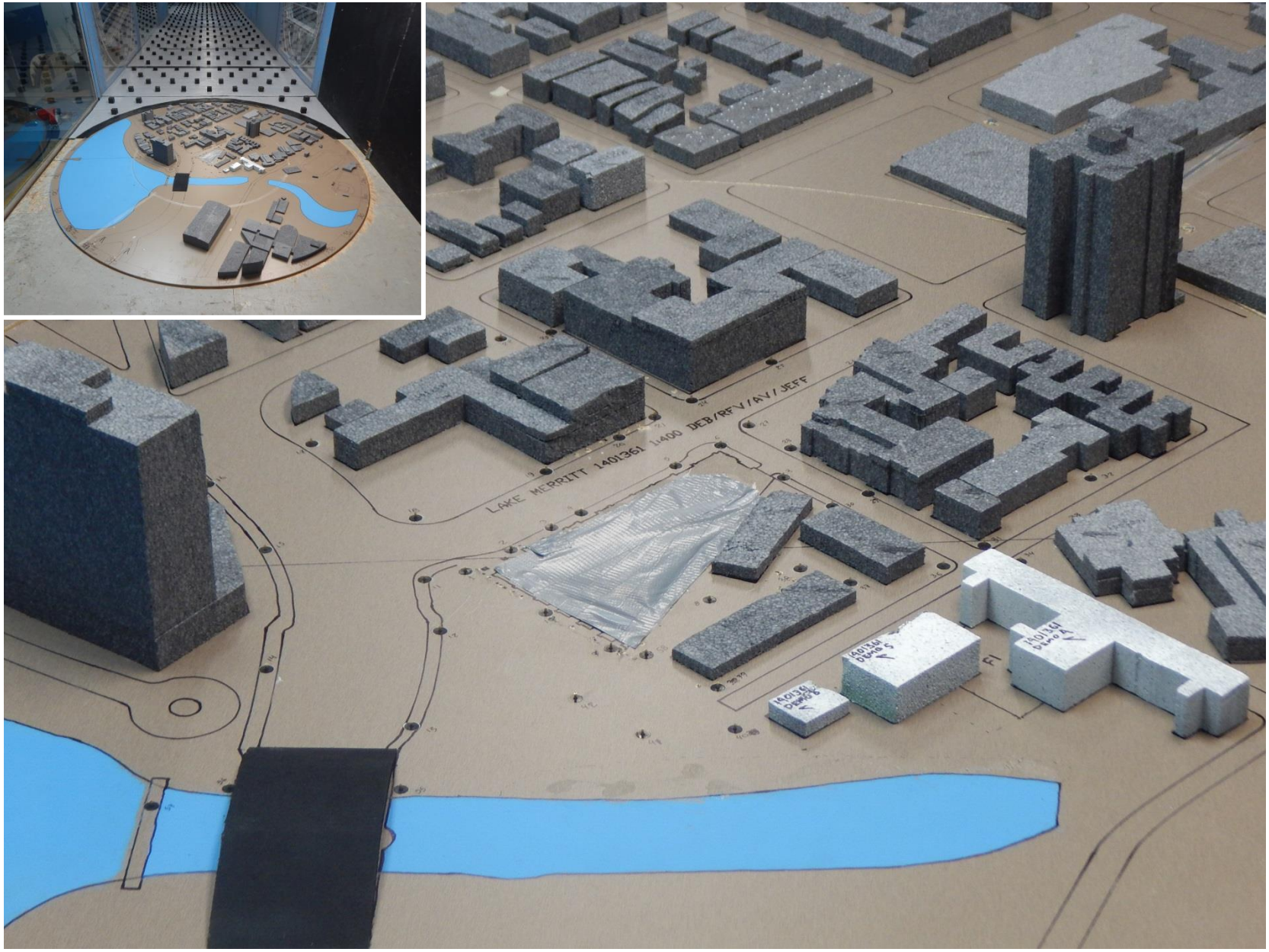
With the addition of the proposed Lakehouse Commons project (Configuration B), wind speeds at three locations at grade level (Locations 6, 12 and 14 in Figure 4b) exceed the hazard criterion for a total of 3 hours. Wind speeds at 12 locations on the podium of the proposed building (Locations 44 through 46, 48 and 50 through 54) exceed the hazard criterion for a total of 76 hours. The above-grade locations are not public areas; therefore mitigation measures to improve these conditions could be developed with the design team as the project progresses. Two of the locations exceeding the hazard criterion at grade level are along sidewalks to the north of the project site, while one location is at the southeast corner of the proposed building. The hazard exceedance at two of these locations (Locations 6 and 12) are new compared to the Existing Configuration.

With the addition of the existing and proposed landscaping on and around the proposed development (Configuration C), the total number of locations where winds exceed the hazard criterion at the grade level reduces to zero, while 8 locations exceed the hazard criterion on the podium of the proposed building for a total of 64 hours (Locations 45, 46, 48 and 50 through 54) (Figure 4c and Table 2). The above-grade locations are not public areas; therefore mitigation measures to improve these conditions could be developed with the design team as the project progresses. With the addition of the cumulative buildings to the site, in the presence of the existing and proposed landscaping (Configuration D), wind speeds at one grade level location on the northeast corner of the proposed building (Location 1 in Figure 4d) exceeded the hazard criterion for a total of 1 hour. This location is new compared to the Existing Configuration, however it is the result of addition of the cumulative OUSD building to the site and is not caused by the project itself. Wind speeds at 7 locations on the podium of the proposed building (Locations 45, 46 and 50 through 54) are expected to exceed the hazard criterion for a total of 68 hours. Considering the predicted wind conditions, we conclude that the proposed project, with the presence of existing and proposed landscaping, does not have a significant negative impact on the wind conditions at the public areas around the project site.

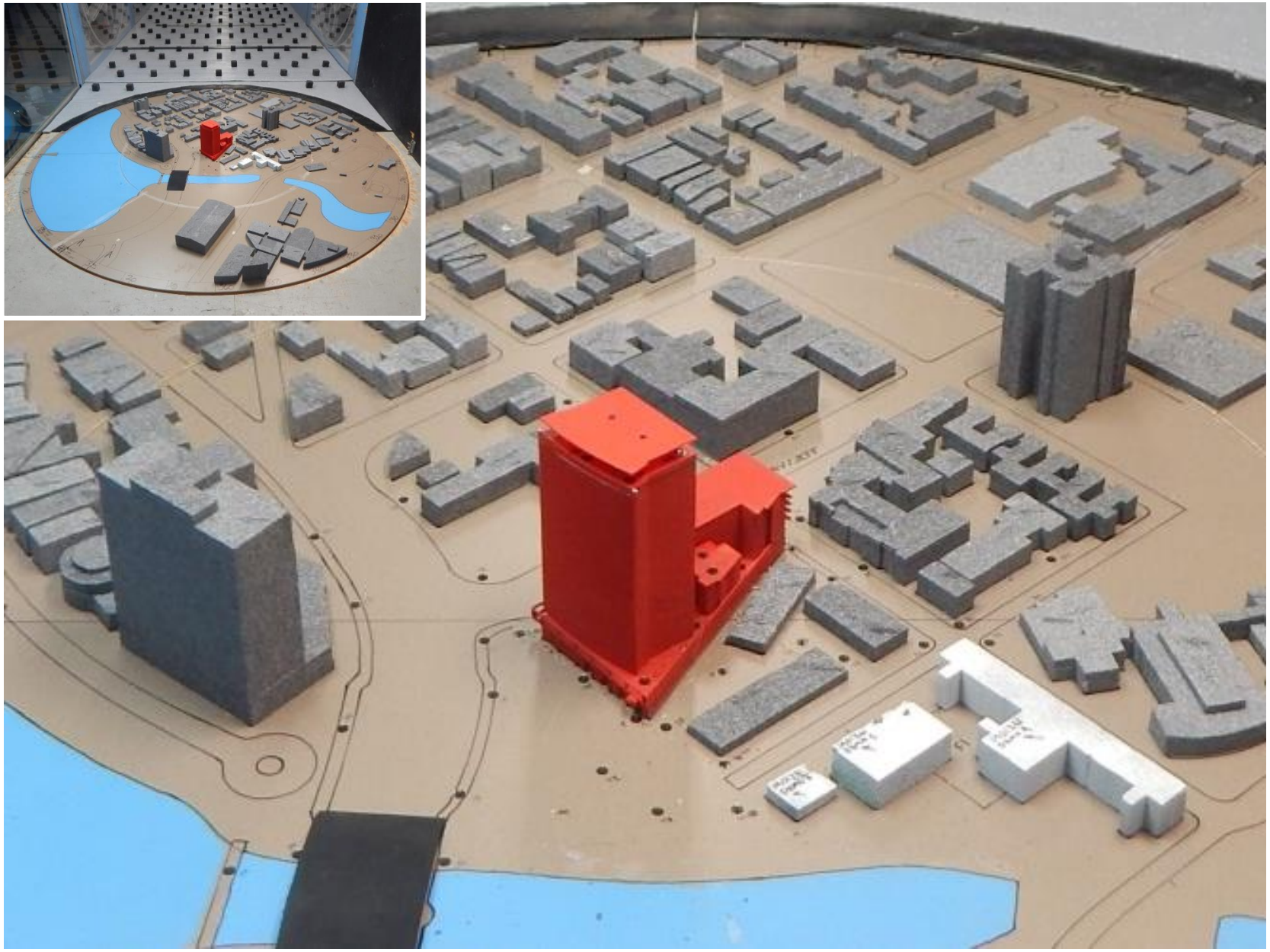
5. APPLICABILITY OF RESULTS

The results presented in this report pertain to the model of the proposed Lakehouse Commons project constructed using the architectural design drawings listed in Appendix A. Should there be design changes that deviate from this list of drawings, the results presented may change. Therefore, if substantial changes in the design are made, it is recommended that RWDI be contacted and requested to review their potential effects on wind conditions.

FIGURES



Wind Tunnel Study Model **Existing**		Figure No. 1a	RWDI
Lakehouse Commons – Oakland, CA	Project #1401361	Date: May 11, 2016	



Wind Tunnel Study Model
Existing + Project

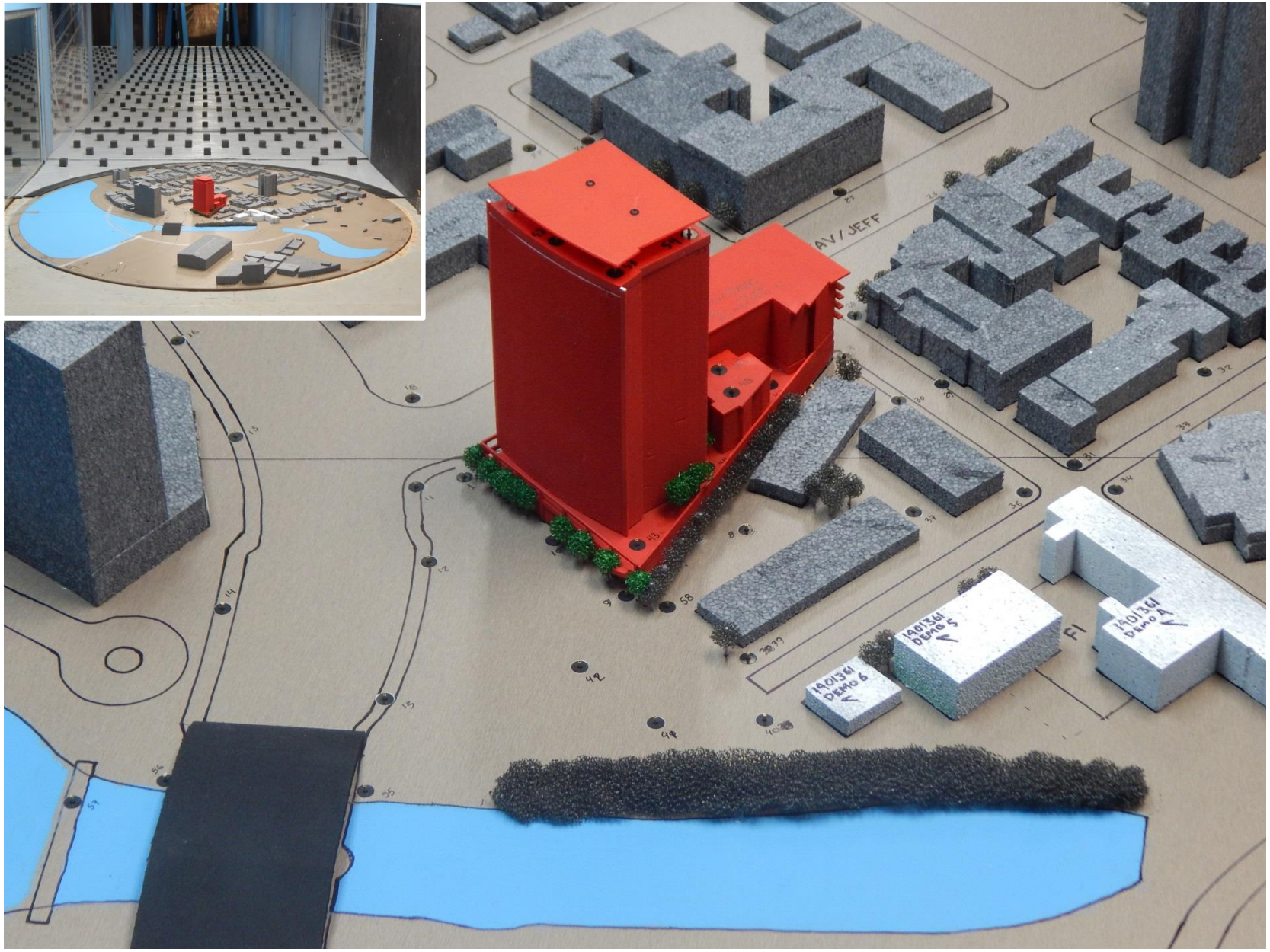
Lakehouse Commons – Oakland, CA

Project #1401361

Figure No. 1b

Date: May 11, 2016

RWDI



Wind Tunnel Study Model
Existing + Project + Landscape

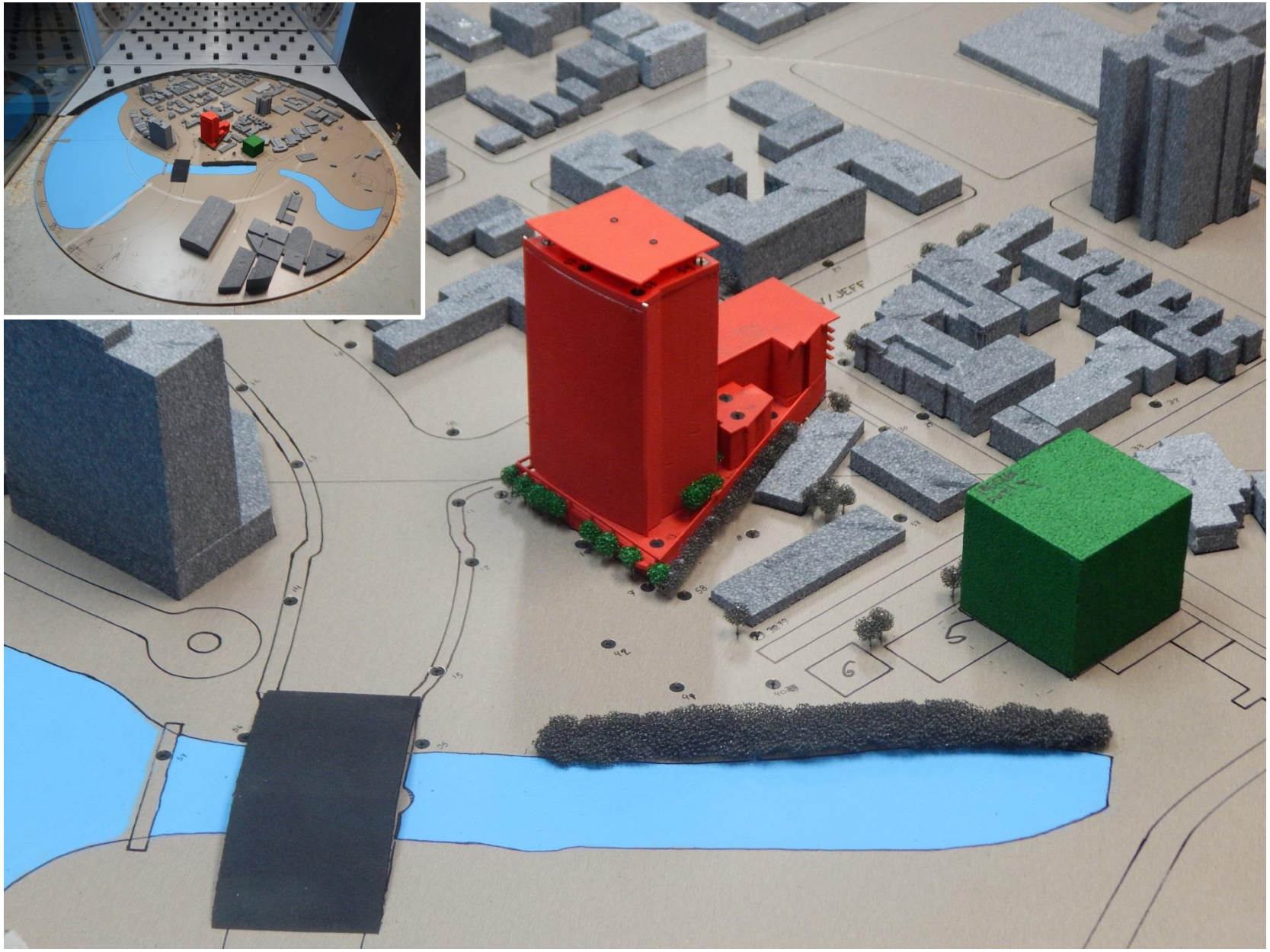
Lakehouse Commons – Oakland, CA

Project #1401361

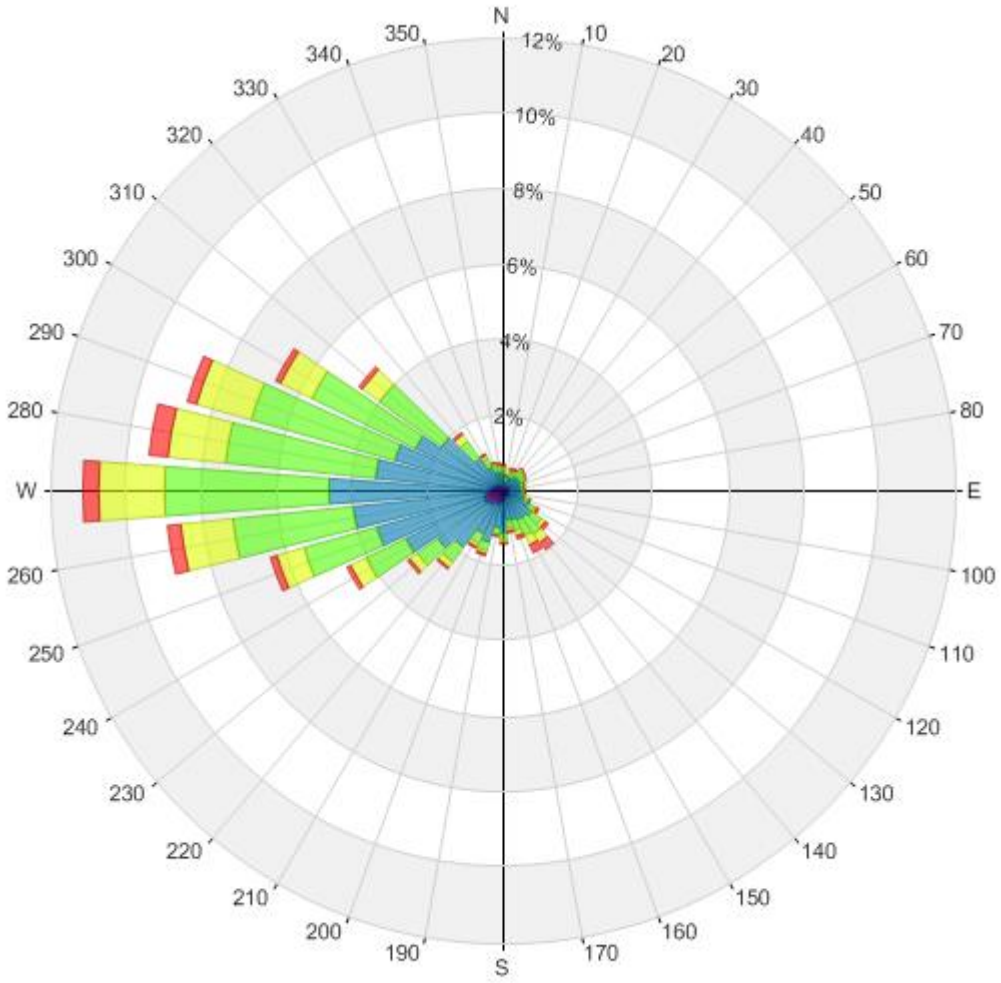
Figure No. 1c

Date: May 11, 2016

RWDI



Wind Tunnel Study Model **Project + Landscape + Cumulative**	Figure No. 1d	RWDI
Lakehouse Commons – Oakland, CA Project #1401361	Date: May 11, 2016	



Annual Winds

Wind Speed (mph)	Probability (%)
Calm	6.6
1-5	9.2
6-10	38.9
11-15	30.4
16-20	11.4
>20	3.5

Directional Distribution (%) of Winds (Blowing From)
Metropolitan Oakland International Airport (1984 - 2014)
7:00 AM - 6:00 PM
Lakehouse Commons – Oakland, CA

Project #1401361

Figure No. 2

Date: May 11, 2016

RWDI

15TH STREET

INTERNATIONAL BOULEVARD

12TH STREET

11TH STREET

LAKESHORE AVENUE

LAKE MERRIT BOULEVARD

2ND AVENUE

LEGEND:

COMFORT CATEGORIES:

1 - 7 mph

8 - 11 mph

> 11 mph

SENSOR LOCATION:

Grade Level

0 50 100ft

Pedestrian Wind Comfort Conditions - Existing
Annual (January to December)

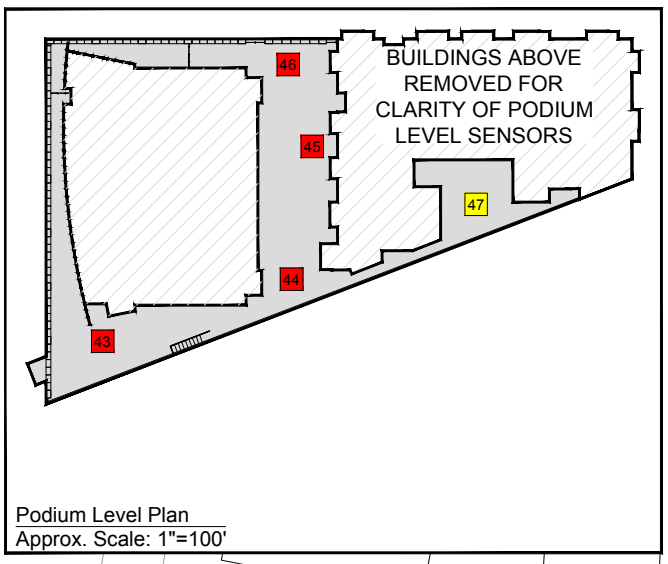
Lakehouse Commons - Oakland, CA

True North

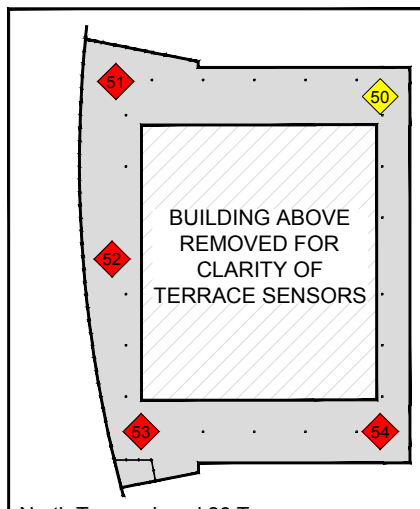
Project #1401361

Drawn by:	EM	Figure:	3a
Approx. Scale:		1"=100'	
Date Revised:		May. 10, 2016	

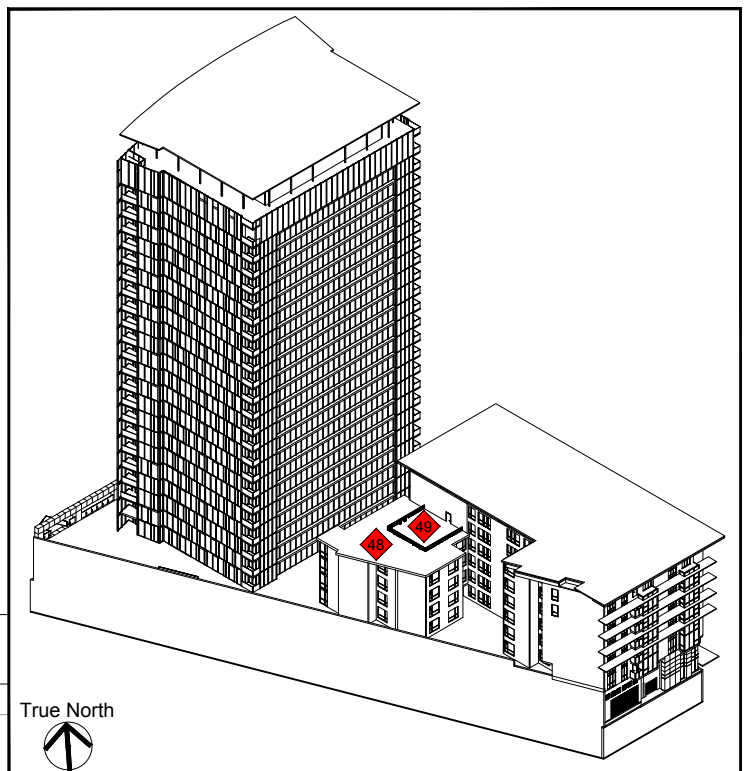
RWDI



Podium Level Plan
Approx. Scale: 1"=100'

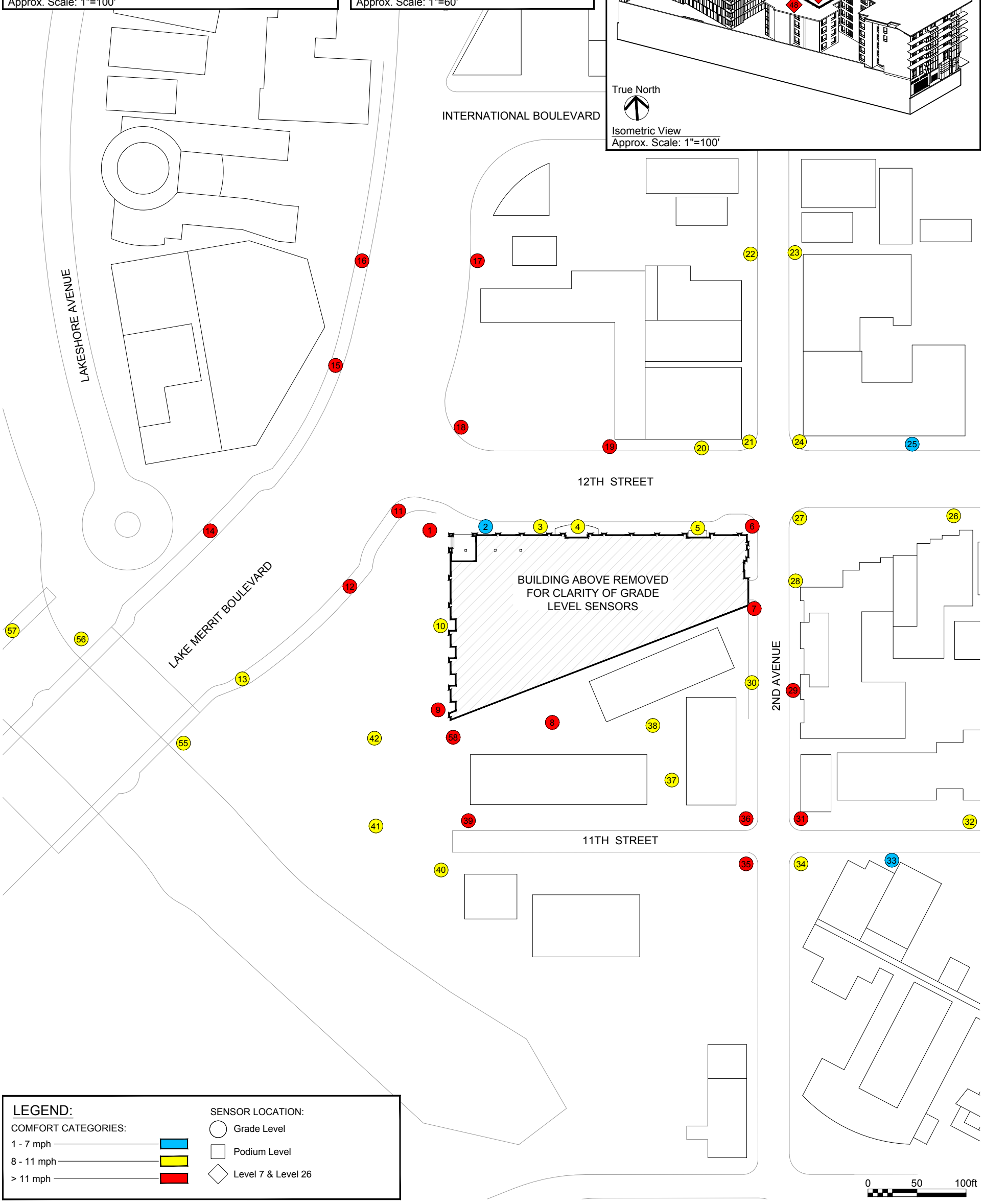


North Tower - Level 26 Terrace
Approx. Scale: 1"=60'



True North

Isometric View
Approx. Scale: 1"=100'



LEGEND:

COMFORT CATEGORIES:
- 1 - 7 mph
- 8 - 11 mph
- > 11 mph

SENSOR LOCATION:
- Grade Level
- Podium Level
- Level 7 & Level 26

0 50 100ft

Pedestrian Wind Comfort Conditions - Existing + Project
Annual (January to December)

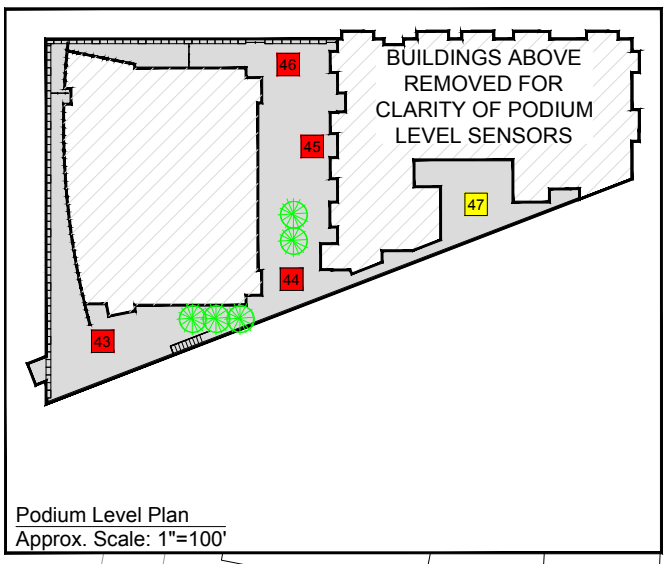
True North

Lakehouse Commons - Oakland, CA

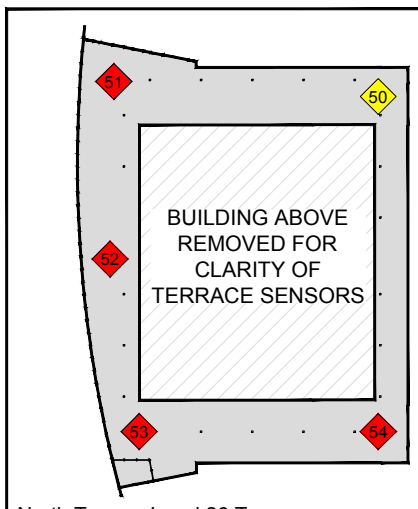
Project #1401361

Drawn by:	EM	Figure:	3b
Approx. Scale:			1"=100'
Date Revised:			May. 10, 2016

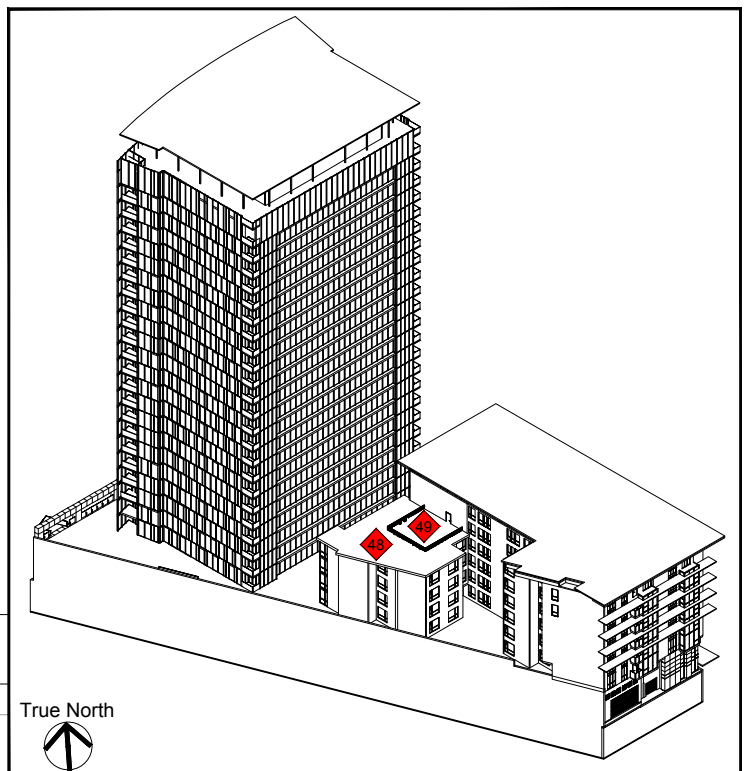
RWDI



Podium Level Plan
Approx. Scale: 1"=100'



North Tower - Level 26 Terrace
Approx. Scale: 1"=60'



True North

Isometric View
Approx. Scale: 1"=100'

INTERNATIONAL BOULEVARD

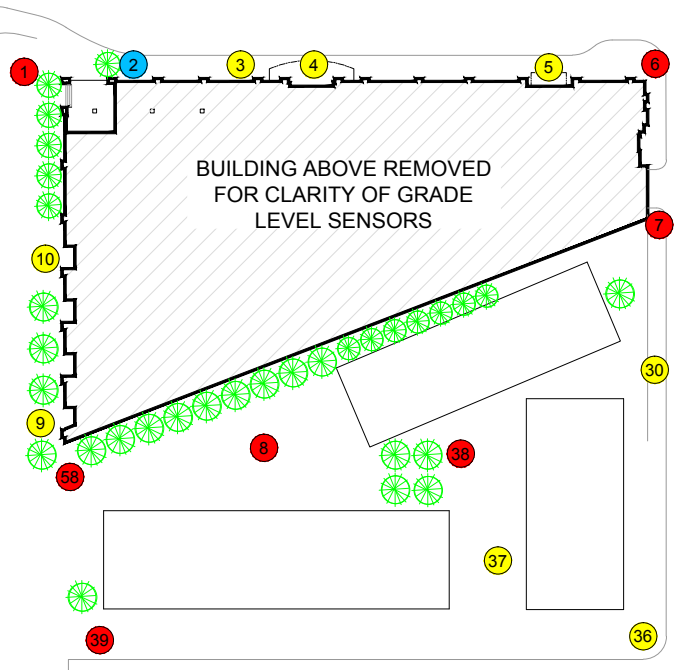
LAKESHORE AVENUE

LAKE MERRIT BOULEVARD

12TH STREET

11TH STREET

2ND AVENUE



LEGEND:

COMFORT CATEGORIES:
- 1 - 7 mph
- 8 - 11 mph
- > 11 mph

SENSOR LOCATION:
- Grade Level
- Podium Level
- Level 7 & Level 26

LANDSCAPING:
- Trees

0 50 100ft

Pedestrian Wind Comfort Conditions - Existing + Project + Landscape
Annual (January to December)

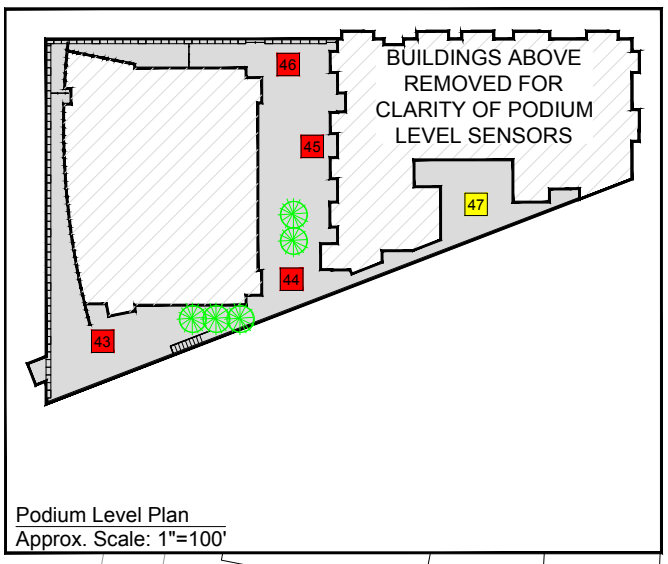
True North

Lakehouse Commons - Oakland, CA

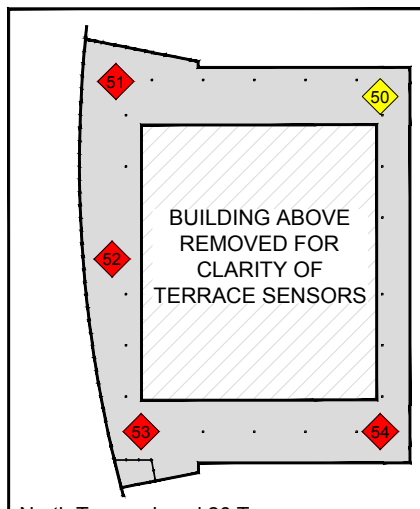
Project #1401361

Drawn by:	EM	Figure:	3c
Approx. Scale:			1"=100'
Date Revised:			May. 10, 2016

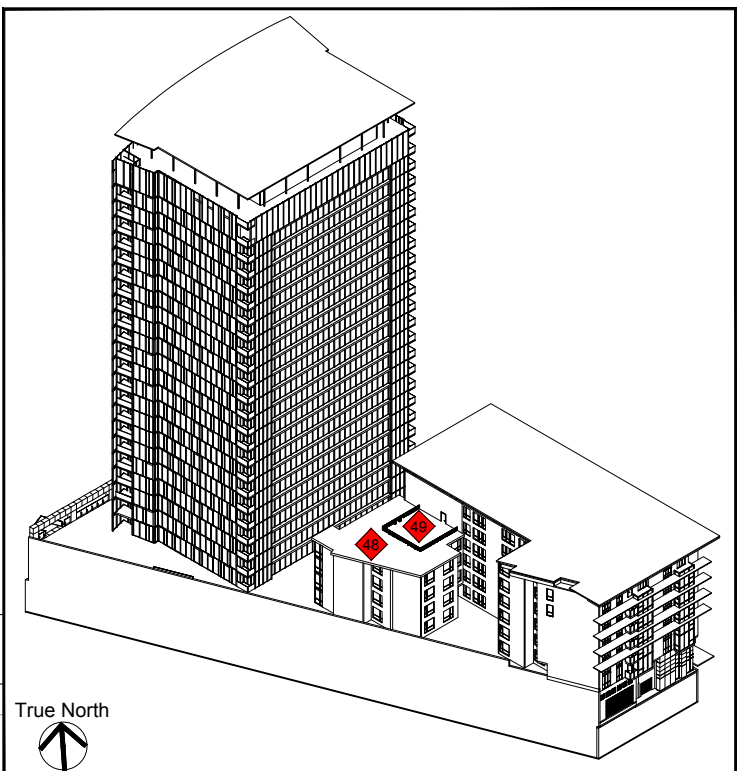
RWDI



Podium Level Plan
Approx. Scale: 1"=100'



North Tower - Level 26 Terrace
Approx. Scale: 1"=60'



True North

Isometric View
Approx. Scale: 1"=100'

INTERNATIONAL BOULEVARD

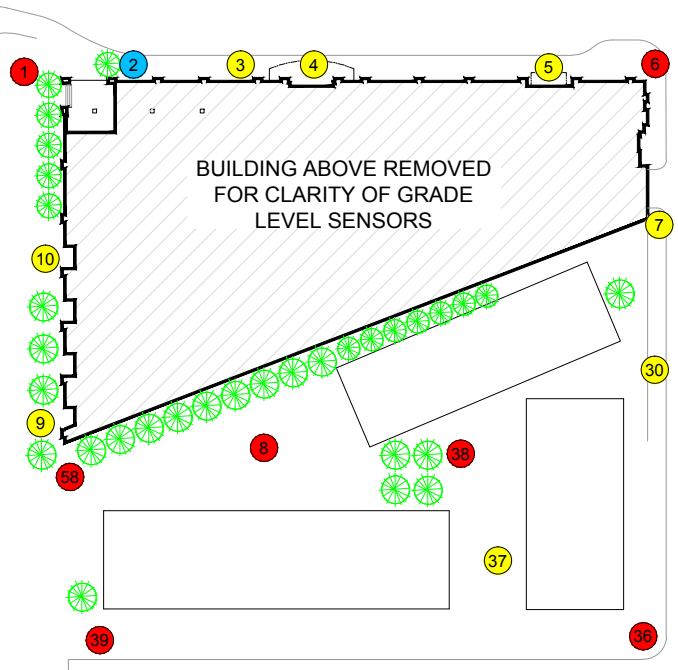
LAKESHORE AVENUE

LAKE MERRIT BOULEVARD

12TH STREET

11TH STREET

2ND AVENUE



LEGEND:

COMFORT CATEGORIES:
- 1 - 7 mph
- 8 - 11 mph
- > 11 mph

SENSOR LOCATION:
- Grade Level
- Podium Level
- Level 7 & Level 26

LANDSCAPING:
- Trees

0 50 100ft

Pedestrian Wind Comfort Conditions - Project + Landscape + Cumulative

Annual (January to December)

True North

Lakehouse Commons - Oakland, CA

Project #1401361

Drawn by:	EM	Figure:	3d
Approx. Scale:			1"=100'
Date Revised:			May. 10, 2016

RWDI

Pedestrian Wind Hazard Conditions - Existing
Annual (January to December)

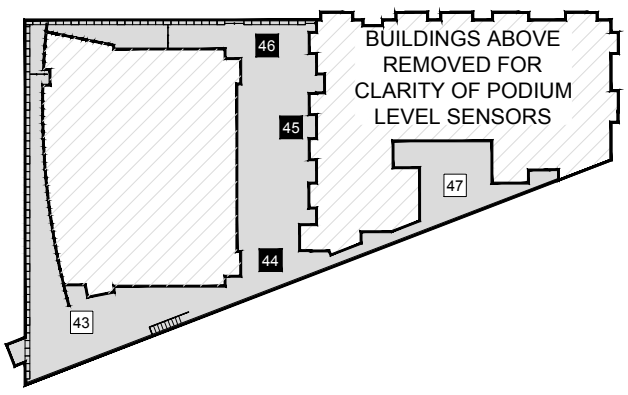
Lakehouse Commons - Oakland, CA

True North

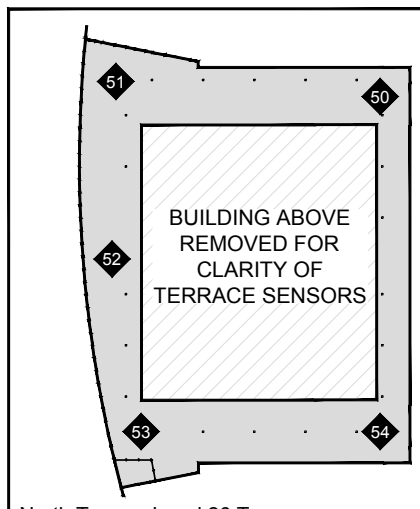
Project #1401361

Drawn by:	EM	Figure:	4a
Approx. Scale:		1"=100'	
Date Revised:		May. 10, 2016	

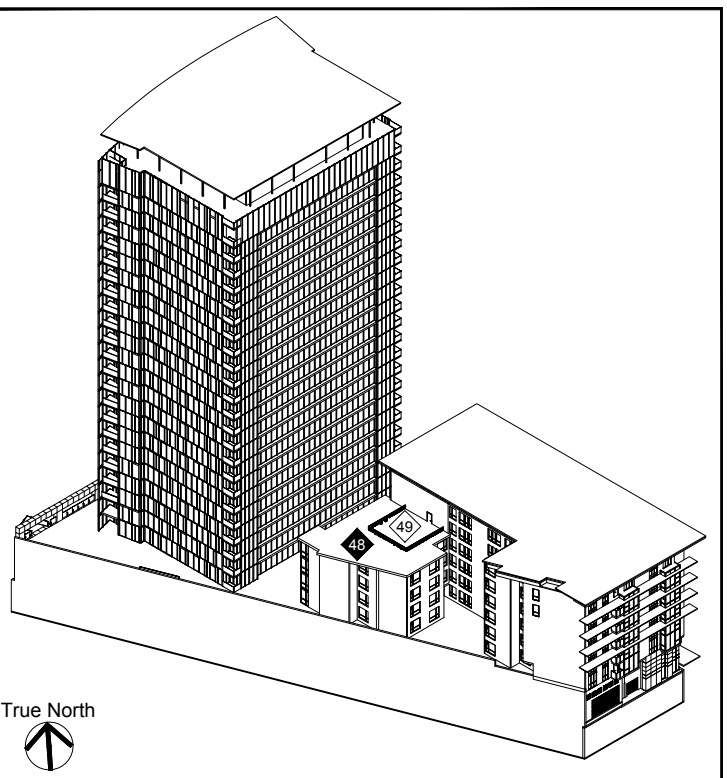
RWDI



Podium Level Plan
Approx. Scale: 1"=100'



North Tower - Level 26 Terrace
Approx. Scale: 1"=60'



True North

Isometric View
Approx. Scale: 1"=100'

INTERNATIONAL BOULEVARD

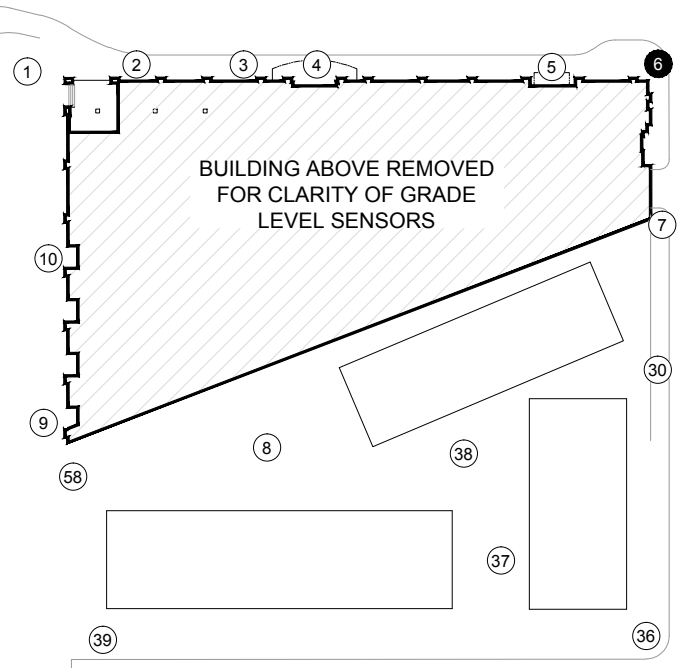
LAKESHORE AVENUE

LAKE MERRIT BOULEVARD

12TH STREET

11TH STREET

2ND AVENUE



LEGEND:

HAZARD CATEGORIES:
- Pass
- Exceeded

SENSOR LOCATION:
- Grade Level
- Podium Level
- Level 7 & Level 26

0 50 100ft

Pedestrian Wind Hazard Conditions - Existing + Project
Annual (January to December)

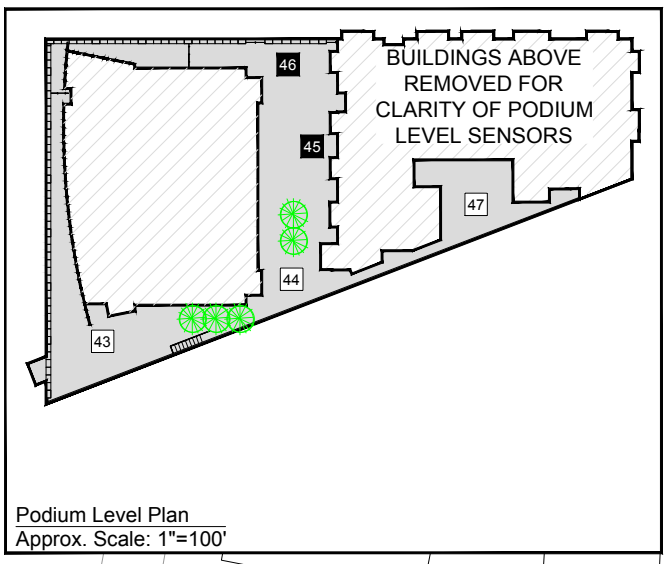
True North

Lakehouse Commons - Oakland, CA

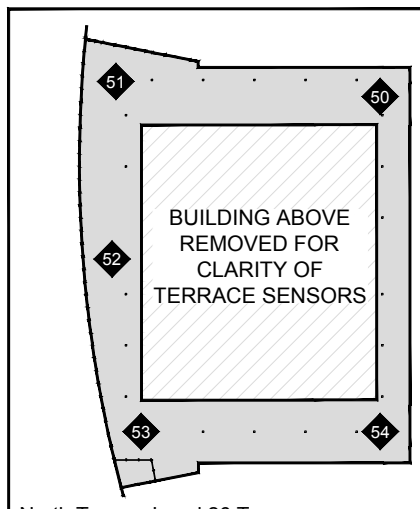
Project #1401361

Drawn by:	EM	Figure:	4b
Approx. Scale:		1"=100'	
Date Revised:		May. 10, 2016	

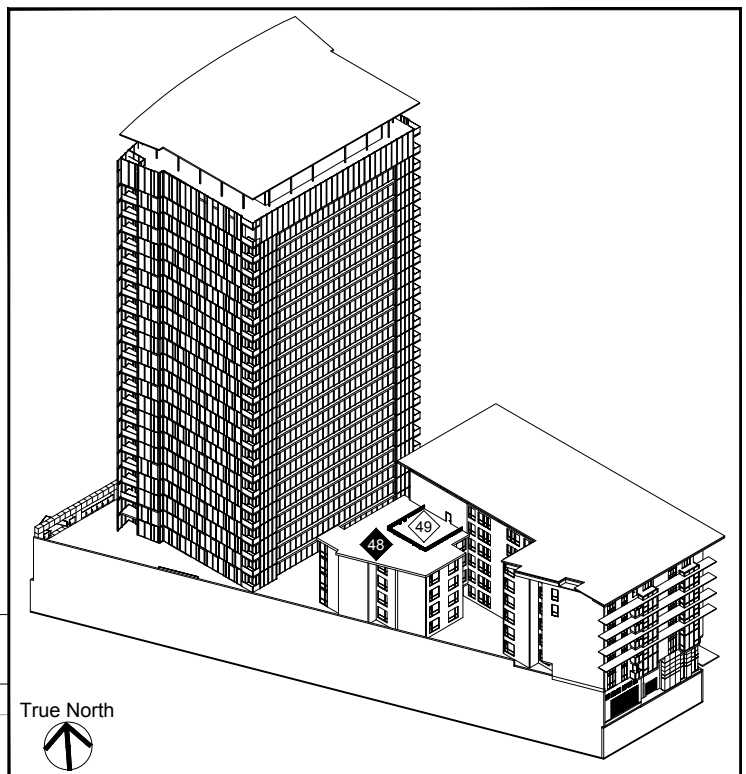
RWDI



Podium Level Plan
Approx. Scale: 1"=100'



North Tower - Level 26 Terrace
Approx. Scale: 1"=60'



True North

Isometric View
Approx. Scale: 1"=100'

INTERNATIONAL BOULEVARD

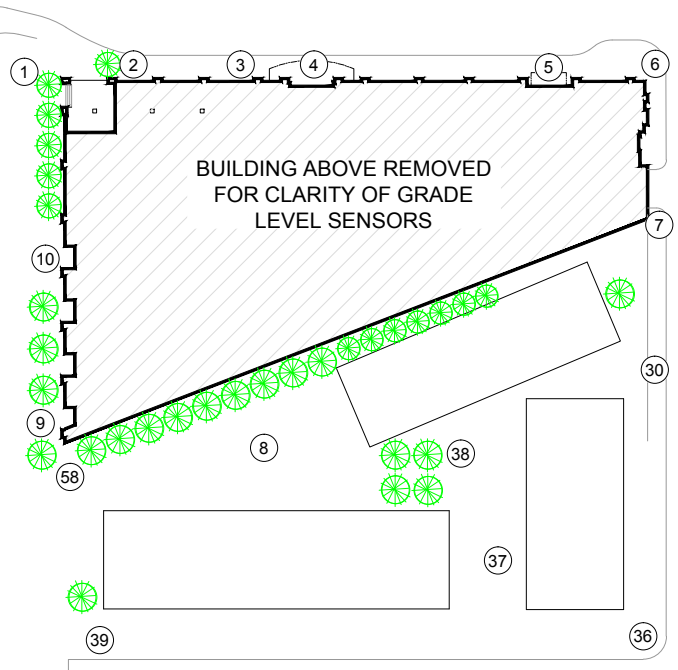
LAKESHORE AVENUE

LAKE MERRIT BOULEVARD

12TH STREET

11TH STREET

2ND AVENUE



LEGEND:

HAZARD CATEGORIES:
Pass
Exceeded

SENSOR LOCATION:
Grade Level
Podium Level
Level 7 & Level 26

LANDSCAPING:
Trees

0 50 100ft

Pedestrian Wind Hazard Conditions - Existing + Project + Landscape
Annual (January to December)

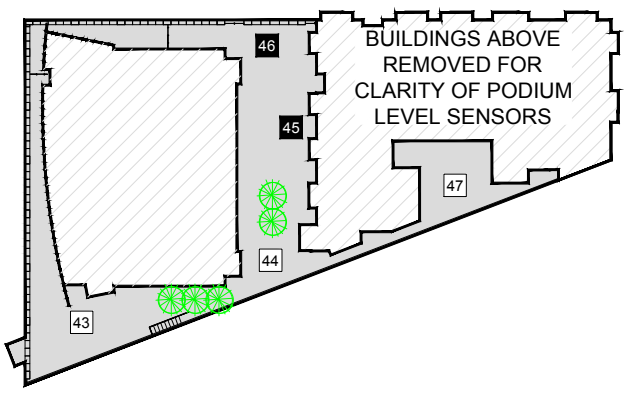
True North

Lakehouse Commons - Oakland, CA

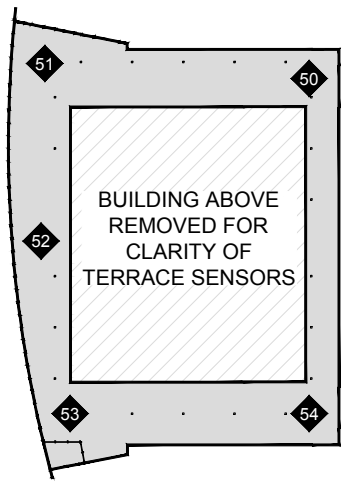
Project #1401361

Drawn by:	EM	Figure:	4c
Approx. Scale:		1"=100'	
Date Revised:		May. 10, 2016	

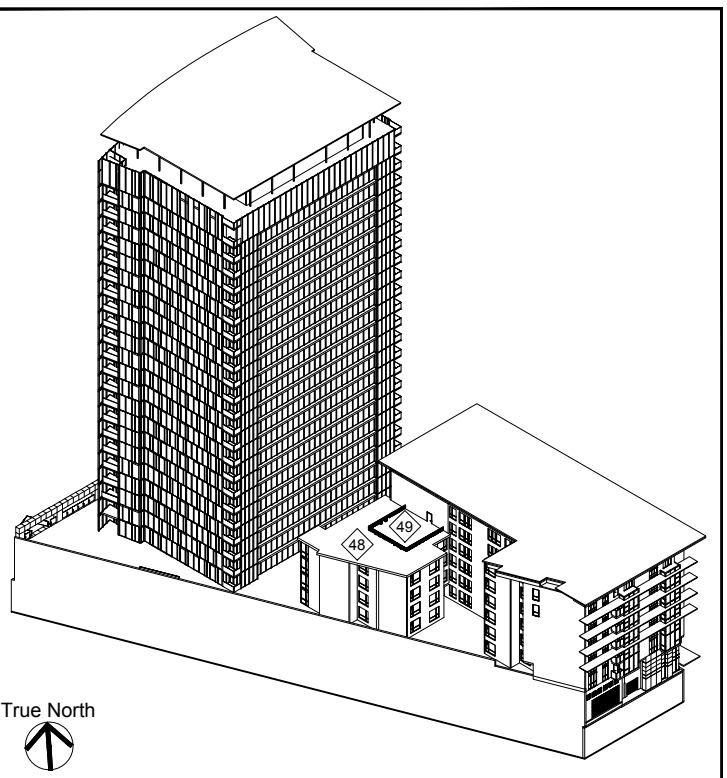
RWDI



Podium Level Plan
Approx. Scale: 1"=100'



North Tower - Level 26 Terrace
Approx. Scale: 1"=60'



True North

Isometric View
Approx. Scale: 1"=100'

INTERNATIONAL BOULEVARD

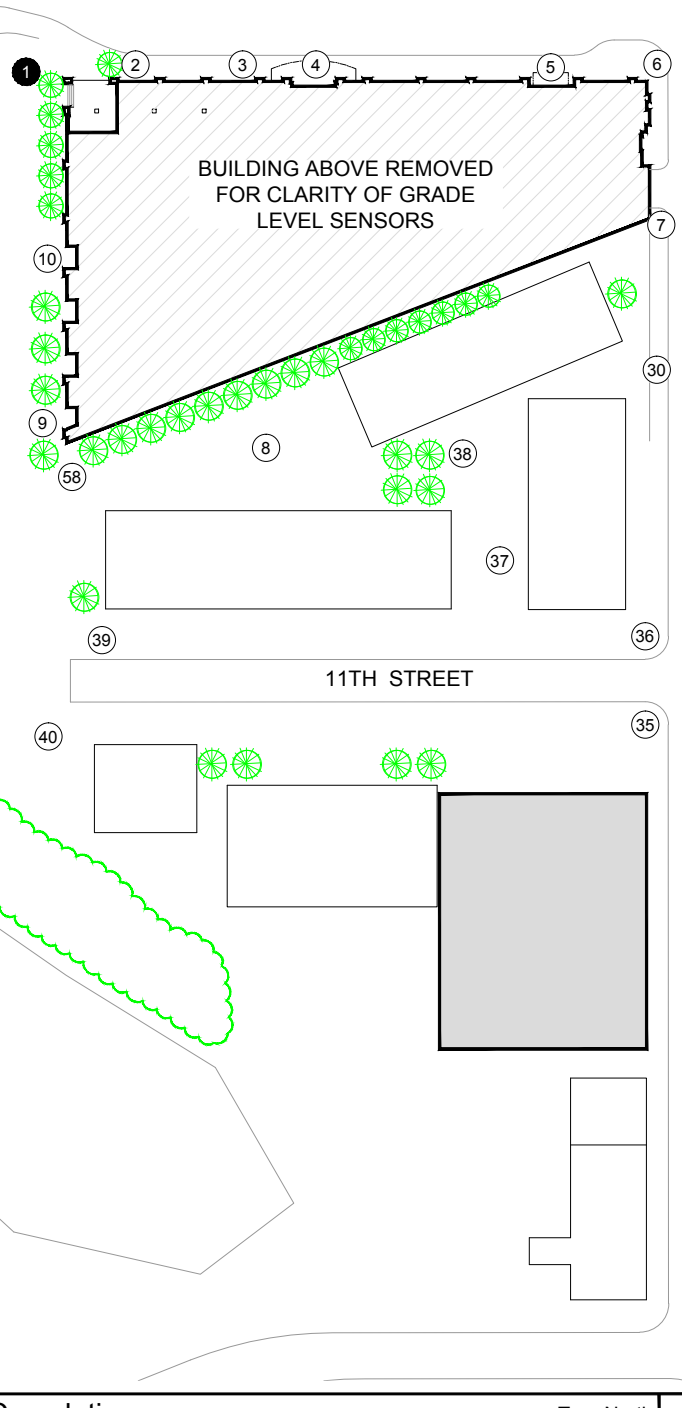
LAKESHORE AVENUE

LAKE MERRIT BOULEVARD

12TH STREET

11TH STREET

2ND AVENUE



LEGEND:

HAZARD CATEGORIES:
Pass
Exceeded

SENSOR LOCATION:
Grade Level
Podium Level
Level 7 & Level 26

LANDSCAPING:
Trees

0 50 100ft

Pedestrian Wind Hazard Conditions - Project + Landscape + Cumulative
Annual (January to December)

True North

Lakehouse Commons - Oakland, CA

Project #1401361

Drawn by:	EM	Figure:	4d
Approx. Scale:			1"=100'
Date Revised:			May. 10, 2016

RWDI

TABLES

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

Grade Level Locations

References	A Existing			B Existing + Project				C Existing + Project + Landscape				D Project + Landscape + Cumulative			
Location Number	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds
1	14	23	e	16	38	2	e	17	39	3	e	17	40	3	e
2	13	21	e	7	2	-6		6	2	-7		6	2	-7	
3	12	15	e	8	4	-4		8	4	-4		8	4	-4	
4	12	13	e	10	6	-2		9	5	-3		10	6	-2	
5	11	10		8	3	-3		8	2	-3		8	2	-3	
6	11	10		13	18	2	e	13	17	2	e	12	14	1	e
7	9	3		13	19	4	e	12	12	3	e	10	8	1	
8	10	5		13	21	3	e	12	14	2	e	13	17	3	e
9	13	19	e	12	14	-1	e	9	4	-4		9	5	-4	
10	13	22	e	11	10	-2		8	2	-5		8	1	-5	
11	14	26	e	16	36	2	e	16	36	2	e	16	35	2	e
12	14	25	e	13	17	-1	e	12	15	-2	e	12	15	-2	e
13	12	13	e	11	10	-1		11	10	-1		11	10	-1	
14	17	33	e	16	29	-1	e	15	29	-2	e	16	32	-1	e
15	16	29	e	16	35	0	e	16	35	0	e	16	35	0	e
16	13	17	e	13	20	0	e	13	20	0	e	13	20	0	e
17	16	26	e	16	31	0	e	16	32	0	e	16	32	0	e
18	13	21	e	17	38	4	e	16	36	3	e	16	36	3	e
19	10	5		14	24	4	e	14	23	4	e	14	24	4	e
20	12	16	e	8	3	-4		7	1	-5		8	2	-4	
21	14	25	e	10	6	-4		10	5	-4		10	6	-4	
22	11	10		8	1	-3		8	1	-3		8	2	-3	

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

References	A Existing			B Existing + Project				C Existing + Project + Landscape				D Project + Landscape + Cumulative			
Location Number	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds
23	12	13	e	9	4	-3		8	3	-4		9	5	-3	
24	10	7		10	6	0		10	5	0		10	7	0	
25	13	19	e	7	1	-6		7	1	-6		7	1	-6	
26	10	6		9	4	-1		9	3	-1		9	4	-1	
27	11	10		10	6	-1		9	4	-2		9	4	-2	
28	11	10		10	7	-1		9	5	-2		9	4	-2	
29	9	4		12	15	3	e	12	14	3	e	11	10	2	
30	9	4		11	10	2		11	10	2		11	10	2	
31	11	10		12	15	1	e	12	15	1	e	12	16	1	e
32	8	2		8	1	0		8	1	0		8	1	0	
33	7	1		7	1	0		6	1	-1		7	0	0	
34	10	6		10	6	0		9	3	-1		11	10	1	
35	11	10		12	13	1	e	9	6	-2		12	14	1	e
36	11	10		12	14	1	e	10	7	-1		14	25	3	e
37	8	2		11	10	3		11	10	3		11	10	3	
38	8	2		11	10	3		13	19	5	e	14	22	6	e
39	11	10		12	13	1	e	12	15	1	e	12	15	1	e
40	11	10		11	10	0		9	4	-2		10	7	-1	
41	12	15	e	11	10	-1		9	4	-3		9	5	-3	
42	13	20	e	11	10	-2		10	8	-3		11	10	-2	
55	12	18	e	11	10	-1		11	10	-1		12	13	0	e
56	10	8		11	10	1		10	8	0		10	8	0	
57	11	10		11	10	0		11	10	0		11	10	0	

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

References	A Existing			B Existing + Project				C Existing + Project + Landscape				D Project + Landscape + Cumulative			
Location Number	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds
58	13	19	e	13	21	0	e	12	14	-1	e	13	17	0	e
Average speed, Average % exceedance, Total exceedances	**12**	**13**	**22 of 46**	**11**	**13**	**-1**	**19 of 46**	**11**	**11**	**-1**	**17of 46**	**11**	**13**	**-1**	**18 of 46**

Table 1: Wind Comfort Results
Comfort Criterion Speed = 11 mph

Above Grade Locations

References	A Existing			B Existing + Project				C Existing + Project + Landscape				D Project + Landscape + Cumulative			
Location Number	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds	Wind Speed Exceeded 10% of the Time (mph)	Percent of Time Wind Speed Exceeds 11 mph	Speed Change Relative to Existing (mph)	Exceeds
43	Data Not Available			15	31	N/A	e	14	26	N/A	e	15	27	N/A	e
44				16	26	N/A	e	13	16	N/A	e	12	15	N/A	e
45				15	26	N/A	e	13	16	N/A	e	12	14	N/A	e
46				15	31	N/A	e	14	24	N/A	e	14	25	N/A	e
47				10	6	N/A		10	6	N/A		10	7	N/A	
48				17	35	N/A	e	17	34	N/A	e	16	32	N/A	e
49				12	15	N/A	e	12	16	N/A	e	12	14	N/A	e
50				11	10	N/A		11	10	N/A		11	10	N/A	
51				18	41	N/A	e	17	40	N/A	e	17	41	N/A	e
52				19	40	N/A	e	18	38	N/A	e	18	40	N/A	e
53				17	35	N/A	e	16	32	N/A	e	17	34	N/A	e
54				22	52	N/A	e	22	52	N/A	e	22	52	N/A	e
Average speed, Average % exceedance, Total exceedances	**Data Not Available**			**16**	**29**	**N/A**	**10 of 12**	**15**	**26**	**N/A**	**10 of 12**	**15**	**26**	**N/A**	**10 of 12**

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

Grade Level Locations

References	A Existing			B Existing + Project				C Existing + Project + Landscape				D Project + Landscape + Cumulative			
Location Number	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds
1	29	0		34	0	0		36	0	0		37	1	1	e
2	27	0		24	0	0		23	0	0		22	0	0	
3	25	0		28	0	0		27	0	0		27	0	0	
4	25	0		24	0	0		24	0	0		25	0	0	
5	23	0		30	0	0		30	0	0		30	0	0	
6	23	0		37	1	1	e	35	0	0		35	0	0	
7	21	0		29	0	0		25	0	0		24	0	0	
8	23	0		31	0	0		27	0	0		29	0	0	
9	28	0		32	0	0		25	0	0		25	0	0	
10	28	0		27	0	0		23	0	0		20	0	0	
11	30	0		35	0	0		34	0	0		34	0	0	
12	32	0		37	1	1	e	35	0	0		35	0	0	
13	37	1	e	35	0	-1		35	0	-1		35	0	-1	
14	37	2	e	37	1	-1	e	35	0	-2		36	0	-2	
15	36	0		35	0	0		35	0	0		36	0	0	
16	29	0		30	0	0		30	0	0		30	0	0	
17	36	0		33	0	0		33	0	0		33	0	0	
18	32	0		35	0	0		33	0	0		33	0	0	
19	27	0		31	0	0		30	0	0		31	0	0	
20	26	0		24	0	0		21	0	0		21	0	0	
21	29	0		24	0	0		23	0	0		22	0	0	
22	23	0		19	0	0		20	0	0		20	0	0	

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

References	A Existing			B Existing + Project				C Existing + Project + Landscape				D Project + Landscape + Cumulative			
Location Number	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds
23	26	0		23	0	0		23	0	0		24	0	0	
24	26	0		26	0	0		24	0	0		23	0	0	
25	27	0		17	0	0		16	0	0		16	0	0	
26	24	0		24	0	0		22	0	0		23	0	0	
27	25	0		35	0	0		34	0	0		34	0	0	
28	22	0		30	0	0		27	0	0		27	0	0	
29	22	0		26	0	0		25	0	0		25	0	0	
30	21	0		25	0	0		25	0	0		24	0	0	
31	29	0		27	0	0		26	0	0		27	0	0	
32	19	0		18	0	0		17	0	0		18	0	0	
33	17	0		17	0	0		16	0	0		15	0	0	
34	26	0		23	0	0		22	0	0		27	0	0	
35	27	0		27	0	0		25	0	0		32	0	0	
36	24	0		26	0	0		24	0	0		29	0	0	
37	20	0		23	0	0		26	0	0		26	0	0	
38	18	0		24	0	0		27	0	0		29	0	0	
39	28	0		31	0	0		31	0	0		31	0	0	
40	25	0		30	0	0		27	0	0		29	0	0	
41	27	0		29	0	0		27	0	0		27	0	0	
42	31	0		33	0	0		32	0	0		32	0	0	
55	27	0		26	0	0		25	0	0		27	0	0	
56	31	0		30	0	0		30	0	0		30	0	0	
57	32	0		30	0	0		30	0	0		31	0	0	

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

References	A Existing			B Existing + Project				C Existing + Project + Landscape				D Project + Landscape + Cumulative			
Location Number	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds
58	28	0		31	0	0		27	0	0		29	0	0	
Average speed, Total hours, Total exceedances	**27**	**3**	**2 of 46**	**28**	**3**	**0**	**3 of 46**	**27**	**0**	**-3**	**0 of 46**	**28**	**1**	**-2**	**1 of 46**

Table 2: Wind Hazard Results
Hazard Criterion Speed = 36 mph

Above Grade Locations

References	A Existing			B Existing + Project				C Existing + Project + Landscape				D Project + Landscape + Cumulative			
Location Number	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Exceeds	Wind Speed Exceeded 1hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds	Wind Speed Exceeded 1 hr/year (mph)	Hours/ Year Wind Speeds Exceed Hazard Criterion	Hours Change Relative to Existing	Exceeds
43	Data Not Available			35	0	N/A		32	0	N/A		34	0	N/A	
44				38	2	N/A	e	28	0	N/A		28	0	N/A	
45				42	4	N/A	e	39	3	N/A	e	39	3	N/A	e
46				41	4	N/A	e	40	3	N/A	e	40	4	N/A	e
47				22	0	N/A		22	0	N/A		22	0	N/A	
48				37	2	N/A	e	37	1	N/A	e	36	0	N/A	
49				26	0	N/A		26	0	N/A		26	0	N/A	
50				49	18	N/A	e	48	16	N/A	e	49	18	N/A	e
51				41	5	N/A	e	41	5	N/A	e	41	5	N/A	e
52				47	16	N/A	e	45	13	N/A	e	46	14	N/A	e
53				44	7	N/A	e	43	7	N/A	e	45	8	N/A	e
54				46	18	N/A	e	45	16	N/A	e	45	16	N/A	e
Average speed, Total hours, Total exceedances	**Data Not Available**			**39**	**76**	**N/A**	**9 of 12**	**37**	**64**	**N/A**	**8 of 12**	**38**	**68**	**N/A**	**7 of 12**

APPENDIX A

APPENDIX A: DRAWING LIST FOR MODEL CONSTRUCTION

The drawings and information listed below were received from LSA Associates Inc. and were used to construct the scale model of the proposed Lakehouse Commons. Should there be any design changes that deviate from this list of drawings, the results may change. Therefore, if changes in the design are made, it is recommended that RWDI be contacted and requested to review their potential effects on the pedestrian wind conditions presented in this report.

File Name	File Type	Date Received (dd/mm/yyyy)
20160415 - Lakehouse Commons - Revit Preview.rvt	Revit	18/04/2016

APPENDIX C

Lakehouse Commons Project Transportation Assessment

FEHR PEERS

MEMORANDUM

Date: May 24, 2016

To: Theresa Wallace, LSA

From: Sam Tabibnia and Ron Ramos

Subject: Lakehouse Commons Project – Transportation Assessment

OK16-0103

This memorandum summarizes the focused transportation impact analysis that Fehr & Peers conducted for the proposed Lakehouse Commons development in the City of Oakland. Fehr & Peers reviewed the proposed project for consistency with the assumptions contained in the Lake Merritt Station Area Plan (LMSAP) EIR for the site, assessed the project site plan for potential impacts on safety, and evaluated project impacts at two intersections that were not analyzed in the LMSAP Draft EIR.

Our analysis assumptions and findings are detailed below.

PROJECT DESCRIPTION

Based on a site plan dated April 15, 2016, the proposed project would consist of a 26-level north building providing 270 multi-family dwelling units and 2,100 square feet of retail, and an eight-level south building providing 91 multi-family dwelling units. The project, which would provide a total of 361 dwelling units, is along the west side of East 12th Street between Lake Merritt Boulevard and Second Avenue in Oakland. The project site is currently vacant. **Figure 1** shows the project site location.

The project would provide a four-level parking garage which would accommodate at least 250 parking spaces for both buildings. The garage would be accessed through a full-access gated driveway on Second Avenue approximately 70 feet west of East 12th Street.

CONSISTENCY WITH LMSAP

The proposed project site is located within the LMSAP area and the LMSAP EIR included development at the project site (identified as Opportunity Site 44) as part of the project.

As noted in the LMSAP EIR, the Development Program represents the reasonably foreseeable development expected to occur in the next 20 to 25 years in the Plan area. The Specific Plan and the EIR intend to provide flexibility in the location, amount, and type of development. Thus, as long as the trip generation for the overall Plan area remains below the levels estimated in the EIR, the traffic impact analysis presented in the EIR continues to remain valid.

Fehr & Peers also estimated the trip generation for the proposed project using the trip generation methodology developed for LMSAP EIR. As summarized in **Table 1**, the proposed project is estimated to generate 809 daily, 60 AM peak hour, and 65 PM peak hour vehicle trips.

Since the approval of the LMSAP EIR, five developments, including this project, have been proposed and are in some stage of the City's approval process at this time. **Table 2** summarizes the trip generation for these five developments. The five developments combined would generate about 5,614 daily trips, 303 AM peak hour, and 494 PM peak hour trips. The combined trip generation is less than the total trip generation estimated in the LMSAP EIR. Likewise, inclusive of the proposed project, the five developments currently proposed and under consideration within the Plan Area is substantially less than the total cumulative development approved within Plan Area by the LMSAP EIR.

Since the uses proposed by the project are consistent with the assumptions in LMSAP EIR and the proposed project would generate fewer automobile trips than assumed in LMSAP EIR, the proposed project would not result in additional impacts on traffic operations at the intersections analyzed in the LMSAP EIR.

TABLE 1
LAKEHOUSE COMMONS
TRIP GENERATION SUMMARY

Land Use	Units[1]	ITE Code	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Residential	361 DU	222[2]	1,516	27	81	108	77	49	126

Mode Split Reduction [3]			-843	-15	-45	-60	-43	-27	-70
Net Trips After Mode Split Reduction			*673*	*12*	*36*	*48*	*34*	*22*	*56*
Restaurant	2.1 KSF	932[4]	267	13	10	23	13	8	21
Mode Split Reduction [5]			-107	-5	-4	-9	-5	-3	-8
Net Trips After Mode Split Reduction			160	8	6	14	8	5	13
Pass-by Reduction [6]			-24	-1	-1	-2	-2	-2	-4
Net Trips After Pass-by Reduction			*136*	*7*	*5*	*12*	*6*	*3*	*9*
Net New Project Trips [7]			**809**	**19**	**41**	**60**	**40**	**25**	**65**

1. DU = Dwelling Units, KSF = 1,000 square feet.
2. ITE Trip *Generation (9th Edition)* land use category 222 (High-Rise Apartment):
   Daily: T = 4.2 * X
   AM Peak Hour: T) = 0.30* X (25% in, 75% out)
   PM Peak Hour: T) = 0.35* X (61% in, 39% out)
3. Per LMSAP DEIR, mode split reduction of 55.6% for residential uses based on the 2009 summary of commute patterns in the Lake Merritt Station Planning Area.
4. ITE *Trip Generation (9th Edition)* land use category 932 (High-Turnover (Sit-Down) Restaurant):
   Daily: T = 127.15*(X)
   AM Peak Hour: T = 10.81*(X) (55% in, 45% out)
   PM Peak Hour: T = 9.85*(X) (60% in, 40% out)
5. Per LMSAP DEIR, mode split reduction of 40% for daily and PM peak hour trips and 41% for AM peak hour trips based on the results of the 2000 Bay Area Travel Survey for retail trips of areas within one-half mile of a BART station in Alameda County.
6. Per LMSAP DEIR, Pass-by reduction of 15% for daily and AM peak hour trips and 34% for PM peak hour trips based on ITE *Trip Generation Handbook, Second Edition*.
7. The LMSAP EIR also accounted for the internal trips within each opportunity site. Considering the small size of the commercial component of the project, this analysis conservatively does not account for internal trips between the residential and commercial components of the project.

Source: Fehr & Peers, 2016.

TABLE 2
TRIP GENERATION FOR DEVELOPMENT PROJECTS WITHIN THE LMSAP AREA

Project Name	Daily	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
378 11th Street (Hampton Inn)[1]	580	26	18	44	23	23	46
250 14th Street[2]	738	11	41	52	43	25	68
226 13th Street[3]	1,285	19	64	83	72	46	118
301/385 12th Street (W12)[4]	2,202	-16	80	64	127	71	198
Lakehouse Commons[5]	*809*	*19*	*41*	*60*	*40*	*25*	*65*
Total Projects trips	**5,614**	**59**	**244**	**303**	**305**	**190**	**495**
LMSAP Estimated Trip Generation	26,837	1,370	725	2,095	996	1,399	2,395
Percent Complete	21%	4%	34%	14%	31%	14%	21%

1. Source: *378 11th Street, Oakland, CA* letter (June 17, 2015)
2. Source: *14th and Alice Residential Project – Transportation Assessment* (January 7, 2016)
3. Source: 226 *13th Street Project –Transportation Assessment* (March 18, 2016)
4. Source: *12th and Webster Street Residential Project – Transportation Assessment* (March 25, 2016)
5. See Table 1

Source: Fehr & Peers, 2016.

The LMSAP Draft EIR identified the following 29 significant impacts at transportation facilities serving the Plan Area:

- TRAN-1 – Lake Merritt Boulevard/11th Street, Existing Plus Project, Less than Significant with mitigation
- TRAN-2 – 1st Avenue/International Boulevard, Existing Plus Project, Significant and Unavoidable
- TRAN-3 – Madison Street/10th Street, Existing Plus Project, Less than Significant with mitigation
- TRAN-4 – Oak Street/10th Street, Existing Plus Project, Significant and Unavoidable
- TRAN-5 – Jackson Street/7th Street, Existing Plus Project, Less than Significant with mitigation
- TRAN-6 – Oak Street/6th Street, Existing Plus Project, Significant and Unavoidable
- TRAN-7 – Jackson Street/5th Street, Existing Plus Project, Significant and Unavoidable
- TRAN-8 – I-880 – Oak Street to 5th Avenue, Existing Plus Project, Significant and Unavoidable
- TRAN-9 – Brush Street/12th Street, 2020 Plus Project, Significant and Unavoidable
- TRAN-10 – Jackson Street/6th Street, 2020 Plus Project, Significant and Unavoidable
- TRAN-11 – Oak Street/6th Street, 2020 Plus Project, Significant and Unavoidable

- TRAN-12 – Oak Street/5th Street, 2020 Plus Project, Significant and Unavoidable
- TRAN-13 – Grand Avenue/Broadway, 2035 Plus Project, Less than Significant with mitigation
- TRAN-14 – Madison Street/14th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-15 – Madison Street/11th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-16 – Madison Street/10th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-17 – Oak Street/10th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-18 – Harrison Street/8th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-19 – Jackson Street/8th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-20 – Oak Street/8th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-21 – Jackson Street/7th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-22 – Oak Street/7th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-23 – 5th Avenue/7th Street/8th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-24 – Jackson Street/6th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-25 – Oak Street/6th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-26 – Oak Street/5th Street, 2035 Plus Project, Significant and Unavoidable
- TRAN-27 – Oak Street – 2nd Street to Embarcadero - 2035 Plus Project, Significant and Unavoidable
- TRAN-28 – Constitution Way/Marina Village Parkway - Existing Plus Project, Significant and Unavoidable
- TRAN-29 – Constitution Way/Atlantic Avenue - Existing Plus Project, Significant and Unavoidable

The proposed project would add minor amounts of traffic to each of these 29 impacted locations, and therefore contributes to each of these previously disclosed impacts and would be required to implement the previously approved mitigation measures. The City of Oakland has recently adopted a Transportation Impact Fee program, so the Project Sponsor has the option to pay the applicable fee in lieu and/or pay their fair share contribution (to be negotiated between the City of Oakland and Project Sponsor) to mitigate their share of the need for traffic improvements at these locations.

SITE PLAN REVIEW

An evaluation of access and circulation for all travel modes, based on the site plan dated April 15, 2016, is summarized below.

Vehicle Access and Circulation

The project would provide a four-level parking garage (two below grade, two above grade) which would be accessed through a full-access gated driveway on Second Avenue approximately 70 feet west of East 12th Street. The garage would accommodate at least 250 parking spaces through a combination of regular and tandem parking spaces.

Considering the proximity of the driveway on Second Avenue to East 12th Street, motorists exiting the garage may not have adequate sight distance of vehicles turning from East 12th Street onto Second Avenue. In addition, based on preliminary review of the site plan, motorists exiting the garage may not have adequate sight distance of pedestrians on the adjacent sidewalk.

Recommendation 1: While not required to address a CEQA impact, the following should be considered as part of the final design for the project:

- To ensure adequate sight distance for vehicles, prohibit on-street parking along project frontage on Second Avenue between the project driveway and East 12th Street and within 20 feet on the west side of the driveway.
- Redesign project driveway on Second Avenue to provide adequate sight distance between motorists exiting the driveway and pedestrians on the sidewalk (Since the recommendation above would prohibit on-street parking adjacent to the project site on Second Avenue, one potential design may be to widen the sidewalk along project frontage and install planter wells adjacent to the project driveway to move pedestrians away from the driveway and ensure adequate sight distance and maintain sidewalk width).

Bicycle Access and Bicycle Parking

Chapter 17.117 of the Oakland Municipal Code requires long-term and short-term bicycle parking for new buildings. Long-term bicycle parking includes lockers or locked enclosures and short-term bicycle parking includes bicycle racks. The Code requires one long-term space for every four multi-family dwelling units and one short-term space for every 20 multi-family dwelling units. Code requires the minimum level of bicycle parking, two long and short-term spaces, for the commercial component of the project.

Table 3 summarizes the bicycle parking requirement for the project. The project is required to provide 93 long-term and 20 short-term parking spaces. The site plan shows long-term bicycle

parking in three separate facilities on Levels 1 and 2, but does not identify the number of parking spaces. In addition, the site plan does not identify the locations for short-term bicycle parking. The long-term bicycle parking on the first level can be accessed through the Lobby on Lake Merritt Boulevard or the garage. Both long-term bicycle-parking on the second level of the garage can be accessed by elevators/stairs or biking through the garage. Using stairs or elevators to access bicycle parking on the second level maybe inconvenient for bicyclists, and riding through the garage may result in potential conflicts between motorists and bicyclists.

TABLE 3
BICYCLE PARKING REQUIREMENTS

Land Use	Size[1]	Long-Term		Short-Term	
		Spaces per Unit	Spaces	Spaces per Unit	Spaces
Apartments	361 DU	1:4 DU	91	1:20 DU	18
Commercial	2.1 KSF	Min.	2	Min.	2
Total Required Bicycle Spaces			93		20
Total Bicycle Parking Provided			N/A[3]		N/A[3]
Bicycle Parking Surplus/Deficit			**-93**		**-20**

1. DU = dwelling unit; KSF = 1,000 square feet
2. Based on Oakland Municipal Code Sections 17.117.090 and 17.117.110
3. Project site plan does not identify the amount of long-term bicycle parking or the location and amount of short-term bicycle parking.

Source: Fehr & Peers, 2016

Recommendation 2: While not required to address a CEQA impact, the following should be considered as part of the final design for the project:

- Consider relocating the long-term bicycle parking from the second level to a more convenient location on the ground level.
- Identify location and amount of short-term bicycle parking, consistent with the City of Oakland Bicycle Parking Ordinance. Short-term bicycle parking should be near the entrances to the commercial and both residential components of the project.
- Ensure that the identified bike rooms accommodate at least 93 long-term bicycle parking spaces

Pedestrian Access and Circulation

Each building would be accessed through a separate lobby that includes elevators and stairwells that connect to the residential levels and the garage. The 26-level north building would be accessed from the corner of Lake Merritt Boulevard/12th Street intersection. The north building also includes four townhomes that can be directly accessed on Lake Merritt Boulevard. The eight-level south building would be accessed on 12th Street just north of Second Avenue.

The sidewalks along the project frontage were recently constructed as part of the 12th Street Bridge Reconstruction Project and the two signalized intersections adjacent to the project at Lake Merritt Boulevard/East 12th Street and East 12th Street/2nd Avenue provide striped crosswalks with countdown pedestrian signal heads, adequate crossing time, and directional curb ramps adjacent to the project site. The project would not alter the existing 12-foot sidewalk along East 12th Street and 10-foot sidewalk along Second Avenue.

Transit Access

Transit service providers in the project vicinity include Bay Area Rapid Transit (BART) and AC Transit.

BART provides regional rail service throughout the East Bay and across the Bay. The nearest BART station to project site is the Lake Merritt BART Station, about 0.5 miles west. The proposed project would not modify access between the project site and the BART Station.

AC Transit is the primary bus service provider in the City of Oakland. AC Transit operates the following routes in the vicinity of the project:

- Routes 1 and 1R operate along International Boulevard with the nearest stop at Second Avenue, about 350 feet east of the project site.
- Routes 11 and 62 operate along 10th Street with the nearest stop at Second Avenue, about 600 feet west of the project site.
- Routes 14, 18, 26, and 40 operate on Lake Merritt Boulevard with the nearest stop between International Boulevard and East 15th Street, about 600 feet east of the project site.

AC Transit is currently designing the East Bay Bus Rapid Transit (BRT) Project along the International Boulevard corridor, which would replace Routes 1 and 1R. The project would

generally dedicate one travel lane in each direction to bus operations only in order to provide a quicker and more reliable bus service. Adjacent to the project, BRT would operate along southbound East 12th Street, and convert the two southbound mixed-flow lanes to one bus-only lane and one mixed-flow lane. The BRT project would continue to maintain the existing Class 2 bicycle lanes and parking along East 12th Street adjacent to the project site.

The nearest BRT stop to the project site would be on southbound East 12th Street, just south of Second Avenue. The corresponding northbound stop would be on International Boulevard just south of Second Avenue, about 350 feet east of the project site. Both stops can be accessed from the project site by crossing at protected signalized intersections.

No changes to the other bus routes operating in the vicinity of the project are planned and access between these bus stops and the proposed project would not modify access between the project site and these bus stops.

TRANSPORTATION DEMAND MANAGEMENT

Since the proposed project would generate more than 50 net new PM peak hour trips, The City's Standard Condition of Approval (SCA), which requires the preparation of a Transportation Demand Management (TDM) plan as described below, is applicable.

SCA 71 - Transportation and Parking Demand Management

a. Transportation and Parking Demand Management (TDM) Plan Required
Requirement: The project applicant shall submit a Transportation and Parking Demand Management (TDM) Plan for review and approval by the City.

i. The goals of the TDM Plan shall be the following:

- *Reduce vehicle traffic and parking demand generated by the project to the maximum extent practicable, consistent with the potential traffic and parking impacts of the project.*
- *Achieve the following project vehicle trip reductions (VTR):*
  - *Projects generating 50-99 net new AM or PM peak hour vehicle trips: 10 percent VTR*
  - *Projects generating 100 or more net new AM or PM peak hour vehicle trips: 20 percent VTR*
- *Increase pedestrian, bicycle, transit, and carpool/vanpool modes of travel. All four modes of travel shall be considered, as appropriate.*

- *Enhance the City's transportation system, consistent with City policies and programs.*

ii. *TDM strategies to consider include, but are not limited to, the following:*

- *Inclusion of additional long-term and short-term bicycle parking that meets the design standards set forth in chapter five of the Bicycle Master Plan and the Bicycle Parking Ordinance (chapter 17.117 of the Oakland Planning Code), and shower and locker facilities in commercial developments that exceed the requirement.*
- *Construction of and/or access to bikeways per the Bicycle Master Plan; construction of priority bikeways, on-site signage and bike lane striping.*
- *Installation of safety elements per the Pedestrian Master Plan (such as crosswalk striping, curb ramps, count down signals, bulb outs, etc.) to encourage convenient and safe crossing at arterials, in addition to safety elements required to address safety impacts of the project.*
- *Installation of amenities such as lighting, street trees, and trash receptacles per the Pedestrian Master Plan and any applicable streetscape plan.*
- *Construction and development of transit stops/shelters, pedestrian access, way finding signage, and lighting around transit stops per transit agency plans or negotiated improvements.*
- *Direct on-site sales of transit passes purchased and sold at a bulk group rate (through programs such as AC Transit Easy Pass or a similar program through another transit agency).*
- *Provision of a transit subsidy to employees or residents, determined by the project applicant and subject to review by the City, if employees or residents use transit or commute by other alternative modes.*
- *Provision of an ongoing contribution to transit service to the area between the project and nearest mass transit station prioritized as follows: 1) Contribution to AC Transit bus service; 2) Contribution to an existing area shuttle service; and 3) Establishment of new shuttle service. The amount of contribution (for any of the above scenarios) would be based upon the cost of establishing new shuttle service (Scenario 3).*
- *Guaranteed ride home program for employees, either through 511.org or through separate program.*
- *Pre-tax commuter benefits (commuter checks) for employees.*
- *Free designated parking spaces for on-site car-sharing program (such as City Car Share, Zip Car, etc.) and/or car-share membership for employees or tenants.*
- *On-site carpooling and/or vanpool program that includes preferential (discounted or free) parking for carpools and vanpools.*

- *Distribution of information concerning alternative transportation options.*
- *Parking spaces sold/leased separately for residential units. Charge employees for parking, or provide a cash incentive or transit pass alternative to a free parking space in commercial properties.*
- *Parking management strategies including attendant/valet parking and shared parking spaces.*
- *Requiring tenants to provide opportunities and the ability to work off-site.*
- *Allow employees or residents to adjust their work schedule in order to complete the basic work requirement of five eight-hour workdays by adjusting their schedule to reduce vehicle trips to the worksite (e.g., working four, ten-hour days; allowing employees to work from home two days per week).*
- *Provide or require tenants to provide employees with staggered work hours involving a shift in the set work hours of all employees at the workplace or flexible work hours involving individually determined work hours.*

The TDM Plan shall indicate the estimated VTR for each strategy, based on published research or guidelines where feasible. For TDM Plans containing ongoing operational VTR strategies, the Plan shall include an ongoing monitoring and enforcement program to ensure the Plan is implemented on an ongoing basis during project operation. If an annual compliance report is required, as explained below, the TDM Plan shall also specify the topics to be addressed in the annual report.

When Required: Prior to approval of construction-related permit

Initial Approval: Bureau of Planning

Monitoring/Inspection: N/A

b. TDM Implementation – Physical Improvements

Requirement: For VTR strategies involving physical improvements, the project applicant shall obtain the necessary permits/approvals from the City and install the improvements prior to the completion of the project.

When Required: Prior to building permit final

Initial Approval: Bureau of Building

Monitoring/Inspection: Bureau of Building

c. TDM Implementation – Operational Strategies

Requirement: For projects that generate 100 or more net new AM or PM peak hour vehicle trips and contain ongoing operational VTR strategies, the project applicant shall submit an annual compliance report for the first five years following completion of the project (or completion of each phase for phased projects) for review and approval by the City. The annual report shall document the status and effectiveness of the TDM program, including the actual VTR achieved by the project during operation. If deemed necessary, the City may elect to have a peer review consultant, paid for by the project applicant, review the annual report. If timely reports are not submitted and/or the annual reports indicate that

the project applicant has failed to implement the TDM Plan, the project will be considered in violation of the Conditions of Approval and the City may initiate enforcement action as provided for in these Conditions of Approval. The project shall not be considered in violation of this Condition if the TDM Plan is implemented but the VTR goal is not achieved.

When Required: Ongoing

Initial Approval: Bureau of Planning

Monitoring/Inspection: Bureau of Planning

FOCUSED TRAFFIC IMPACT ANALYSIS

This section discusses the impacts of the proposed project on traffic operations under Existing and 2035 conditions on two study intersections that were not analyzed in LMSAP EIR.

Trip Distribution and Assignment

The trip distribution and assignment process estimates how the vehicle trips generated by a project site would distribute across the roadway network. **Figure 2** shows the trip distribution for the project, which is based on the trip distribution documented in the LMSAP EIR, modified to account for the project location.

Trips generated by the proposed project, as shown in Table 1, were assigned to the roadway network according to the trip distribution shown on Figure 2. **Figure 3** shows the resulting trip assignment by roadway segment for the PM peak hour because the PM peak hour has the highest project trip generation.

As shown on Figure 3, the proposed project would add more than 20 peak hour trips to the following two intersections that were not analyzed in the LMSAP EIR:

1. Lake Merritt Boulevard/East 12th Street
2. East 12th Street/2nd Avenue

Therefore, this section assesses potential impacts at these two intersections.

Existing Traffic Conditions

Traffic data, consisting of automobile turning movement, as well as pedestrian and bicycle counts, were collected on clear days, while area schools were in normal session. The traffic data collection was conducted from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00 PM on September 16, 2014.

These time periods were selected because trips generated by the proposed project, in combination with background traffic, are expected to represent typical worst traffic conditions.

Figure 4 presents existing intersection lane configurations, traffic control devices, and peak hour traffic volumes. Based on the volumes and roadway configurations presented in Figure 4, Fehr & Peers calculated the Level of Service (LOS)[1] at the study intersections using the 2010 *Highway Capacity Manual* (HCM) methodologies.

Table 4 summarizes the existing intersection analysis results. The technical appendix provides the detailed LOS calculation sheets. Both intersections currently operate at LOS B during both AM and PM peak hours.

Existing Plus Project Conditions

Figure 4 shows traffic volumes under Existing Plus Project conditions, which consist of Existing Conditions traffic volumes plus added traffic volumes generated by the project.

Table 4 summarizes the intersection operations results for the Existing Plus Project conditions. Both study intersections would continue to operate at LOS B during both AM and PM peak hours. Therefore, the project would not result in a significant impact at either of these intersections.

[1] The operations of roadway facilities are typically described with the term level of service (LOS), a qualitative description of traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, which reflects free-flow conditions where there is very little interaction between vehicles, to LOS F, where the vehicle demand exceeds the capacity and high levels of vehicle delay result. LOS E represents "at-capacity" operations. When traffic volumes exceed the intersection capacity, stop-and-go conditions result and a vehicle may wait through multiple signal cycles before passing through the intersection; these operations are designated as LOS F.

TABLE 4
INTERSECTION LOS SUMMARY
EXISTING AND EXISTING PLUS PROJECT CONDITIONS

Intersection	Traffic Control[1]	Peak Hour	Existing Conditions		Existing Plus Project Conditions		Significant Impact?
			Delay [2] (seconds)	LOS	Delay [2] (seconds)	LOS	
1. Lake Merritt Boulevard/ East 12th Street	Signal	AM	13.3	B	13.6	B	No
		PM	11.7	B	12.2	B	No
2. East 12th Street/ Second Avenue	Signal	AM	9.8	A	10.6	B	No
		PM	10.7	B	11.1	B	No

Bold indicates intersections operating at an unacceptable level. All intersection located in Downtown or on arterials that provide direct access to Downtown where LOS E (not LOS D) is the threshold.
1. Signal = intersection is controlled by a traffic signal
2. For signalized intersections, average intersection delay and LOS based on the 2010 HCM method is shown.

Source: Fehr & Peers, 2016.

2035 Intersection Analysis

2035 conditions at the two study intersections are described below.

Traffic Forecasts

This analysis uses the same methodology used to forecast year 2035 traffic volumes for LMSAP EIR to forecast 2035 No Project volumes at the two study intersections. Consistent with the LMSAP EIR, the forecasts are based on the ACTC Model (released in June 2011), which uses land use data consistent with Association of Bay Area Government (ABAG) *Projection 2009*. The 2035 Plus Project volumes are forecast by adding the project traffic to the 2035 No Project traffic volumes. **Figure 4** shows the traffic volumes for the 2035 No Project and 2035 Plus Project scenarios.

2035 Roadway Network

The 2035 No Project and the 2035 Plus Project conditions assume the completion of the proposed BRT project along East 12th Street. As previously described, the BRT project would convert one-mixed flow lane along southbound East 12th Street to bus-only operations. The BRT Project would also prohibit left-turns on East 12th Street at Second Avenue.

2035 Intersection Operations

Table 5 summarizes intersection LOS calculations for 2035 No Project and 2035 Plus Project conditions. Both study intersections would operate at LOS C or better during both AM and PM peak hours under 2035 No Project and 2035 Plus Project conditions. Therefore, the project would not result in a significant impact at either of these intersections.

Project Driveway Operations

As previously described, the driveway for the proposed project would be on Second Avenue, about 70 feet west of East 12th Street. Based on the completed analysis, the 95th percentile queues on eastbound Second Avenue at East 12th Street are expected to spill back beyond the project driveway during both AM and PM peak hours. However, these queues would clear at the end of each signal cycle and allow vehicles to turn into and out of the driveway.

TABLE 5
INTERSECTION LOS SUMMARY
2035 CONDITIONS

Intersection	Traffic Control[1]	Peak Hour	2035 No Project Conditions		2035 Plus Project Conditions		Significant Impact?
			Delay [2] (seconds)	LOS	Delay [2] (seconds)	LOS	
1. Lake Merritt Boulevard/ East 12th Street	Signal	AM	16.6	B	17.0	B	No
		PM	19.3	B	20.0	C	No
2. East 12th Street/ Second Avenue	Signal	AM	10.1	B	10.8	B	No
		PM	15.4	B	16.4	B	No

Bold indicates intersections operating at an unacceptable level. All intersection located in Downtown or on arterials that provide direct access to Downtown where LOS E (not LOS D) is the threshold.
1. Signal = intersection is controlled by a traffic signal
2. For signalized intersections, average intersection delay and LOS based on the 2010 HCM method is shown.

Source: Fehr & Peers, 2016.

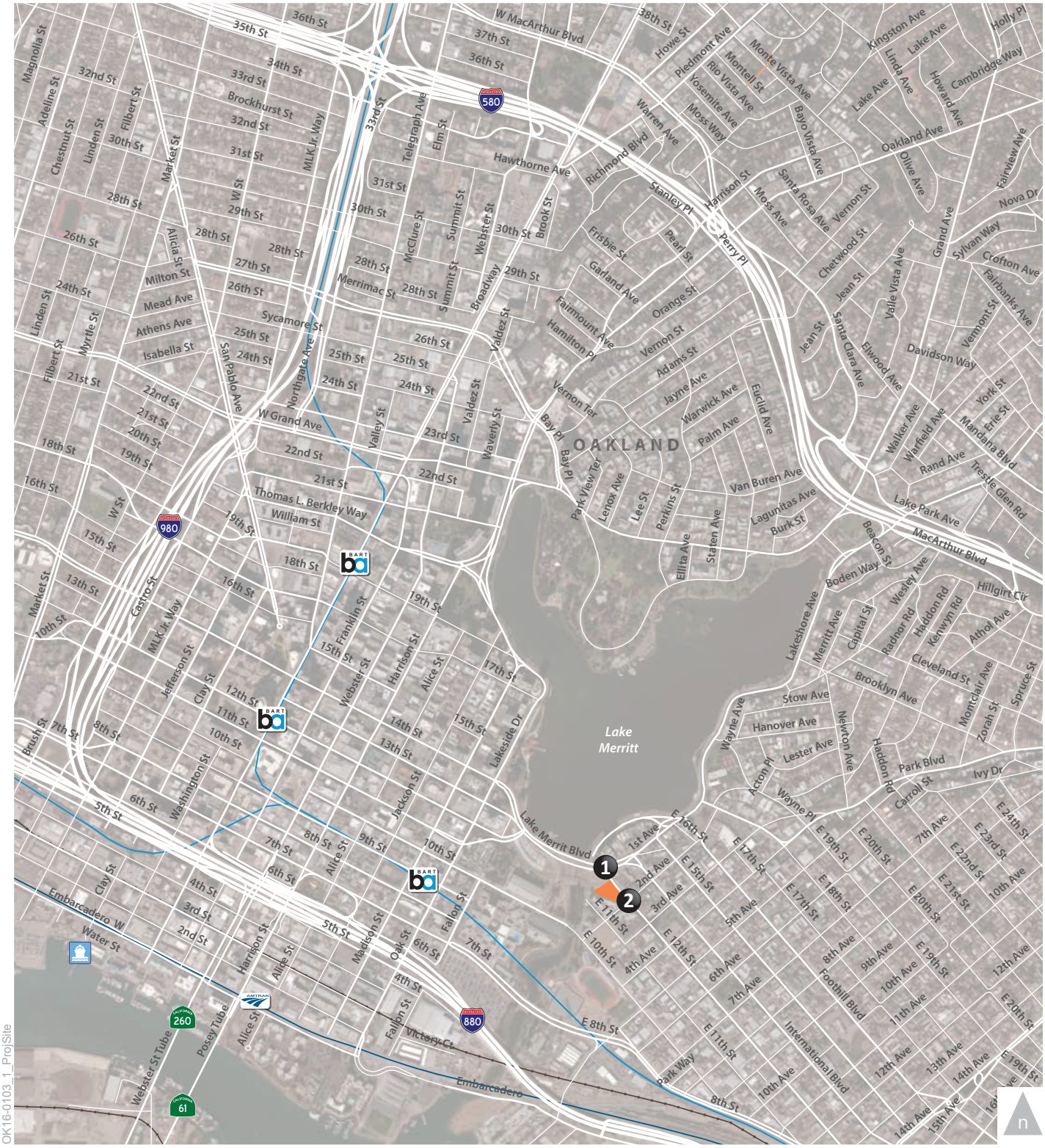
Please contact us with questions or comments.

Attachments:

Figures:

Figure 1 Project Site and Study Intersections
Figure 2 Project Trip Distribution

Appendix:



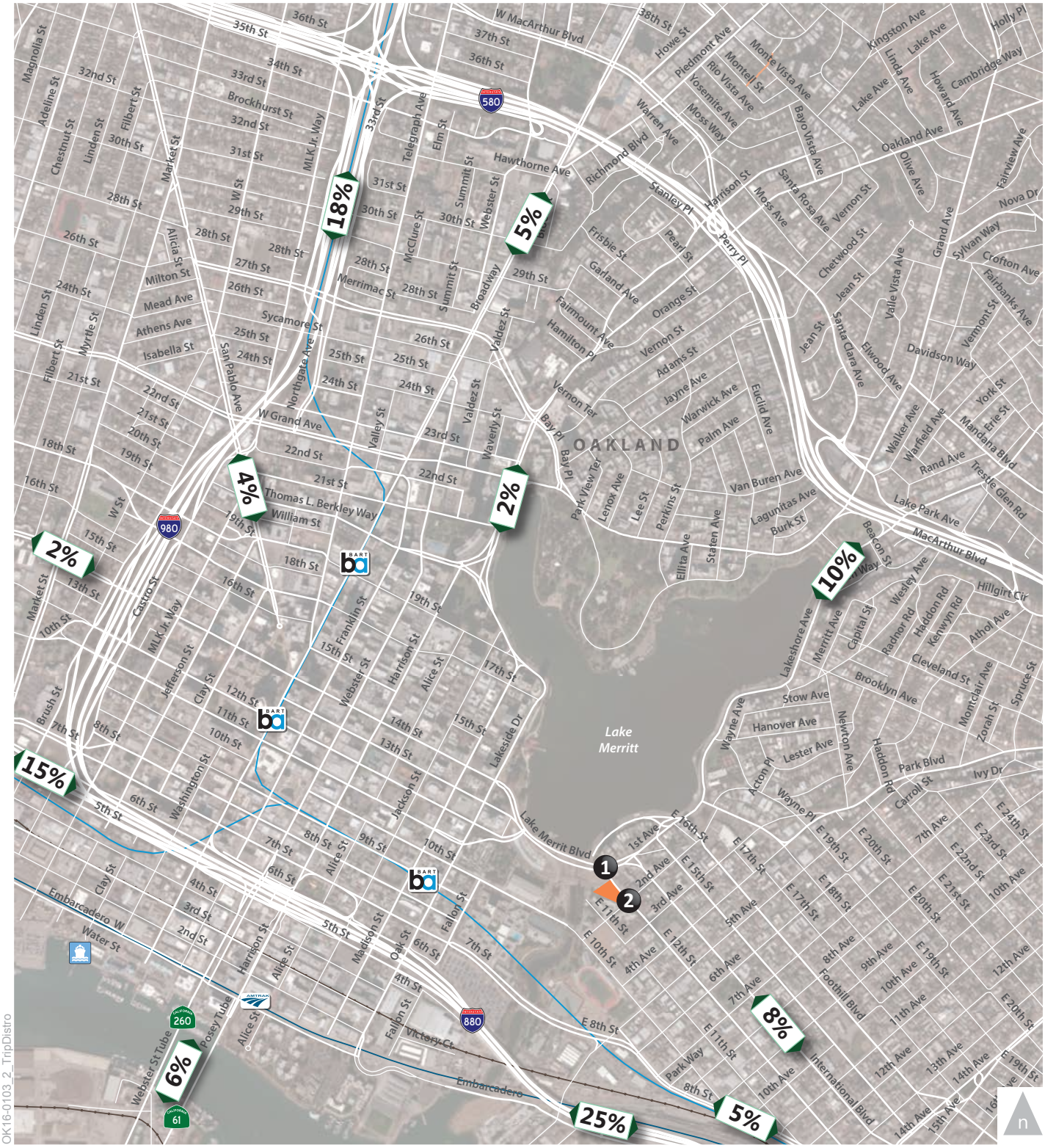
OK16-0103_1_ProjSite

LEGEND

Study Intersection Project Site

Figure 1

Project Site and Study Intersections



LEGEND

Study Intersection | Project Site | X% Project Trip Distribution

Figure 2

Project Trip Distribution

OK16-0103_3_ProjTripAssgn

LEGEND

Project Trips

- Greater than 20
- Between 10 and 20
- Between 5 and 10

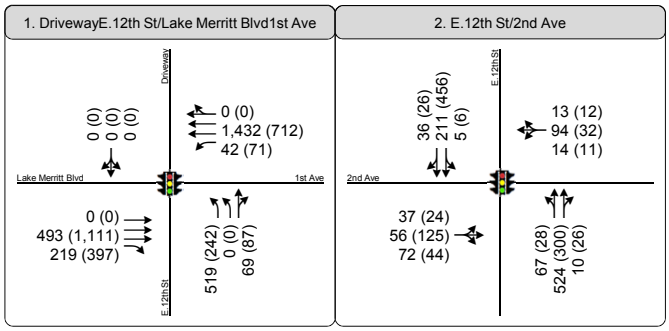
Study Intersection

Project Site

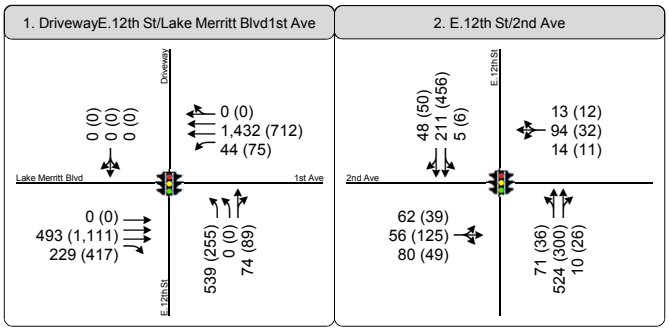
Figure 3

Project Trip Assignment

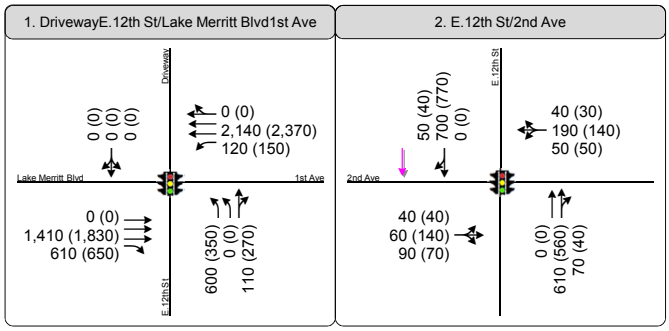
EXISTING (2014)



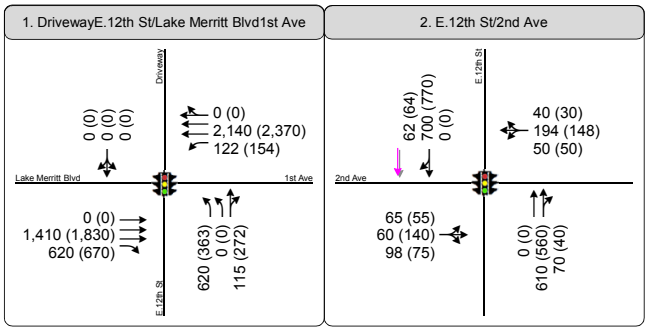
EXISTING PLUS PROJECT (2014)



2035 NO PROJECT



2035 PLUS PROJECT



LEGEND

XX (YY) AM (PM) Peak Hour Traffic Volume

Traffic Signal

Mixed Flow Lane

Bus Only Lane

Study Intersection

Project Site

Figure 4

Intersection Configuration and Peak Hour Volumes

Appendix A

LOS Calculations

FEHR PEERS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	493	219	42	1432	0	519	0	69	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.97		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	0	493	128	42	1432	0	519	0	16	0	0	0
Adj No. of Lanes	0	3	1	1	3	0	2	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	3009	922	64	3363	0	923	0	351	0	424	0
Arrive On Green	0.00	0.59	0.59	0.04	0.66	0.00	0.23	0.00	0.23	0.00	0.00	0.00
Sat Flow, veh/h	0	5253	1558	1774	5253	0	3351	0	1542	0	1863	0
Grp Volume(v), veh/h	0	493	128	42	1432	0	519	0	16	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1695	1558	1774	1695	0	1675	0	1542	0	1863	0
Q Serve(g_s), s	0.0	3.9	3.3	2.1	12.0	0.0	12.7	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	3.9	3.3	2.1	12.0	0.0	12.7	0.0	0.7	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	3009	922	64	3363	0	923	0	351	0	424	0
V/C Ratio(X)	0.00	0.16	0.14	0.66	0.43	0.00	0.56	0.00	0.05	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	3009	922	138	3363	0	1240	0	497	0	600	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.98	0.00	0.98	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.3	8.2	42.8	7.2	0.0	31.8	0.0	27.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.3	4.2	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	0.0	1.9	1.5	1.1	5.7	0.0	5.9	0.0	0.3	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	8.4	8.5	47.0	7.6	0.0	32.0	0.0	27.1	0.0	0.0	0.0
LnGrp LOS		A	A	D	A		C		C			
Approach Vol, veh/h		621			1474			535			0	
Approach Delay, s/veh		8.4			8.7			31.8			0.0	
Approach LOS		A			A			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	6.3	58.3		25.5		64.5		25.5
Change Period (Y+Rc), s	3.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	41.0		29.0		51.0		29.0
Max Q Clear Time (g_c+I1), s	4.1	5.9		0.0		14.0		14.7
Green Ext Time (p_c), s	0.0	4.1		0.0		4.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	13.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	37	56	72	14	94	13	67	524	10	5	211	36
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.85	0.90		0.84	0.98		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	37	56	35	14	94	7	67	524	9	5	211	27
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	104	142	73	62	272	19	287	2174	37	65	2223	278
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.74	0.74	0.74	1.00	1.00	1.00
Sat Flow, veh/h	301	812	419	101	1554	107	323	2953	51	32	3020	377
Grp Volume(v), veh/h	128	0	0	115	0	0	300	0	300	128	0	115
Grp Sat Flow(s),veh/h/ln	1531	0	0	1762	0	0	1645	0	1683	1826	0	1603
Q Serve(g_s), s	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.3	0.0	0.0	5.0	0.0	0.0	4.6	0.0	5.1	0.0	0.0	0.0
Prop In Lane	0.29		0.27	0.12		0.06	0.22		0.03	0.04		0.24
Lane Grp Cap(c), veh/h	320	0	0	353	0	0	1259	0	1239	1386	0	1180
V/C Ratio(X)	0.40	0.00	0.00	0.33	0.00	0.00	0.24	0.00	0.24	0.09	0.00	0.10
Avail Cap(c_a), veh/h	501	0	0	566	0	0	1259	0	1239	1386	0	1180
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.98	0.00	0.98
Uniform Delay (d), s/veh	33.2	0.0	0.0	32.7	0.0	0.0	3.7	0.0	3.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.2	0.0	0.0	0.4	0.0	0.5	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	2.9	0.0	0.0	2.5	0.0	0.0	2.5	0.0	2.5	0.0	0.0	0.1
LnGrp Delay(d),s/veh	33.5	0.0	0.0	32.9	0.0	0.0	4.2	0.0	4.3	0.1	0.0	0.2
LnGrp LOS	C			C			A		A	A		A
Approach Vol, veh/h		128			115			600			243	
Approach Delay, s/veh		33.5			32.9			4.2			0.1	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		70.2		19.8		70.2		19.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		27.0		55.0		27.0
Max Q Clear Time (g_c+I1), s		2.0		7.0		7.1		8.3
Green Ext Time (p_c), s		1.1		0.3		1.1		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	9.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1111	397	71	712	0	242	0	87	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.97		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	0	1111	276	71	712	0	242	0	12	0	0	0
Adj No. of Lanes	0	3	1	1	3	0	2	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	3507	1080	91	3906	0	604	0	218	0	263	0
Arrive On Green	0.00	0.69	0.69	0.05	0.77	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Sat Flow, veh/h	0	5253	1566	1774	5253	0	3354	0	1543	0	1863	0
Grp Volume(v), veh/h	0	1111	276	71	712	0	242	0	12	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1695	1566	1774	1695	0	1677	0	1543	0	1863	0
Q Serve(g_s), s	0.0	9.5	7.3	4.4	4.2	0.0	7.3	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.5	7.3	4.4	4.2	0.0	7.3	0.0	0.7	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	3507	1080	91	3906	0	604	0	218	0	263	0
V/C Ratio(X)	0.00	0.32	0.26	0.78	0.18	0.00	0.40	0.00	0.06	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	3507	1080	113	3906	0	1015	0	407	0	491	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.99	0.00	0.99	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.8	6.4	51.6	3.4	0.0	43.7	0.0	40.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.6	19.0	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	0.0	4.5	3.3	2.6	1.9	0.0	3.4	0.0	0.3	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	7.0	7.0	70.5	3.5	0.0	43.9	0.0	40.9	0.0	0.0	0.0
LnGrp LOS		A	A	E	A		D		D			
Approach Vol, veh/h		1387			783			254			0	
Approach Delay, s/veh		7.0			9.6			43.8			0.0	
Approach LOS		A			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	8.6	80.9		20.5		89.5		20.5
Change Period (Y+Rc), s	3.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	61.0		29.0		71.0		29.0
Max Q Clear Time (g_c+I1), s	6.4	11.5		0.0		6.2		9.3
Green Ext Time (p_c), s	0.0	3.6		0.0		3.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	24	125	44	11	32	12	28	300	26	6	456	26
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.91	0.96		0.92	0.99		0.96	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	24	125	33	11	32	2	28	300	23	6	456	24
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	184	45	79	199	11	209	2216	171	46	2591	135
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.78	0.78	0.78	1.00	1.00	1.00
Sat Flow, veh/h	140	1261	310	261	1366	76	219	2835	219	16	3316	173
Grp Volume(v), veh/h	182	0	0	45	0	0	179	0	172	256	0	230
Grp Sat Flow(s),veh/h/ln	1710	0	0	1702	0	0	1629	0	1644	1850	0	1655
Q Serve(g_s), s	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.1	0.0	0.0	2.4	0.0	0.0	2.5	0.0	2.8	0.0	0.0	0.0
Prop In Lane	0.13		0.18	0.24		0.04	0.16		0.13	0.02		0.10
Lane Grp Cap(c), veh/h	287	0	0	289	0	0	1311	0	1285	1479	0	1293
V/C Ratio(X)	0.64	0.00	0.00	0.16	0.00	0.00	0.14	0.00	0.13	0.17	0.00	0.18
Avail Cap(c_a), veh/h	514	0	0	508	0	0	1311	0	1285	1479	0	1293
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.93	0.00	0.93
Uniform Delay (d), s/veh	44.8	0.0	0.0	41.1	0.0	0.0	2.9	0.0	2.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.2	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	5.3	0.0	0.0	1.2	0.0	0.0	1.4	0.0	1.3	0.1	0.0	0.1
LnGrp Delay(d),s/veh	45.6	0.0	0.0	41.2	0.0	0.0	3.1	0.0	3.2	0.2	0.0	0.3
LnGrp LOS	D			D			A		A	A		A
Approach Vol, veh/h		182			45			351			486	
Approach Delay, s/veh		45.6			41.2			3.1			0.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		90.0		20.0		90.0		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		31.0		71.0		31.0
Max Q Clear Time (g_c+I1), s		2.0		4.4		4.8		13.1
Green Ext Time (p_c), s		1.1		0.3		1.1		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	10.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	493	229	44	1432	0	539	0	74	0	0	0
Future Volume (veh/h)	0	493	229	44	1432	0	539	0	74	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.97		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	0	493	133	44	1432	0	539	0	18	0	0	0
Adj No. of Lanes	0	3	1	1	3	0	2	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	2987	915	66	3345	0	935	0	356	0	431	0
Arrive On Green	0.00	0.59	0.59	0.04	0.66	0.00	0.23	0.00	0.23	0.00	0.00	0.00
Sat Flow, veh/h	0	5253	1557	1774	5253	0	3352	0	1542	0	1863	0
Grp Volume(v), veh/h	0	493	133	44	1432	0	539	0	18	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1695	1557	1774	1695	0	1676	0	1542	0	1863	0
Q Serve(g_s), s	0.0	4.0	3.5	2.2	12.1	0.0	13.3	0.0	0.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	4.0	3.5	2.2	12.1	0.0	13.3	0.0	0.8	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	2987	915	66	3345	0	935	0	356	0	431	0
V/C Ratio(X)	0.00	0.17	0.15	0.67	0.43	0.00	0.58	0.00	0.05	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2987	915	138	3345	0	1240	0	497	0	600	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.97	0.00	0.97	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.5	8.4	42.8	7.3	0.0	31.7	0.0	26.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.3	4.3	0.4	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	1.9	1.6	1.2	5.7	0.0	6.2	0.0	0.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	8.6	8.7	47.1	7.7	0.0	31.9	0.0	26.9	0.0	0.0	0.0
LnGrp LOS		A	A	D	A		C		C			
Approach Vol, veh/h		626			1476			557			0	
Approach Delay, s/veh		8.6			8.9			31.7			0.0	
Approach LOS		A			A			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	6.3	57.9		25.8		64.2		25.8
Change Period (Y+Rc), s	3.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	41.0		29.0		51.0		29.0
Max Q Clear Time (g_c+I1), s	4.2	6.0		0.0		14.1		15.3
Green Ext Time (p_c), s	0.0	4.1		0.0		4.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	13.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	56	80	14	94	13	71	524	10	5	211	48
Future Volume (veh/h)	62	56	80	14	94	13	71	524	10	5	211	48
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.90		0.86	0.92		0.85	0.98		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	62	56	48	14	94	7	71	524	9	5	211	36
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	135	116	80	63	289	20	296	2119	36	63	2102	348
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.73	0.73	0.73	1.00	1.00	1.00
Sat Flow, veh/h	433	627	431	99	1558	107	340	2921	50	29	2897	479
Grp Volume(v), veh/h	166	0	0	115	0	0	301	0	303	134	0	118
Grp Sat Flow(s),veh/h/ln	1491	0	0	1764	0	0	1628	0	1683	1829	0	1577
Q Serve(g_s), s	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.6	0.0	0.0	4.9	0.0	0.0	4.8	0.0	5.4	0.0	0.0	0.0
Prop In Lane	0.37		0.29	0.12		0.06	0.24		0.03	0.04		0.30
Lane Grp Cap(c), veh/h	331	0	0	372	0	0	1231	0	1221	1368	0	1145
V/C Ratio(X)	0.50	0.00	0.00	0.31	0.00	0.00	0.24	0.00	0.25	0.10	0.00	0.10
Avail Cap(c_a), veh/h	492	0	0	567	0	0	1231	0	1221	1368	0	1145
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.98	0.00	0.98
Uniform Delay (d), s/veh	33.2	0.0	0.0	31.9	0.0	0.0	4.0	0.0	4.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.2	0.0	0.0	0.5	0.0	0.5	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	0.0	0.0	2.5	0.0	0.0	2.6	0.0	2.6	0.1	0.0	0.1
LnGrp Delay(d),s/veh	33.6	0.0	0.0	32.0	0.0	0.0	4.5	0.0	4.6	0.1	0.0	0.2
LnGrp LOS	C			C			A		A	A		A
Approach Vol, veh/h		166			115			604			252	
Approach Delay, s/veh		33.6			32.0			4.6			0.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.3		20.7		69.3		20.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		27.0		55.0		27.0
Max Q Clear Time (g_c+I1), s		2.0		6.9		7.4		10.6
Green Ext Time (p_c), s		1.1		0.4		1.1		0.4

Intersection Summary		
HCM 2010 Ctrl Delay		10.6
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1111	417	75	712	0	255	0	89	0	0	0
Future Volume (veh/h)	0	1111	417	75	712	0	255	0	89	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	0.97		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	0	1111	289	75	712	0	255	0	12	0	0	0
Adj No. of Lanes	0	3	1	1	3	0	2	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	3481	1072	96	3893	0	612	0	222	0	267	0
Arrive On Green	0.00	0.68	0.68	0.05	0.77	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Sat Flow, veh/h	0	5253	1566	1774	5253	0	3355	0	1544	0	1863	0
Grp Volume(v), veh/h	0	1111	289	75	712	0	255	0	12	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1695	1566	1774	1695	0	1678	0	1544	0	1863	0
Q Serve(g_s), s	0.0	9.7	7.9	4.6	4.2	0.0	7.7	0.0	0.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.7	7.9	4.6	4.2	0.0	7.7	0.0	0.7	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	3481	1072	96	3893	0	612	0	222	0	267	0
V/C Ratio(X)	0.00	0.32	0.27	0.78	0.18	0.00	0.42	0.00	0.05	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	3481	1072	113	3893	0	1015	0	407	0	491	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.99	0.00	0.99	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.0	6.7	51.4	3.5	0.0	43.7	0.0	40.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.6	21.5	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.6	3.6	2.8	1.9	0.0	3.6	0.0	0.3	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	7.3	7.3	72.9	3.6	0.0	43.8	0.0	40.7	0.0	0.0	0.0
LnGrp LOS		A	A	E	A		D		D			
Approach Vol, veh/h		1400			787			267			0	
Approach Delay, s/veh		7.3			10.2			43.7			0.0	
Approach LOS		A			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	8.9	80.3		20.8		89.2		20.8
Change Period (Y+Rc), s	3.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	61.0		29.0		71.0		29.0
Max Q Clear Time (g_c+I1), s	6.6	11.7		0.0		6.2		9.7
Green Ext Time (p_c), s	0.0	3.6		0.0		3.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	39	125	49	11	32	12	36	300	26	6	456	50
Future Volume (veh/h)	39	125	49	11	32	12	36	300	26	6	456	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.92	0.97		0.92	0.99		0.96	0.99		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	39	125	37	11	32	2	36	300	23	6	456	45
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	174	47	80	205	11	253	2099	163	45	2437	237
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.77	0.77	0.77	1.00	1.00	1.00
Sat Flow, veh/h	233	1131	308	258	1331	74	276	2715	212	15	3152	307
Grp Volume(v), veh/h	201	0	0	45	0	0	180	0	179	269	0	238
Grp Sat Flow(s),veh/h/ln	1672	0	0	1662	0	0	1557	0	1646	1851	0	1623
Q Serve(g_s), s	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.6	0.0	0.0	2.3	0.0	0.0	2.7	0.0	3.0	0.0	0.0	0.0
Prop In Lane	0.19		0.18	0.24		0.04	0.20		0.13	0.02		0.19
Lane Grp Cap(c), veh/h	297	0	0	297	0	0	1243	0	1272	1464	0	1255
V/C Ratio(X)	0.68	0.00	0.00	0.15	0.00	0.00	0.14	0.00	0.14	0.18	0.00	0.19
Avail Cap(c_a), veh/h	506	0	0	503	0	0	1243	0	1272	1464	0	1255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	0.00	1.00	0.92	0.00	0.92
Uniform Delay (d), s/veh	44.6	0.0	0.0	40.3	0.0	0.0	3.1	0.0	3.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.2	0.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	0.0	0.0	1.2	0.0	0.0	1.4	0.0	1.4	0.1	0.0	0.1
LnGrp Delay(d),s/veh	45.6	0.0	0.0	40.4	0.0	0.0	3.4	0.0	3.4	0.3	0.0	0.3
LnGrp LOS	D			D			A		A	A		A
Approach Vol, veh/h		201			45			359			507	
Approach Delay, s/veh		45.6			40.4			3.4			0.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		21.0		89.0		21.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		31.0		71.0		31.0
Max Q Clear Time (g_c+I1), s		2.0		4.3		5.0		14.6
Green Ext Time (p_c), s		1.1		0.3		1.1		0.3

Intersection Summary		
HCM 2010 Ctrl Delay		11.1
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1410	610	120	2140	0	600	0	110	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.98		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	0	1410	363	120	2140	0	600	0	28	0	0	0
Adj No. of Lanes	0	3	1	1	3	0	2	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	2725	823	138	3290	0	972	0	374	0	451	0
Arrive On Green	0.00	0.54	0.54	0.08	0.65	0.00	0.24	0.00	0.24	0.00	0.00	0.00
Sat Flow, veh/h	0	5253	1536	1774	5253	0	3356	0	1544	0	1863	0
Grp Volume(v), veh/h	0	1410	363	120	2140	0	600	0	28	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1695	1536	1774	1695	0	1678	0	1544	0	1863	0
Q Serve(g_s), s	0.0	16.0	12.9	6.0	23.1	0.0	14.9	0.0	1.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	16.0	12.9	6.0	23.1	0.0	14.9	0.0	1.3	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	2725	823	138	3290	0	972	0	374	0	451	0
V/C Ratio(X)	0.00	0.52	0.44	0.87	0.65	0.00	0.62	0.00	0.07	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2725	823	138	3290	0	1241	0	498	0	600	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.97	0.00	0.97	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.4	12.7	41.0	9.7	0.0	31.5	0.0	26.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.7	39.5	1.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	0.0	7.6	5.8	4.4	11.0	0.0	6.9	0.0	0.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	14.1	14.4	80.6	10.7	0.0	31.7	0.0	26.4	0.0	0.0	0.0
LnGrp LOS		B	B	F	B		C		C			
Approach Vol, veh/h		1773			2260			628			0	
Approach Delay, s/veh		14.2			14.4			31.5			0.0	
Approach LOS		B			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	53.2		26.8		63.2		26.8
Change Period (Y+Rc), s	3.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	41.0		29.0		51.0		29.0
Max Q Clear Time (g_c+I1), s	8.0	18.0		0.0		25.1		16.9
Green Ext Time (p_c), s	0.0	10.0		0.0		10.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	16.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	60	90	50	190	40	0	610	70	0	700	50
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.79	0.87		0.87	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	40	60	49	50	190	32	0	610	63	0	700	48
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	107	146	99	93	260	41	0	2271	234	0	1209	83
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.00	0.70	0.70	0.00	1.00	1.00
Sat Flow, veh/h	272	706	479	221	1257	197	0	3316	332	0	1716	118
Grp Volume(v), veh/h	149	0	0	272	0	0	0	334	339	0	0	748
Grp Sat Flow(s),veh/h/ln	1457	0	0	1676	0	0	0	1770	1786	0	0	1834
Q Serve(g_s), s	0.0	0.0	0.0	5.9	0.0	0.0	0.0	6.2	6.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.6	0.0	0.0	13.6	0.0	0.0	0.0	6.2	6.2	0.0	0.0	0.0
Prop In Lane	0.27		0.33	0.18		0.12	0.00		0.19	0.00		0.06
Lane Grp Cap(c), veh/h	352	0	0	393	0	0	0	1247	1258	0	0	1292
V/C Ratio(X)	0.42	0.00	0.00	0.69	0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.58
Avail Cap(c_a), veh/h	480	0	0	543	0	0	0	1247	1258	0	0	1292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.71
Uniform Delay (d), s/veh	31.3	0.0	0.0	33.5	0.0	0.0	0.0	4.8	4.8	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.8	0.0	0.0	0.0	0.5	0.5	0.0	0.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	3.3	0.0	0.0	6.4	0.0	0.0	0.0	3.2	3.2	0.0	0.0	0.5
LnGrp Delay(d),s/veh	31.6	0.0	0.0	34.4	0.0	0.0	0.0	5.4	5.4	0.0	0.0	1.3
LnGrp LOS	C			C				A	A			A
Approach Vol, veh/h		149			272			673			748	
Approach Delay, s/veh		31.6			34.4			5.4			1.3	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		67.4		22.6		67.4		22.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		27.0		55.0		27.0
Max Q Clear Time (g_c+I1), s		2.0		15.6		8.2		9.6
Green Ext Time (p_c), s		2.0		0.6		2.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	1830	650	150	2370	0	350	0	270	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.98		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	0	1830	501	150	2370	0	350	0	168	0	0	0
Adj No. of Lanes	0	3	1	1	3	0	2	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	3317	1013	113	3779	0	690	0	257	0	309	0
Arrive On Green	0.00	0.65	0.65	0.06	0.74	0.00	0.17	0.00	0.17	0.00	0.00	0.00
Sat Flow, veh/h	0	5253	1553	1774	5253	0	3367	0	1549	0	1863	0
Grp Volume(v), veh/h	0	1830	501	150	2370	0	350	0	168	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1695	1553	1774	1695	0	1684	0	1549	0	1863	0
Q Serve(g_s), s	0.0	21.5	18.2	7.0	24.7	0.0	10.6	0.0	11.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	21.5	18.2	7.0	24.7	0.0	10.6	0.0	11.2	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	3317	1013	113	3779	0	690	0	257	0	309	0
V/C Ratio(X)	0.00	0.55	0.49	1.33	0.63	0.00	0.51	0.00	0.65	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	3317	1013	113	3779	0	1019	0	408	0	491	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.98	0.00	0.98	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.4	9.8	51.5	6.8	0.0	42.7	0.0	42.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.7	196.4	0.8	0.0	0.2	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	0.0	10.2	8.3	9.6	11.7	0.0	5.0	0.0	4.8	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	11.1	11.5	247.9	7.6	0.0	42.9	0.0	43.9	0.0	0.0	0.0
LnGrp LOS		B	B	F	A		D		D			
Approach Vol, veh/h		2331			2520			518			0	
Approach Delay, s/veh		11.2			21.9			43.2			0.0	
Approach LOS		B			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	76.7		23.3		86.7		23.3
Change Period (Y+Rc), s	3.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	61.0		29.0		71.0		29.0
Max Q Clear Time (g_c+I1), s	9.0	23.5		0.0		26.7		13.2
Green Ext Time (p_c), s	0.0	16.1		0.0		17.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	40	140	70	50	140	30	0	560	40	0	770	40
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.87	0.96		0.93	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	40	140	55	50	140	24	0	560	37	0	770	39
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	71	177	64	84	183	29	0	2532	167	0	1321	67
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.00	0.75	0.75	0.00	0.75	0.75
Sat Flow, veh/h	189	1020	369	249	1053	164	0	3453	222	0	1753	89
Grp Volume(v), veh/h	235	0	0	214	0	0	0	294	303	0	0	809
Grp Sat Flow(s),veh/h/ln	1578	0	0	1467	0	0	0	1770	1812	0	0	1842
Q Serve(g_s), s	0.1	0.0	0.0	0.0	0.0	0.0	0.0	5.4	5.4	0.0	0.0	21.2
Cycle Q Clear(g_c), s	15.9	0.0	0.0	15.8	0.0	0.0	0.0	5.4	5.4	0.0	0.0	21.2
Prop In Lane	0.17		0.23	0.23		0.11	0.00		0.12	0.00		0.05
Lane Grp Cap(c), veh/h	312	0	0	295	0	0	0	1334	1366	0	0	1388
V/C Ratio(X)	0.75	0.00	0.00	0.73	0.00	0.00	0.00	0.22	0.22	0.00	0.00	0.58
Avail Cap(c_a), veh/h	483	0	0	466	0	0	0	1334	1366	0	0	1388
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.60
Uniform Delay (d), s/veh	43.9	0.0	0.0	43.6	0.0	0.0	0.0	4.0	4.0	0.0	0.0	6.0
Incr Delay (d2), s/veh	1.4	0.0	0.0	1.3	0.0	0.0	0.0	0.4	0.4	0.0	0.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(-26165%),veh/ln	7.0	0.0	0.0	6.4	0.0	0.0	0.0	2.8	2.8	0.0	0.0	11.0
LnGrp Delay(d),s/veh	45.3	0.0	0.0	44.8	0.0	0.0	0.0	4.4	4.4	0.0	0.0	7.0
LnGrp LOS	D			D				A	A			A
Approach Vol, veh/h		235			214			597			809	
Approach Delay, s/veh		45.3			44.8			4.4			7.0	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		86.9		23.1		86.9		23.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		31.0		71.0		31.0
Max Q Clear Time (g_c+I1), s		23.2		17.8		7.4		17.9
Green Ext Time (p_c), s		2.0		0.6		2.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1410	620	122	2140	0	620	0	115	0	0	0
Future Volume (veh/h)	0	1410	620	122	2140	0	620	0	115	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.98		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	0	1410	365	122	2140	0	620	0	30	0	0	0
Adj No. of Lanes	0	3	1	1	3	0	2	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	2707	817	138	3272	0	984	0	379	0	457	0
Arrive On Green	0.00	0.53	0.53	0.08	0.64	0.00	0.25	0.00	0.25	0.00	0.00	0.00
Sat Flow, veh/h	0	5253	1536	1774	5253	0	3358	0	1545	0	1863	0
Grp Volume(v), veh/h	0	1410	365	122	2140	0	620	0	30	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1695	1536	1774	1695	0	1679	0	1545	0	1863	0
Q Serve(g_s), s	0.0	16.1	13.1	6.1	23.3	0.0	15.4	0.0	1.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	16.1	13.1	6.1	23.3	0.0	15.4	0.0	1.3	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	2707	817	138	3272	0	984	0	379	0	457	0
V/C Ratio(X)	0.00	0.52	0.45	0.88	0.65	0.00	0.63	0.00	0.08	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	2707	817	138	3272	0	1242	0	498	0	600	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.97	0.00	0.97	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	13.6	12.9	41.1	9.9	0.0	31.4	0.0	26.1	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.8	43.0	1.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.6	5.9	4.7	11.0	0.0	7.2	0.0	0.6	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	14.3	14.7	84.1	10.9	0.0	31.7	0.0	26.2	0.0	0.0	0.0
LnGrp LOS		B	B	F	B		C		C			
Approach Vol, veh/h		1775			2262			650			0	
Approach Delay, s/veh		14.4			14.9			31.4			0.0	
Approach LOS		B			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	52.9		27.1		62.9		27.1
Change Period (Y+Rc), s	3.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	41.0		29.0		51.0		29.0
Max Q Clear Time (g_c+I1), s	8.1	18.1		0.0		25.3		17.4
Green Ext Time (p_c), s	0.0	10.0		0.0		10.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay	17.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	60	98	50	194	40	0	610	70	0	700	62
Future Volume (veh/h)	65	60	98	50	194	40	0	610	70	0	700	62
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.79	0.89		0.87	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	65	60	62	50	194	33	0	610	63	0	700	59
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	127	111	91	92	261	41	0	2264	233	0	1184	100
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.00	0.70	0.70	0.00	1.00	1.00
Sat Flow, veh/h	348	531	436	215	1251	198	0	3316	332	0	1686	142
Grp Volume(v), veh/h	187	0	0	277	0	0	0	334	339	0	0	759
Grp Sat Flow(s),veh/h/ln	1316	0	0	1664	0	0	0	1770	1786	0	0	1828
Q Serve(g_s), s	0.0	0.0	0.0	2.4	0.0	0.0	0.0	6.2	6.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.6	0.0	0.0	14.0	0.0	0.0	0.0	6.2	6.3	0.0	0.0	0.0
Prop In Lane	0.35		0.33	0.18		0.12	0.00		0.19	0.00		0.08
Lane Grp Cap(c), veh/h	329	0	0	395	0	0	0	1243	1254	0	0	1284
V/C Ratio(X)	0.57	0.00	0.00	0.70	0.00	0.00	0.00	0.27	0.27	0.00	0.00	0.59
Avail Cap(c_a), veh/h	449	0	0	541	0	0	0	1243	1254	0	0	1284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.70
Uniform Delay (d), s/veh	32.4	0.0	0.0	33.6	0.0	0.0	0.0	4.9	4.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.1	0.0	0.0	0.0	0.5	0.5	0.0	0.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	0.0	6.7	0.0	0.0	0.0	3.2	3.2	0.0	0.0	0.5
LnGrp Delay(d),s/veh	33.0	0.0	0.0	34.7	0.0	0.0	0.0	5.4	5.4	0.0	0.0	1.4
LnGrp LOS	C			C				A	A			A
Approach Vol, veh/h		187			277			673			759	
Approach Delay, s/veh		33.0			34.7			5.4			1.4	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		67.2		22.8		67.2		22.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		27.0		55.0		27.0
Max Q Clear Time (g_c+I1), s		2.0		16.0		8.3		13.6
Green Ext Time (p_c), s		2.0		0.6		2.0		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	10.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1830	670	154	2370	0	363	0	272	0	0	0
Future Volume (veh/h)	0	1830	670	154	2370	0	363	0	272	0	0	0
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.98		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0	1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	0	1830	514	154	2370	0	363	0	171	0	0	0
Adj No. of Lanes	0	3	1	1	3	0	2	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	3310	1011	113	3772	0	694	0	259	0	312	0
Arrive On Green	0.00	0.65	0.65	0.06	0.74	0.00	0.17	0.00	0.17	0.00	0.00	0.00
Sat Flow, veh/h	0	5253	1553	1774	5253	0	3368	0	1549	0	1863	0
Grp Volume(v), veh/h	0	1830	514	154	2370	0	363	0	171	0	0	0
Grp Sat Flow(s),veh/h/ln	0	1695	1553	1774	1695	0	1684	0	1549	0	1863	0
Q Serve(g_s), s	0.0	21.6	19.0	7.0	24.8	0.0	11.1	0.0	11.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	21.6	19.0	7.0	24.8	0.0	11.1	0.0	11.4	0.0	0.0	0.0
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	0	3310	1011	113	3772	0	694	0	259	0	312	0
V/C Ratio(X)	0.00	0.55	0.51	1.36	0.63	0.00	0.52	0.00	0.66	0.00	0.00	0.00
Avail Cap(c_a), veh/h	0	3310	1011	113	3772	0	1019	0	408	0	491	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.98	0.00	0.98	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	10.5	10.0	51.5	6.9	0.0	42.7	0.0	42.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.7	1.8	210.4	0.8	0.0	0.2	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.2	8.7	10.0	11.7	0.0	5.2	0.0	4.9	0.0	0.0	0.0
LnGrp Delay(d),s/veh	0.0	11.1	11.8	261.9	7.7	0.0	43.0	0.0	43.9	0.0	0.0	0.0
LnGrp LOS		B	B	F	A		D		D			
Approach Vol, veh/h		2344			2524			534			0	
Approach Delay, s/veh		11.3			23.2			43.3			0.0	
Approach LOS		B			C			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	76.6		23.4		86.6		23.4
Change Period (Y+Rc), s	3.0	5.0		5.0		5.0		5.0
Max Green Setting (Gmax), s	7.0	61.0		29.0		71.0		29.0
Max Q Clear Time (g_c+I1), s	9.0	23.6		0.0		26.8		13.4
Green Ext Time (p_c), s	0.0	16.1		0.0		17.0		0.2

Intersection Summary		
HCM 2010 Ctrl Delay		20.0
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	140	75	50	148	30	0	560	40	0	770	64
Future Volume (veh/h)	55	140	75	50	148	30	0	560	40	0	770	64
Number	3	8	18	7	4	14	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.88	0.98		0.93	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	0	1863	1900	0	1863	1900
Adj Flow Rate, veh/h	55	140	61	50	148	24	0	560	37	0	770	62
Adj No. of Lanes	0	1	0	0	1	0	0	2	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	0	2	2
Cap, veh/h	87	171	68	85	204	30	0	2476	163	0	1248	101
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.00	0.74	0.74	0.00	0.74	0.74
Sat Flow, veh/h	246	900	358	236	1069	158	0	3453	222	0	1694	136
Grp Volume(v), veh/h	256	0	0	222	0	0	0	294	303	0	0	832
Grp Sat Flow(s),veh/h/ln	1504	0	0	1463	0	0	0	1770	1812	0	0	1831
Q Serve(g_s), s	2.5	0.0	0.0	0.0	0.0	0.0	0.0	5.8	5.8	0.0	0.0	24.1
Cycle Q Clear(g_c), s	18.4	0.0	0.0	15.9	0.0	0.0	0.0	5.8	5.8	0.0	0.0	24.1
Prop In Lane	0.21		0.24	0.23		0.11	0.00		0.12	0.00		0.07
Lane Grp Cap(c), veh/h	326	0	0	319	0	0	0	1304	1335	0	0	1349
V/C Ratio(X)	0.79	0.00	0.00	0.70	0.00	0.00	0.00	0.23	0.23	0.00	0.00	0.62
Avail Cap(c_a), veh/h	468	0	0	465	0	0	0	1304	1335	0	0	1349
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	0.57
Uniform Delay (d), s/veh	43.2	0.0	0.0	41.9	0.0	0.0	0.0	4.6	4.6	0.0	0.0	7.0
Incr Delay (d2), s/veh	3.3	0.0	0.0	1.0	0.0	0.0	0.0	0.4	0.4	0.0	0.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	0.0	6.5	0.0	0.0	0.0	2.9	3.0	0.0	0.0	12.5
LnGrp Delay(d),s/veh	46.5	0.0	0.0	43.0	0.0	0.0	0.0	5.0	5.0	0.0	0.0	8.2
LnGrp LOS	D			D				A	A			A
Approach Vol, veh/h		256			222			597			832	
Approach Delay, s/veh		46.5			43.0			5.0			8.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		85.1		24.9		85.1		24.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		31.0		71.0		31.0
Max Q Clear Time (g_c+I1), s		26.1		17.9		7.8		20.4
Green Ext Time (p_c), s		2.0		0.6		2.0		0.6

Intersection Summary		
HCM 2010 Ctrl Delay		16.4
HCM 2010 LOS		B