



PLANNING COMMISSION AGENDA REPORT

MEETING DATE: JULY 11, 2016

ITEM NUMBER: PA-2

SUBJECT: PLANNING APPLICATION PA-09-15 A1 MASTER PLAN AMENDMENT TO REPLACE PROPOSED OFFICE USE WITH EXPANSION OF EXISTING ASSISTED LIVING FACILITY, CLUB FITNESS CENTER, AND COMMUNITY EVENT CENTER AT 1640 MONROVIA AVENUE.

DATE: JULY 8, 2016

FROM: PLANNING DIVISION/DEVELOPMENT SERVICES DEPARTMENT

PRESENTATION BY: DANIEL INLOES, SENIOR PLANNER

**FOR FURTHER INFORMATION CONTACT: DANIEL INLOES, AICP (714) 754-5088
daniel.inloes@costamesaca.gov**

DESCRIPTION

The proposed project involves the following:

- **Addendum to Initial Study/Mitigated Negative Declaration (IS/MND):** This document analyzes the environmental impacts of the project and describes mitigation measures and conditions of approval to minimize impacts to below a level of significance. No new impacts are identified and only modest mitigation measures were proposed mostly concerning the construction of the site.
- **Master Plan Amendment PA-09-15 A1:** The Urban Master Plan Amendment is for the replacement of a 42,000 square foot office building with a 111-unit, four-story mixed-use development that consists of:
 - 111 units of independent and assisted living
 - Senior Club Fitness Center (1700 SF)
 - Community Event Center (3900 SF)

Deviation requested: Requires approval of the following urban plan deviation:

- **Setback from Public Street.** Any structure is required to be a minimum 10 feet from property line which abuts a public street. The project is proposing a vehicular ramp and wrought iron fencing with a zero setback from the property line and building at 114-foot setback.

See Project Description in the Analysis section for expanded description.

APPLICANT

The applicant and property owner is Nexus Development Corp. and Grand Plan 1, LLC

RECOMMENDATION

Staff recommends that the Planning Commission adopt a resolution to:

1. Adopt the Initial Study/Mitigated Negative Declaration (IS/MND) for the project;
2. Approve the project, subject to conditions of approval and mitigation measures.

PLANNING APPLICATION SUMMARY

Location: 1640 Monrovia Avenue Application: PA-09-15 A1 (Amendment to Final Master Plan PA-07-20/ VT-16999)

Request: Replace proposed 42,000 sq. ft. office building with expansion of State Licensed Assisted Living Facility within Mixed-Use Development, Senior Club Fitness Center, and Community Event Center.

SUBJECT PROPERTY:

Zone: MG & Mixed-Use Overlay Zone
 General Plan: Light Industrial
 Lot Dimensions: Approx. 850.5 x 229 ft.
 Lot Area: 6.82 acres 296,993 sq. ft.

SURROUNDING PROPERTY:

North: Light Industrial Uses
 South: Light Industrial Uses
 East: Light Industrial Uses
 West: Light Industrial Uses and Mobile Homes, (Play Port Mobile Village)

Existing Development: Existing 185 unit Assisted Living and Memory Care Living Facility

DEVELOPMENT STANDARD COMPARISON: MESA WEST BLUFFS URBAN PLAN

Development Standard	Zoning Code	Mesa West Bluffs Urban Plan	Proposed Project
Zone – FAR MG (General Industrial) Mixed-Use Overlay Zone	NA	1.0 FAR	1.02 FAR ^{1,4}
Min. FAR for Nonresidential Component		0.175 FAR	NA ³
Development Lot Size	10,000 SF	One acre	6.82 acres (296,993 sq. ft.)
Site Coverage – Overall Project			
Maximum Lot Coverage Buildings	NA	90%	<90%
Open Space	NA	10%	>10% (33.8% for Phase II) ⁴
Setbacks for Development Lot			
Front (West interior PL)	NA	10 ft. Abuts Monrovia Avenue	15 ft. Monrovia 0 ⁴ ft. Babcock
Side (North interior PL)		0 ft.	0 ft. ⁶ (114 ft. from main building.)
Side (South interior PL)		0 ft.	>25 ft.
Rear (East interior PL)	NA	10 ft. Abuts Babcock Street	0 ft. ⁴
Building Height	NA	4 stories/ 60 ft.	4 stories / 56 ft. ^{2,4}
Parking			
296-unit Assisted and Independent Living Facility (Phase I + Phase II) Studios: 66 +15 1 bedroom/1 bath: 79+ 77 2 bedroom/2 bath: 40+19 Total units: 296	NA	198 spaces ^{4,5}	198 spaces ⁴
Club Fitness Center (1700 SF)	NA	NA	17 ⁴
Community Event Center (3900 SF)	NA	NA	43 ⁴
Overall Parking Total		213 spaces ⁴	258 spaces ⁴
Driveway Width	16 ft.	NA	Min. 25 ft.
NA = Not Applicable or No Requirement (1) Up to 1.25 FAR allowed subject to findings. This FAR includes Phase I and Phase II (2) Roof decks are not counted as a story in the Urban Plan area. (3) The minimum nonresidential FAR standard is no longer applicable as this project is comprised of industrial office & institutional uses. (4) Amended per Master Plan Amendment PA-09-15 A1 (5) Staff finds that .67 spaces per unit could be justified as appropriate based on a parking study of the existing Vivante Facility. Shared parking is expected to occur between the two phases of Vivante. (6) Zero setback from fence and ramp, 10 ft. setback to stairwell structure, 114 ft. setback to main building.			
CEQA Status	Addendum to Initial Study/Mitigated Negative Declaration		
Final Action	Planning Commission		

BACKGROUND

Master Plan for 1640 Monrovia

In November 2007, Planning Commission approved the Westside Lofts project at 1640 Monrovia Avenue (Vicinity Map, Attachment 1).

The original project (PA-07-20) included a master plan for development of horizontal mixed-use development including 42,000 square feet of commercial space, 151 residential condominiums, and five live/work units, and a 4.5-level parking structure. The project also included a vesting tentative tract map (VT-16999) for subdivision of the property into office uses, live/work units and common interest development that was approved concurrently with the final master plan.

The proposed project also included some major public benefits which included remediation of the soil, undergrounding utilities, and green building design.

Since that approval the project has been amended to modify the residential component. The first amendment, ZA-08-17, amended the master plan to convert the proposed condominiums and live/work units to rentals. The second amendment, PA-09-15, amended the residential component to replace the 151 apartment units with a State-Licensed Assisted Living Facility with a memory care wing including 185 units. Since this approval the State Licensed Facility has been constructed and in operation for several years. During this time the facility has won multiple awards including the 2015 Gold Award for Best Assisted Living/Special Needs Community by the National Association of Homebuilders 50+ Housing Council.

Currently the project consists of a horizontal mixed-use development with an operating Assisted Living Facility and an approved cluster of office buildings summing 42,000 square feet.

Project Site/Environs

The 6.82-acre project site is located at 1640 Monrovia Avenue in the Westside. The property is designated as Light Industry in the City's General Plan and zoned as General Industrial (MG). It is also located within the Mesa West Bluffs Urban Plan / mixed-use development overlay zone.

A multi-tenant industrial building borders the site to the south in the City of Newport Beach. Business operations within this building include publishing, landscaping, screen printing and embroidery. European Collectibles borders the site to the north, beyond which is the Southern California Edison LaFayette Substation, and other industrial properties.

Additional multi—tenant industrial buildings and Playport Mobile Home Park are located to the west and light industrial buildings are located east of the site. Other business operations east of the site include engineering, electric/plumbing, towing and woodworking.



Vicinity Map and Surrounding Uses

ANALYSIS

Project Description

The proposed Vivante Phase II includes a request to amend the Master Plan PA-09-15 to allow the replacement of the previously approved 42,000 square feet of office building with a proposed 111-unit independent and assisted living facility, 1700 square foot Club Fitness Center, and a 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 15 studio units, 77 one-bedroom units, and 19 two-bedroom units. The project contains a total of 125 parking spaces including a surface parking and one-level underground parking lot on the easterly portion of the property. The project includes multiple amenities such as: a kitchen/restaurant style dining room, dance studio, café, bar/lounge, activity rooms, library/computer room, art room, outdoor plaza park and some ancillary office space for management services. The project requires a deviation from the required street setback of 10 feet from the Mesa West Bluffs Urban Plan to a proposed 0-foot setback to maximize the number of parking spaces within the underground parking structure. The remainder of the structures maintain the ten-foot setback including the main building which is 114 feet from the street frontage.

Amendment to Master Plan

The site area for the Master plan amendment represents the north 2.25 acres of the project area where office uses were previously approved.

The proposal involves a new vertical mixed-use expansion of the State-licensed Assisted Living Facility with assisted and independent living units, a Club Senior Fitness Center, and Community Event Center to replace the unbuilt office components of the previously-entitled mixed-use development.

The Planning Application Summary Table on page 2 summarizes the proposed changes to the original Final Master Plan.

- Deleted components of the Final Master Plan include: 42,000 square feet / 4-story office uses.
- New component involves a 111-unit / 4 story Assisted and Independent Living Facility including a Club Senior Fitness Center, and Community Event Center.

Deviation

Approval of the master plan as proposed will include the following deviation from the Mesa West Bluffs Urban Plan Development Standards:

- **Setback from Public Street.** Minimum 10 feet from property line any structure is required. The project is proposing a vehicular ramp a wrought iron fencing which has no setback from the property line. Along Babcock street frontage the following setbacks are proposed:

Wrought Iron Fence	0 ft.	Deviation
Vehicular Ramp	0 ft.	Deviation
Stairwell Structure	10 ft.	Code Compliant
Block wall on west side of ramp	28 ft.	Code Compliant
Main Building	114 ft.	Code Compliant

The sloped vehicular ramp encroaches into the required 10 feet setback from a public street. The vehicular ramp which provides access to the 57 underground parking spaces encroaches to the property line that abuts Babcock Street. This is a deviation from the Mesa West Bluffs development standards however its placement allows for the maximum number of parking spaces in the underground parking structure, other access to the underground parking structure, the stairs and elevator, are outside of the required setback. While this encroachment does remove the opportunity to have grounds for landscaping, the ramp to the underground parking structure itself does not impose an above ground or vertical obstruction and the wrought iron and pilaster fence which surrounds the ramp, for safety purposes, is fairly transparent and allows pedestrians along Babcock to see the landscaping which has been provided along the property line. This lack of ground landscaping can be further mitigated by vertical landscaping along the walls and structures outside of the ten-foot setback but near Babcock Street which is included in the conditions of approval.

Justifications for Approval of Master Plan Amendment

Following are justifications for approval of Vivante Phase II, Fitness Club, and Community Event Center:

- *Proposed amendment is in conformance with General Plan, Zoning Code and Urban Plan.* The MG zoning district is intended for a wide range of industrial-related activities, including light manufacturing, corporate headquarters of trade industries, and motor vehicle storage/repair. Since mixed-use development is prohibited in the MG zone, the City created a mixed-use overlay zone in April 2006 to allow mixed-use development in specified areas of the Westside. This project is a mixed use development which incorporates institutional uses with retail and cultural uses in one building. The retail and cultural uses being the community event center, which will be available for rent by anyone within the community as an event space (3900 square feet) and the club senior fitness center, whose membership is open to anyone 60 years of age and over (1,700 square feet). The institutional use will be the expansion of the existing Vivante State Licensed Assisted and Independent Living Facility with 111 units and additional amenities. Attachment 3 includes a Planning Consultant letter, which further describes how Vivante Phase I and Phase II are a complete mixed-use project. Because of the quality of site planning, architectural design, and its commercial/institutional/civic mixed-use development type, this project's proposed FAR of 1.02 is permitted. The standard FAR maximum is 1.0, but the code allows up to 1.25 for mixed use projects with excellent design and site planning. This site has already won several awards for the quality of design and the nature of its use. Phase II continues the quality of materials, adds to the overall aesthetic, and provides additional civic and cultural amenities that senior residents, and residents in general, will have access to once the project is built.
- *The project has minimized the impact of the encroachment into the required ten-foot setback by modifying the plans, providing more transparent fencing, and landscape screening.* While the proposed project does encroach into the ten-foot setback required along Babcock, the vehicular ramp is strategically placed to maximize the number of parking spaces available within the underground structure. To minimize the impact of this encroachment, the applicant has planned other access structures outside of the setback area, including the elevator and the stairwell structure. To further decrease the impact to the site, the wall surrounding the vehicular ramp, which lies within the ten-foot setback, will be a wrought iron and pilaster fence to decrease visual impact with its more transparent design. This will allow pedestrians to see the passive landscaping section that will be behind the fence, abutting a portion of Babcock. Lastly, the project will be conditioned to incorporate vertical landscaping along walls and structures near Babcock to increase the verdant aesthetic, which has been lost by the encroachment.
- *Architectural design and building materials proposed project are of high quality.* The proposed contemporary-style Assisted Living Facility features Type V construction, precast concrete panel system, metal/glass enclosures for the

balconies, and stone/tile veneer-clad columns along the first floor and corners of the building. This type of architecture complements the industrial surroundings while creating an aesthetically pleasing architecture. (*Full-color architectural renderings, Attachment 5*).



- The project will provide the required shared on-site parking spaces (258 spaces) for Phase I and Phase II of Vivante, the Club Fitness Center, and the Community Event Center. The Zoning Code does not specify a parking rate for an assisted living facility; however, the industry standard based on a survey of surrounding Cities is 0.5 to 0.8 spaces per unit. A parking study was completed by Linscott Law & Greenspan which recommended a parking rate of .67 for all of the assisted living units onsite based on a study completed at the existing Vivante facility. Based on the parking study and their recommendations the parking demand for Vivante’s assisted living units both in the existing development (185 units) as well as the proposed expansion (111 units) is 198 parking spaces. This means that there are 60 spaces available for the Club Fitness Center and Community Event Center. Any potential activity at the community event center which would require more than this number of parking spaces will be conditioned to be planned for evenings and weekends when the parking needs for the Vivante Assisted Living Facility are lowest.

(1) Type of Day	(2) Design Parking Ratio ¹²	Peak Parking Needs (Spaces)			Comparison With Proposed Parking Supply (6 – 5)	
		(3) Existing Phase I (185 units)	(4) Added Project Phase II (111 units)	(5) Future Total (296 units)	(6) Parking Supply (Spaces)	(7) Surplus (+)/ Deficiency (-) (Spaces)
Peak Sunday/Holiday						
12:00 PM	0.67 spaces/unit	124	74	198	260	+62
8:00 PM	0.44 spaces/unit	81	49	130	260	+130
Typical Weekday						
12:00 PM	0.57 spaces/unit	106	63	169	260	+91
8:00 PM	0.46 spaces/unit	85	51	136	260	+124
Typical Sunday/Weekend Day						
12:00 PM	0.46 spaces/unit	85	51	136	260	+124
8:00 PM	0.43 spaces/unit	80	48	128	260	+132

- Proposed amendment will still maintain acceptable levels of service at major intersections. The original Westside Lofts traffic study indicated that the proposed project will not result in adverse impacts to levels of service. This environmental conclusion is still applicable to the project given that the updated traffic study prepared by Linscott Law & Greenspan for the addendum to the mitigated negative declaration shows a decrease in trips, compared to the original proposal for 151-residential units and 5 live/work units. The estimate was a decrease of 259 daily trips from the original proposed project to this proposed amendment. See below.

TTE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Rates:							
• 230: Residential Condominium/Townhouse (TE/DU)	5.81	17%	83%	0.44	67%	33%	0.52
• 254: Assisted Living (TE/Bed)	2.66	65%	35%	0.14	44%	56%	0.22
• 492: Health/Fitness Club (TE/1,000 SF)	35.30 ⁶	50%	50%	1.41	57%	43%	3.53
• 495: Recreational Community Center (TE/1,000 SF)	33.82	66%	34%	2.05	49%	51%	2.74
• 710: General Office (TE/1,000 SF)	11.03	88%	12%	1.56	17%	83%	1.49
<u>A. Original Entitlement (2007-2008):</u>							
<u>Vivante South:</u>							
• Residential Condominiums (151 DU)	877	11	55	66	53	26	79
• Live/Work ⁷ (5 DU)	29	0	2	2	2	1	3
<u>Vivante North:</u>							
• Commercial Office (42,000 SF)	463	58	8	66	11	52	63
A: Subtotal	1,369	69	65	134	66	79	145
<u>B. Amended Entitlement (2010):</u>							
<u>Vivante South:</u>							
• Assisted Living (185 Units = 225 Beds)	599	21	11	32	22	28	50
<u>Vivante North:</u>							
• Commercial Office (42,000 SF)	463	58	8	66	11	52	63
B: Subtotal	1,062	79	19	98	33	80	113
<u>C. Proposed Project:</u>							
<u>Vivante South:</u>							
• Existing Assisted Living (185 Units = 225 Beds)	599	21	11	32	22	28	50
<u>Vivante North:</u>							
• Assisted Living (111 Units = 130 Beds)	346	12	6	18	13	16	29
• Community Event Center (3,900 SF)	132	5	3	8	5	6	11
• Fitness Center (940 SF)	33	1	0	1	2	1	3
C: Subtotal	1,110	39	20	59	42	51	93
<u>Proposed Project Vs Original Entitlement (2007-2008) (C - A)</u>							
	-259	-30	-45	-75	-24	-28	-52
<u>Proposed Project Vs Amended Entitlement (2010) (C - B)</u>							
	48	-40	1	-39	9	-29	-20

- All utility lines on private property will be undergrounded. There are two poles at the north east corner of the site that will be undergrounded per code.
- The project exceeds the minimum requirements for common open space and provides programmed open space that will meet the needs of its residents. The proposed Phase II development provides over 30% open space on the site. This open space includes passive open space throughout the site but also programmed spaces to provide additional amenities to their residents. Those amenities include the pavilion plaza area and a dog park.

ALTERNATIVES

The Planning Commission has the following options:

1. Approve Master Plan Amendment. As recommended by staff, this action will allow the applicant to proceed with the approval of the mixed-use development expansion of the existing Assisted Living Facility in the Westside and the additional of the Club Fitness Center and Community Event Center. This approval will supersede the prior approval: therefore, the entitlement related to the 42,000 square feet office space will be null and void.
2. Deny Master Plan Amendment. If the project were denied, the original Final Master Plan (with office space components) will still be in place. The applicant could not submit a modified proposal for the Planning Commission's consideration for six months.

ENVIRONMENTAL DETERMINATION

The Westside Lofts Initial Study/Mitigated Negative Declaration was adopted in November 2007 in accordance with the California Environmental Quality Act (CEQA), the State CEQA Guidelines, and the City of Costa Mesa Environmental Guidelines. An Addendum to the Initial Study / Mitigated Negative Declaration for the Vivante Senior Living – Phase II was completed on July 7, 2016 to assess the change in impacts of the proposed amendment to the master plan. The addendum found that the proposed change would not alter any environmental topics level of significance.

Summary of Environmental Impacts and Mitigation Measures

Environmental Topic Requiring Mitigation	Level of Significance after Mitigation
Air Quality	Less than Significant
Noise	Less than Significant
Geology and Soils	Less than Significant
Hydrology and Water Quality	Less than Significant
Hazards & Hazardous Materials	Less than Significant

The environmental conclusions are still relevant to the project as revised. No significant changes to the mitigation program are required (See Attachment 6). Original IS/MND may be downloaded from City's website at: <http://www.costamesaca.gov>.

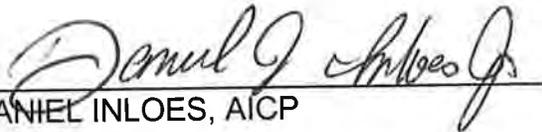
LEGAL REVIEW

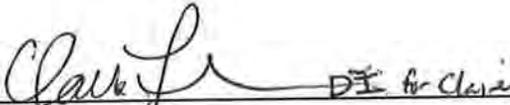
The IS/MND and draft resolutions have been reviewed and approved as to form by the City Attorney's Office.

CONCLUSION

When City Council approved the Westside Urban Plans, Council stressed the importance of mixed-use development being within the development capacity of the

General Plan. The proposed project conforms to the technical requirements of the Urban Plan. Approval of the amendment to the master plan will provide for mixed-use development on site with a successful institutional use already thriving. The project provides housing opportunities to senior residents and employment for health care professionals in a mixed-use setting that also allows for community amenities which improve the human and social capital of the residents. The overall design reflects a quality project that is consistent with the intent of the Mesa West Bluffs Urban Plan. The Addendum to the Initial Study/Mitigated Negative Declaration for Vivante Phase II shows no changes to the environmental conclusions within the original study, moreover, the proposed replacement would reduce overall impact to the environment.


DANIEL INLOES, AICP
Senior Planner

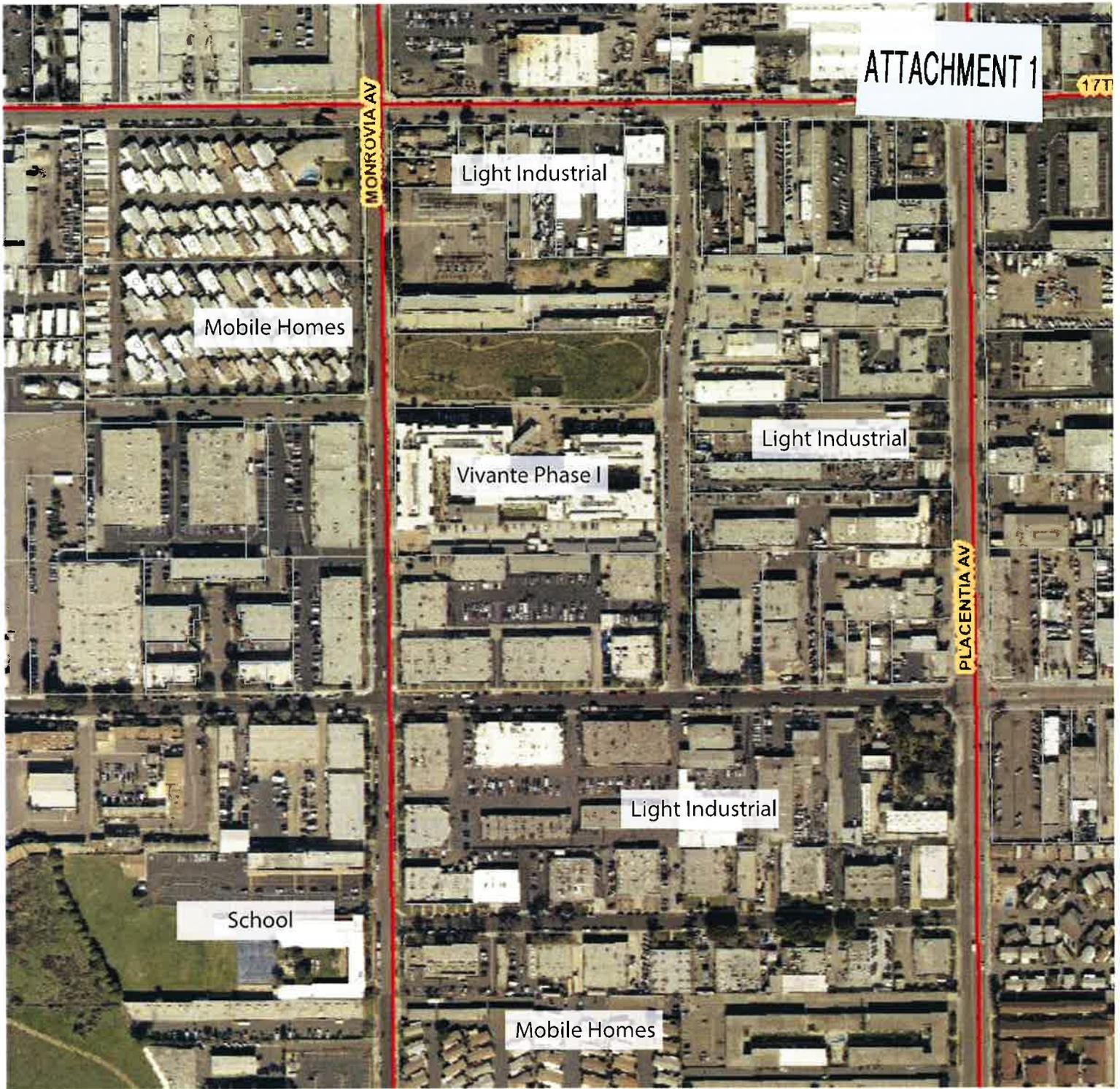

CLAIRE FLYNN, AICP
Asst. Development Services Director

- Attachments:
1. Vicinity, Zoning, and Radius Map
 2. Site Photos
 3. Applicant's Project Description and Consultant Letter
 4. Draft Planning Commission Resolutions and Exhibits
 5. Project Plans/Elevations/Perspectives
 6. Initial Study/Mitigated Negative Declaration (provided under separate cover)

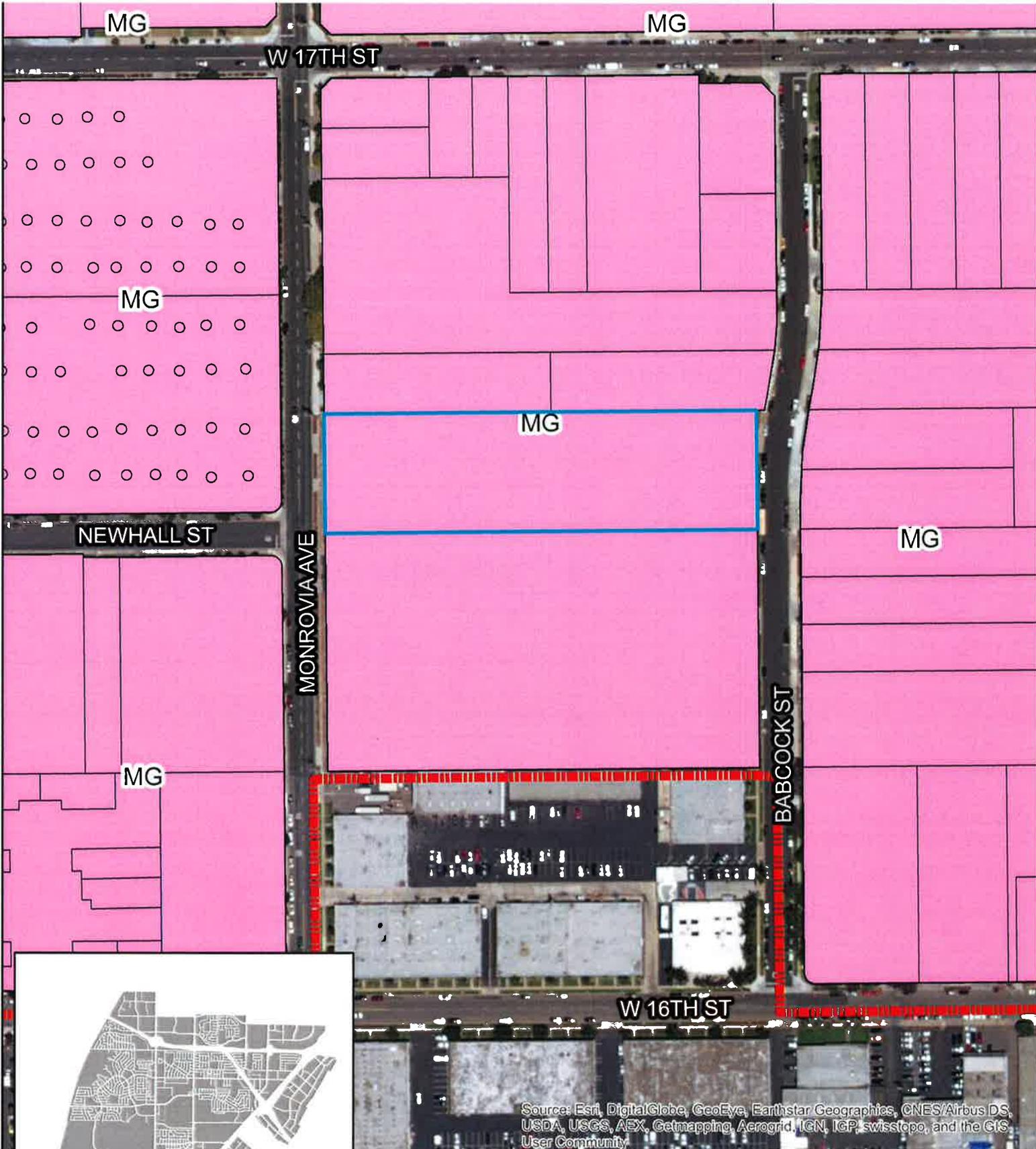
Distribution:

- Director of Economic & Development Services/Deputy CEO
- Assistant Development Services Director
- Senior Deputy City Attorney
- Public Services Director
- City Engineer
- Transportation Services Manager
- Fire Protection Analyst
- File (2)

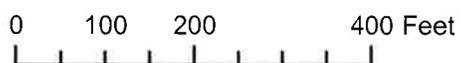
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Nexus Development
1 MacArthur Place, Suite 300
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Vicinity - 1640 Monrovia Avenue



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



Zoning of Site
1640 Monrovia Avenue

12



Front of Phase I



Open Space of Phase I



Restaurant of Phase I



Foyer of Phase I



Common Drive



Project Site



Existing Walking Path on Project Site



14 Private Property Utility Poles Near Babcock



Public ROW Utility Poles Near Monrovia

December 23, 2015

Ms. Claire Flynn
Assistant Development Services Director
City of Costa Mesa
77 Fair Drive
Costa Mesa, CA 92628

**Subject: Request for Amendment to Master Plan PA-09-15
1650 Monrovia – Vivante on the Coast**

Dear Ms. Flynn:

Please find enclosed for your consideration, a project submittal package for our proposed amendment to approved Master Plan PA-09-15 for the second phase of Vivante on the Coast Project located at 1640 and 1650 Monrovia Avenue.

We are proposing to replace the previously approved multi-story 42,000 square feet of office buildings with a 4-story 111 unit independent and assisted living facility surrounded by a surface parking lot, one level underground parking on the east portion of the property along with the existing first phase of the Master Plan – Vivante on the Coast.

The orientation of the new building is similar to that of the first phase, and the second phase will have additional amenities that include, but are not limited to, its own kitchen/restaurant style dining, fitness center, dance studio, café, bar/lounge, and event center in addition to ancillary office space for management services. We feel that the newly proposed expansion also boasts a similar exciting elevation as that of the first phase of the project, which is consistent with the Mesa West Bluffs Urban Plan.

Given the success of the first phase of Vivante on the Coast, we feel that this proposed amendment to the Master Plan would be more compatible and more consistent with the vision for the overall project rather than the previously approved office buildings. We also feel that this proposed amendment would be less impactful to the surrounding area versus the previously approved office buildings including, but not limited to a reduction of traffic.

Ms. Claire Flynn
City of Costa Mesa
Page 2 of 2

We look forward to the opportunity to work with the City on this proposed amendment and we appreciate the continued support and cooperation of you and your staff. Please do not hesitate to contact me if you or any other department has any questions regarding this proposed amendment.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert W. Eres", with a long horizontal flourish extending to the right.

Robert W. Eres
Nexus Development Corporation/Central Division
Vice President of Development



March 31, 2016

Ms. Claire Flynn

Assistant Development Services Director

City of Costa Mesa

77 Fair Drive

Costa Mesa, CA 92628

Subject: Vivante Planning Application PA-15-60 (Amendment to Master Plan PA-Monrovia – Vivante on the Coast)

09-15 1650

Dear Ms. Flynn:

Interwest has been asked to review the development characteristics of the Vivante Development Proposal in consideration of the mixed-use development plan for the Mesa West Bluffs area of the City of Costa Mesa. Interwest provides planning, building and public works services to public sector clients. For your reference, attached is my resume to demonstrate my qualifications as an urban planner.

The following summarizes why Vivante Phase II should, in fact, be considered a mixed-use development project and highlights unique characteristics of the project that meet the objectives of the Mesa West Urban Plan.

Related Policy Guidance/City Regulations

The City's General Plan states that "Mixed-use development projects are intended to provide additional housing opportunities in the City (such as the Westside) by combining residential and nonresidential uses in an integrated development. Additionally, this type of development is intended to revitalize areas of the City, without exceeding the capacity of the General Plan transportation system." The General Plan also states that "the mix of uses can occur in either a vertical or horizontal design, up to four stories in height."

The Costa Mesa Zoning Code provides the following definition for mixed use development: "The development of lot(s) or structure(s) with two (2) or more different land uses such as, but not limited to, a combination of residential, office, manufacturing, retail, public or entertainment in a single or physically integrated group of structures."

The Mesa West Urban Plan defines Mixed-Use Development-Vertical as a type of mixed-use development where nonresidential and residential uses are located in the same building and where the dwelling units are typically located on the upper levels and the nonresidential uses on the lower levels.

Chapter 11, The Mixed-Use Overlay District, provides the following insight:

It is the purpose and intent of this article:

- (a) To meet general plan goals to create new housing opportunities in commercial, industrial, and residential areas by allowing mixed-use developments that exhibit excellence in design, site planning, integration of uses and structures, and protect the integrity of neighboring development.
- (b) To encourage mixed-use development projects, as allowed by an adopted urban plan, that combines residential and nonresidential uses, including office, retail, business services, personal services, public spaces and uses, and other community amenities as a means to revitalize a defined area in the city without exceeding the development capacity of the general plan transportation system.
- (c) To encourage a full array of different land use types and structures, including reuse of existing structures, to create an active city life and enhance business vitality.

Vivante Phase II

The Vivante Phase II includes a 4-story, 111- unit independent and assisted living housing development, approximately 2,879 sf of office space, an approx. 1,700 sf fitness center, and a large indoor/outdoor Community Event Center (approx. 3,900 sf). The project will be served by a surface parking lot and one partial level of underground parking.

Phase II is designed to complement and integrate with the existing Vivante facility that includes a variety of residential options such as independent living, assisted living and memory care. In addition to its many different types of residential uses, Vivante provides an abundance of amenities for both the

residents, employees and outside visitors from and around the surrounding community. Vivante Phase I also provides approx. 3,753 square feet of office space, as well as a full service restaurant and café.

General Plan and Zoning Review

In reviewing the relevant policy and code language, it can be clearly concluded that the Vivante Development (Phase I and II) meet both the definition and intent of a mixed-use project. The independent and assisted living components are in every way a residential use, and they provide housing opportunities for a growing population in the community. The office, meeting, fitness center, and community event spaces serve both the Vivante residents and the greater Costa Mesa community. This vertical and horizontal mixing of uses is the embodiment of the General Plan: "Mixed-use development projects are intended to provide additional housing opportunities in the City (such as the Westside) by combining residential and nonresidential uses in an integrated development..."

One reason local government encourages mixed-use development is stewardship and reduction in environmental impacts such as vehicle trips, air pollution, and consumption of natural resources. A compact residential building housing a population in a higher density setting is consistent with this purpose. The provision of on-site medical, social and meal services reduces the residents' dependence on motor vehicle travel. The use of shuttle vehicles also contributes to reductions in vehicle trips and vehicle miles traveled. A compact building constructed to current Building Code standards represents an opportunity for significant energy savings. These are important considerations in light of ever increasing pressure for local government to participate in programs to reduce the emission of Green House Gases (GHG).

Mixed-Use Nature of Building Uses

The office space located in Phase I and proposed for Phase II is primarily used by a third party company, Integral Senior Living (ISL). ISL utilizes the office space to accommodate employees serving the residences of Vivante as well as for employees who may be visiting from associated communities, from ISL corporate headquarters and local healthcare professionals such as doctors, or lab technicians. The on-site office use in support of Vivante residents represents another application of the mixed-use principals to encourage efficiency and reduce environmental impacts. Residents of Vivante do not have to travel by vehicle to receive the services offered by ISL.

ISL also holds corporate training workshops and general industry conferences in these office areas. Nexus Companies also occupies a portion of the office areas within Vivante for their own separate purposes. In addition, Vivante hosts a number of outside events with many unrelated for-profit and non-profit organizations. Vivante utilizes its many outdoor activity areas, lounges, restaurant and café to accommodate these activities. A benefit of the Vivante development is the availability of the on-site restaurant and café to offer those attending meetings a “no trip” option for meal service. The shared food preparation facilities reduce the number employees necessary to serve the combined demand of the Vivante residents and visitors to the office/conference space. Vivante Phase II will include a 3,900 square foot Community Events Center, which will be available for non-resident use by outside agencies for meetings, events and activities.

Enclosed as Exhibit A is a list of sample events and organizations that are expected to utilize the meeting rooms and Community Events Center at Vivante. The operator is already working with many of these organizations to schedule events in 2016. The Phase II indoor/outdoor Community Events Center offers an opportunity to directly address the City’s expressed purpose to combine residential and nonresidential uses, public spaces and other community amenities as a means to revitalize a defined area in the city without exceeding the development capacity of the general plan transportation system.

Further, the Phase II plan calls for a 1,700 sf fitness center that will serve the residents of Vivante, but more importantly, will be offered to Costa Mesa residents age 60 and older at a nominal cost. Offering this amenity to area residents is unique in that the City’s existing senior center does not include a modern fitness room. Such fitness facilities have been well received by neighboring City of Newport Beach at their Oasis Senior Center.

Conclusion

Vivante, including Phase I and II, will attract more residents to the Westside who will avail themselves of the businesses in the area and create economic benefit for the area. Tenants of the previously approved office buildings could be expected to utilize some of the surrounding businesses during the work week daytime hours; however, the Vivante residents will utilize the businesses throughout the day, seven days a week. The independent living residents are part of the emerging active senior population and can be expected to walk to shops and services in the area.

Another common theme of the Costa Mesa policies regarding mixed-use development is excellence in design. Vivante Phase I and the proposed Phase II are designed to enhance their environment and contribute to the visual ambiance of the Mesa West Bluffs area. The placement of this mixed-use

development in Mesa West directly meets the City's goal to combine residential and nonresidential uses, including office, personal services, and public spaces in a well-designed and integrated development that is nontraditional in form and design, which compliments the surrounding existing development. Vivante has won numerous awards for its design excellence (see attached Exhibit B).

The proposed amendment to the Master Plan is more compatible and consistent with the vision for the Mesa West Bluffs than the previously approved office buildings. We also feel that this proposed amendment would be less impactful to the surrounding area versus the previously approved office buildings including, but not limited to, a reduction of traffic.

Sincerely,



Charles View
Interwest Consulting Group

EXHIBIT A - Community Events

Existing Meetings/Events currently held at Vivante on the Coast - Phase I

Name of Group/Host	Notes/Invitees
Pathways to Care - Managing Dementia	Lecture - Dementia -Open to the Public
RTH Stroke Screenings	Open to the Public
Jane Mahakian Educational Workshop	Open to the Public
Artists Tea Event by Alz. Assoc.	Open to the Public
Jane Mahakian Support Group for Families	Ongoing Monthly Support Group
Dementia Educational Workshop - Dr. Mahakian	Open to the Public
Amy Blackburn - Educational Series - Monthly	Caregiving Professionals CEU
National Healthcare Decision Day	Hoag Hosp/Alz Assoc Presentation
Ask the Attorney	Estate Planning Presentation
Newport Beach/Costa Mesa Joint Chamber Mixer	Chamber Mixer
Food Truck Event	Open to the Public
Savvy Caregivers - Alz Assoc. Weekly Series	Weekly Series for Caregivers
Christmas Networking Luncheon	Senior Industry Professionals
UCI Mind Matters - Dr. Claudia Kawas	Lecture
Referral Agencies Open House	Referral Agencies
Senior Industry Networking	Senior Industry Professionals
Calif Assoc of Nurse Practitioners	Nurse Practitioners
Reception for Author Barbara Kames, RN	Open to the Public
Bridge Group	Open to the Public
Realtor Open House	Local Realtors & General Public
Annual Networking Luncheon	Senior Industry Professionals
Alzheimers Association Med Chats	Open to the Public
Alzheimers Association Spring Training	Open to the Public
55+ Real Estate Council Meetings	Builders/Developers/Business
Tuesday Tunes in the Courtyard	Open to the Public
POLST Meeting - Alz Assoc	Open to the Public
Advance Care Planning Meeting	Open to the Public
Caregiving Educational Workshop	Open to the Public
Conference Room Space for various agencies	Various Groups

New Meetings/Events for Vivante's Community Events Center in Phase II

Alzheimers Assoc - Fundraiser	Open to the Public
Agewell Fundraiser	Open to the Public
Senior Prom - Dance and Dinner	Open to the Public
Theatrical Plays	Open to the Public
Musical Presentations	Open to the Public
Themed Dances	Open to the Public
Outdoor Picnics	Open to the Public
Health Expo	Open to the Public
Financial, Real Estate, Insurance Presentations	Open to the Public
Monthly Bingo Space for local community	Open to the Public
Art Shows	Open to the Public
Childrens Presentations	Open to the Public
Bridge Tournaments	Open to the Public
Corporate Retreats	TBD based on booking party
NMUSD Meetings for Training and Conferences	TBD based on NMUSD invitees

EXHIBIT B – List of Awards received by Vivante on the Coast

NAHB (National Association of Homebuilders) 50+ Housing Council

2015 Best of 50+ Housing Awards

- GOLD Achievement Award: Best 50+ Assisted Living / Special Needs Community

SeniorAdvisor.com 2015 Best of Assisted Living Award Winner

NAHB (National Association of Homebuilders) 50+ Housing Council

2013 Best of 50+ Housing Awards

- GOLD Achievement Award: Best 50+ Assisted Living / Special Needs Community “On the Boards”
- SILVER Achievement Award: Best Online Marketing Strategy
- SILVER Achievement Award: best 50+ Market Rate Rental Community

55+ Housing Council

2013 SAGE Awards

- “On the Boards” Project of the Year

NAHB (National Association of Homebuilders) 50+ Housing Council

2012 Best of 50+ Housing Awards

- Gold Achievement Award: Best Brochure
- Gold Achievement Award: Best Website
- Innovation Award: Best CCRR or Independent/Assisted Living “On The Boards”

ICAA (International Council on Active Aging)

Rebranding Aging Awards 2011

- Silver Award

PCBC

Gold Nugget Awards 2012

- Best Senior Housing Community On The Boards

RESOLUTION NO. PC-16-

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COSTA MESA ADOPTING the ADDENDUM TO THE INITIAL STUDY / MITIGATED NEGATIVE DECLARATION AND APPROVING MASTER PLAN AMENDMENT TO THE PREVIOUSLY APPROVED FINAL MASTER PLAN PA-09-15 TO REPLACE PROPOSED OFFICE USE WITH EXPANSION OF EXISTING ASSISTED LIVING FACILITY, A CLUB FITNESS CENTER, AND A COMMUNITY EVENT CENTER AT 1640 MONROVIA AVENUE.

THE PLANNING COMMISSION OF THE CITY OF COSTA MESA HEREBY RESOLVES AS FOLLOWS:

WHEREAS, the proposed mixed-use development was originally approved by the Planning Commission on November 15, 2007. The original project consisted of a Final Master Plan PA-07-20 for (a) 42,000 sq. ft. commercial space in two- to-four story buildings; (b) 151 residential condominiums in a four-story building complex; (c) 5 custom live/work units in three-story buildings; (d) 4.5-level parking structure and surface parking spaces (overall total of 475 parking spaces);

WHEREAS, major public benefits, proposed by the applicant in a letter dated November 6, 2007 and included as part of the project approval, comprised of the following: (a) Hazardous waste remediation of the site pursuant to the State Department of Toxic Substances Control (DTSC) requirements; (b) Undergrounding of Southern California Edison transmission/distribution lines along Monrovia frontage in the public right-of-way; (c) Incorporation of green building design, such as energy efficient windows, appliances, irrigation system, and building materials;

WHEREAS, Zoning Application ZA-08-17 was filed by Cynthia Nelson of Nexus Development Corporation for the property located at 1640 Monrovia Avenue, requesting modification of Resolution PC-07-79 to allow 151 condominium units to be initially offered as rental units. The Planning Commission approved ZA-08-17 by adoption of Planning Commission Resolution PC-08-55 on June 23, 2008, and this decision was upheld by the City Council on July 15, 2008;

WHEREAS, the proposed Westside Lofts mixed-use development was amended in 2010 by the approval of Master Plan Amendment PA-09-15 to replace the previously entitled, yet unbuilt condominium and live/work components with a two to three-story, 185-unit, State licensed, Assisted Living Facility with 133 surface parking spaces and made no changes related to the 42,000 square-foot industrial office component of the Master Plan or the Vesting Tentative Tract Map VT-16999;

WHEREAS, an application was filed by Nexus Development Corp., the property owner, requesting approval of the following:

Master Plan Amendment PA-09-15 A1: The proposed Vivante Phase II includes a request to amend the Master Plan PA-09-15 to allow the replacement of the previously approved 42,000 square feet of office building with a proposed 111-unit independent and assisted living facility, 1700 square foot Club Fitness Center, and a 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 15 studio units, 77 one-bedroom units, and 19 two-bedroom units. The project contains a total of 125 parking spaces including a surface parking and one-level underground parking lot on the easterly portion of the property. The project includes multiple amenities such as: a kitchen/restaurant style dining room, dance studio, café, bar/lounge, activity rooms, library/computer room, art room, outdoor plaza park and some ancillary office space for management services. The project requires a deviation from the required street setback of 10 feet from the Mesa West Bluffs Urban Plan to a proposed 0-foot setback to maximize the number of parking spaces within the underground parking structure. The remainder of the structures maintain the ten-foot setback including the main building which is 114 feet from the street frontage.

WHEREAS, the Initial Study/Mitigated Negative Declaration was adopted on November 15, 2007 pursuant to CEQA, the CEQA Guidelines, and the City of Costa Mesa Environmental Guidelines. The environmental document considers all environmental impacts of the proposed project and identifies mitigation measures to reduce significant impacts to below a level of significance. The environmental

conclusions and Mitigation Monitoring Program are still applicable to the amended project;

WHEREAS, an Addendum to the Initial Study/Mitigated Negative Declaration was created to assess the applicable amended project pursuant to CEQA, the CEQA Guidelines, and the City of Costa Mesa Environmental Guidelines. The environmental conclusions remain the same for the amended project. All mitigation measures included as part of the addendum and the original mitigated negative declaration are included in the Mitigation Monitoring Program (Exhibit C);

WHEREAS, the Planning Commission has reviewed all environmental documents comprising the Initial Study/Mitigated Negative Declaration and has found that the Initial Study/Mitigated Negative Declaration and the Addendum considers all environmental impacts of the proposed project and a reasonable range of alternatives, and the Initial Study/Mitigated Negative Declaration and the Addendum is complete, adequate, and fully complies with all requirements of CEQA, the CEQA Guidelines, and the City of Costa Mesa Environmental Guidelines.

WHEREAS, a duly noticed public hearing was held by the Planning Commission on July 11, 2016 with all persons having the opportunity to speak for and against the proposal.

BE IT RESOLVED that, based on the evidence in the record and the findings contained in Exhibit A, and subject to the conditions of approval and mitigation measures indicated in the Mitigation Monitoring Program contained within Exhibits B, and C, respectively, the Planning Commission hereby **ADOPTS** the Addendum to the Initial Study/Mitigated Declaration for the Vivante Phase II Project and **APPROVES** Planning Application PA-09-15 A1.

BE IT FURTHER RESOLVED that the Costa Mesa Planning Commission does hereby find and determine that adoption of this Resolution is expressly predicated upon the activity as described in the staff report for Planning Application PA-09-15 A1 and upon the applicant's compliance with each and all of the conditions in Exhibit B, the

Mitigation Monitoring Program in Exhibit C, and compliance of all applicable federal, state, and local laws. Any approval granted by this resolution shall be subject to review, modification or revocation if there is a material change that occurs in the operation, or if the applicant fails to comply with any of the conditions of approval and/or mitigation measures.

BE IT FURTHER RESOLVED that if any section, division, sentence, clause, phrase or portion of this resolution, or the documents in the record in support of this resolution, are for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions.

PASSED AND ADOPTED this 11th day of July, 2016.

Robert L. Dickson, Jr., Chair
Costa Mesa Planning Commission

EXHIBIT A

FINDINGS (APPROVAL)

- A. Pursuant to Section 13-29(g)(5) of the Municipal Code, Master Plan Amendment PA-09-15 A1 meets the broader goals of the 2000 General Plan and Mesa West Bluffs Urban Plan by exhibiting excellence in design, site planning, integration of uses and structures, and protection of the integrity of neighboring development.

The amended project meets the purpose and intent of the mixed-use overlay district, and the stated policies of the Mesa West Bluffs Urban Plan. The new building will feature architecture that will complement the surrounding industrial uses. The proposed project would meet the Assisted Living Facility, senior resident's health, and gathering needs of the community at a level no greater than which can be supported by planned infrastructure improvements. Master Plan Amendment PA-09-15 A1 is consistent with the goals, policies, objectives, and/or regulations of the General Plan, Zoning Code, and Mesa West Bluffs Urban Plan.

- B. The proposed Master Plan Amendment PA-09-15 A1 complies with Title 13, Section 13-83.52, Mixed-Use Overlay District, of the Municipal Code because the Master Plan is found to exhibit excellence in design, site planning, integration of uses and structures and protection of the integrity of neighboring development. The proposed project, as amended, complies with the Urban Plan to provide additional amenities or innovation in exchange for flexible development standards. Overall the proposed master plan, as amended, represents a desirable product type in conformance with the City's policy and regulatory documents. The expansion of the State Licensed Assisted Living Facility meets the overall need for senior housing. The addition of the civic and cultural amenities such as the Club Fitness Center and Community Event Center will provide access to additional sites available for physical and social health for our community.

- C. The amended project complies with Title 13, Section 13-29(e), of the Municipal Code because:

- a) The proposed development and use is compatible and harmonious with uses both onsite as well as those on surrounding properties. Specifically, interior and exterior noise attenuation for the Assisted Living Facility is required. On-site hazardous materials remediation is also required prior to issuance of building permits.
- b) Safety and compatibility of the design of the buildings, parking areas, landscaping, luminaries, and other site features including functional aspects of the site development such as automobile and pedestrian circulation have been considered. The project shall provide a standard commercial drive approach from Babcock Street and Monrovia Avenue. The Assisted Living Facility expansion shall be fully-sprinklered. The

lighting plan shall minimize light/glare to the surrounding neighbors and new residents to the fullest extent possible.

- c) The planning application is for a project-specific case and does not establish a precedent for future development in the overlay zone.
 - d) The cumulative effects of Planning Application PA-07-20, as amended by Master Plan Amendment PA-09-15, as amended by Master Plan PA-09-15 A1 have been considered.
- D. The discharge of sewage from this subdivision into the public sewer system will not violate the requirements of the California Regional Water Quality Control Board pursuant to Division 7 (commencing with Section 13000 of the Water Code).
- E. The amended project has been reviewed for compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines, and the City's environmental procedures. The Westside Lofts Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the final master plan, pursuant to the California Environmental Quality Act. An Addendum to the Westside Lofts Initial Study/Mitigated Negative Declaration (IS/MND) and although the project has been amended, the environmental conclusions have not changed. Although the amended project could have a significant effect on the environment, mitigation measures have been included as conditions of approval that reduce impacts to the fullest extent reasonable and practicable. All significant impacts are reduced to a below a level of significance with implementation of conditions and mitigation measures.
- F. Mitigation Measures from the Westside Lofts IS/MND and the Addendum to the IS/MND have been included as conditions of approval. If any of these conditions are removed, the City Council must make a finding that the project will not result in significant environmental impacts, that the condition(s) are within the responsibility and jurisdiction of another public agency, or that specific economic, social, or other considerations make the mitigation measures infeasible.
- G. The evidence presented in the record as a whole indicates that the project will not individually or cumulatively have an adverse effect on wildlife resources or habitat. The project site consists of ornamental, non-native vegetation and does not contain, nor is it in proximity to, any sensitive habitat areas.
- H. The amended project, as conditioned, is consistent with Chapter XII, Article 3, Transportation System Management of Title 13 of the Municipal Code in that the project's traffic impacts will be mitigated at all affected intersections and by the payment of traffic impact fees.
- I. The amended project has been reviewed for conformity with the Orange County Congestion Management Program (CMP) requirements and the additional traffic generated by the project does not cause the CMP highway system to exceed LOS "E".

- J. The revised site-specific 1.02 FAR for the Westside Lofts mixed-use development includes the building square footage of all proposed structures. The proposed scale, density, and intensity are considered suitable for the project site because the project is below the 1.25 FAR standard established in the Mesa West Bluffs Urban Plan when a project exemplifies overall design quality, site planning, seamless integration of Phase II next to the existing Vivante Phase I, and the overall project is within the development capacity of the General Plan.
- K. The proposed buildings are an excessive distance from the street necessitating fire apparatus access and provisions of an on-site fire hydrant(s) as required by the Costa Mesa Fire Department. The City's Fire Department has required the installation of an automatic fire sprinkler system pursuant to NFPA 13 requirements.
- L. The project meets the objectives of the Urban Plan by including public benefits such as: (a) Hazardous waste remediation of the site pursuant to the State Department of Toxic Substances Control (DTSC) requirements was completed in Phase I; (b) Undergrounding of Southern California Edison distribution lines along Monrovia frontage in the public right-of-way; (c) Incorporation of green building design, such as energy efficient windows, appliances, irrigation system, and building materials;

EXHIBIT B

CONDITIONS OF APPROVAL

- Plng.
1. The 1,700 square feet which include the Dance/Yoga Studio and Fitness Center within Phase II of Vivante shall be open to all seniors 60 years old and more regardless of where they live.
 2. The 3,900 square feet community event center must be available to non Vivante residents and staff to rent for public, professional, or private events throughout the year.
 3. Prior to issuance of building permits an Outreach and Operations Plan shall be provided from Nexus Development Corp. and approved by the Planning Division. The outreach plan shall describe the marketing program of the Club Fitness Center and Community Event Center to ensure the facilities are available and the community is aware of them. Specifically this plan shall plan for the manner in which they operate both centers which include but are not limited to: hours of operation, access onsite, availability, membership/rental fees and management.
 4. Planning Application PA-09-15 A1 shall comply with the conditions of approval, code requirements, special district requirements, and mitigation measures of the IS/MND for this project and as listed in the attached Mitigation Monitoring Program (Exhibit C).
 5. Mitigation measures from the IS/MND for this project have been included as Exhibit C. If any of these conditions are removed, the Planning Commission must make a finding that the project will not result in significant environmental impacts, that the conditions are within the responsibility of another public agency, or that specific economic, social, or other considerations make the mitigation measures infeasible.
 6. The conditions of approval including Mitigation Measures incorporated by reference in these Conditions of Approval as Exhibit C, code requirements, and special district requirements of PA-09-15 A1 shall be blueprinted on the face of the site plan as part of the plan check submittal package.
 7. A decorative 6-foot high perimeter block wall shall be constructed along the northern interior property line of the site abutting commercial and industrial uses prior to issuance of certificates of occupancy unless otherwise approved by the Development Services Director. Where walls on adjacent properties already exist, the applicant shall work with the adjacent property owner(s) to prevent side-by-side walls with gaps in between them and/or provide adequate privacy screening by trees and landscaping.
 8. Prior to issuance of building permits, a final landscape plan indicating the landscape palette and the design/material of paved areas shall be submitted for review and approval by the Planning Division.
 9. Landscaping and irrigation shall be installed in accordance with the approved plans prior to final inspection or occupancy clearance.
 10. Prior to issuance of building permits, developer shall contact the U.S. Postal Service with regard to location and design of mail delivery facilities. Such facilities shall be shown on the site plan, landscape plan,

and/or floor plan.

11. No modification(s) of the approved building elevations including, but not limited to, change of architectural type, changes that increase the building height, removal of building articulation, or a change of the finish material(s), shall be made during construction without prior Planning Division written approval. Failure to obtain prior Planning Division approval of the modification could result in the requirement of the applicant to (re)process the modification through a discretionary review process or a variance, or in the requirement to modify the construction to reflect the approved plans.
12. No exterior roof access ladders, roof drain scuppers, or roof drain downspouts are permitted. This condition relates to visually prominent features of scuppers or downspouts that not only detract from the architecture but may be spilling water from overhead without an integrated gutter system which would typically channel the rainwater from the scupper/downspout to the ground. An integrated downspout/gutter system which is painted to match the building would comply with the condition. This condition shall be completed under the direction of the Planning Division.
13. Prior to issuance of grading permits, developer shall submit for review and approval a Construction Management Plan. This plan features methods to minimize disruption to the neighboring residential uses to the fullest extent that is reasonable and practicable. The plan shall include construction parking and vehicle access and specifying staging areas and delivery and hauling truck routes. The plan should mitigate disruption to residents during construction. The truck route plan shall preclude truck routes through residential areas and major truck traffic during peak hours. The total truck trips to the site shall not exceed 200 trucks per day (i.e., 100 truck trips to the site plus 100 truck trips from the site) unless approved by the Development Services Director or Transportation Services Manager.
14. The subject property's ultimate finished grade level may not be filled/raised in excess of 36 inches above the finished grade of any abutting property. If additional fill dirt is needed to provide acceptable on-site storm water flow to a public street, an alternative means of accommodating that drainage shall be approved by the City's Building Official prior to issuance of any grading or building permits. Such alternatives may include subsurface tie-in to public storm water facilities, subsurface drainage collection systems and/or sumps with mechanical pump discharge in-lieu of gravity flow. If mechanical pump method is determined appropriate, said mechanical pump(s) shall continuously be maintained in working order. In any case, development of subject property shall preserve or improve the existing pattern of drainage on abutting properties.
15. The applicant shall contact the Planning Division to arrange a Planning inspection of the site prior to the release of occupancy/utilities. This inspection is to confirm that the conditions of approval and code

requirements have been satisfied.

16. The project shall comply with Title 24 of the California Code of Regulations established by the energy conservation standards. The project Applicant shall incorporate the following in building plans:
 - a. Double paned glass or window treatment for energy conservation shall be used in all exterior windows.
 - b. Building shall be oriented north/south where feasible.
17. In the event that archaeological resources are encountered during grading and construction, all construction activities shall be temporarily halted or redirected to permit the sampling, identification, and evaluation of archaeological materials as determined by the City, who shall establish, in cooperation with the project applicant and a certified archaeologist, the appropriate procedures for exploration and/or salvage of the artifacts.
18. In the event that paleontological resources are encountered during grading and construction operations, all construction activities shall be temporarily halted or redirected to permit a qualified paleontologist to assess the find for significance and, if necessary, develop a paleontological resources impact mitigation plan (PRIMP) for the review and approval by the City prior to resuming excavation activities.
19. If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.
20. Trash facilities shall be screened from view, and designed and located appropriately to minimize potential noise and odor impacts to residential areas.
21. To avoid an alley-like appearance, the private street shall not be developed with a center concrete swale. The private street shall be complemented by stamped concrete or pervious pavers.
22. Transformers, backflow preventers, and any other approved above-ground utility improvement shall be located outside of the required street setback area and shall be screened from view, under direction of Planning staff. Any deviation from this requirement shall be subject to review and approval of the Development Services Director.
23. A comprehensive sign program shall be submitted for all on-site signs

(i.e., monument, directory, wall mounted) for review and approval of the Development Services Director prior to issuance of building permits.

24. The applicant shall defend, indemnify, and hold harmless the City, its elected and appointed officials, agents, officers and employees from any claim, action, or proceeding (collectively referred to as "proceeding") brought against the City, its elected and appointed officials, agents, officers or employees arising out of, or which are in any way related to, the applicant's project, or any approvals granted by City related to the applicant's project. The indemnification shall include, but not be limited to, damages, fees and/or costs awarded against the City, if any, and cost of suit, attorney's fees, and other costs, liabilities and expenses incurred in connection with such proceeding whether incurred by the applicant, the City and/or the parties initiating or bringing such proceeding. This indemnity provision shall include the applicant's obligation to indemnify the City for all the City's costs, fees, and damages that the City incurs in enforcing the indemnification provisions set forth in this section. City shall have the right to choose its own legal counsel to represent the City's interests, and applicant shall indemnify City for all such costs incurred by City.
25. Vertical landscaping shall be further incorporated along the walls and structures outside of the ten-foot setback but near Babcock Street to minimize impact of setback encroachment.
- Eng 26. Maintain the public right-of-way in a "wet-down" condition to prevent excessive dust and promptly remove any spillage from the public right-of-way by sweeping or sprinkling.
27. At the time of development submit for approval an Offsite Plan to Engineering Division and Grading Plan to Building Division that shows Existing Parkway Improvements, Sewer, Water and the limits of work on the site, and hydrology calculations, both prepared by a registered Civil Engineer or Architect. Construction Access approval must be obtained prior to Building or Engineering Permits being issued by the City of Costa Mesa.
28. Dedicate 3-foot wide public sidewalk easement behind the right of way line along the property frontage on Monrovia Avenue to allow for the construction of the sidewalk behind the proposed driveway approach.
29. The applicant shall be required to underground utilities in the public right-of-way along Monrovia Avenue for the site. The subdivider shall submit application to Southern California Edison (SCE) for a determination on the design and all other logistical requirements for the undergrounding. Unless the proposed undergrounding is not considered feasible by SCE (i.e. it determines that the pole must remain above ground for specified reason), the Public Services Director shall require compliance with this condition of approval. If the applicant requests waiver from the undergrounding requirement, it shall be reviewed by the Planning Commission for consideration (re-submittal of the Planning Application is not required).
30. The plans shall clearly delineate the entire right of way line specifically

on Babcock Street side and shall show that all of the proposed private improvements are within private property and outside the right-of-way.

- Fire
31. A Fire Master Plan must be submitted and approved prior to architectural plan submittal. See Fire Prevention.
 32. Provide a manual wet standpipe system in all stair enclosures at each floor level.
 33. Provide (2) Class A fire hydrants per Fire Department direction.
 34. Provide a "blue dot" reflective marker for all on-site fire hydrants.
 35. Provide a public address system per Fire Department direction.
 36. Provide address numerals which conform to Fire Department standards with minimum size of 12 inches.

CODE REQUIREMENTS

The following list of federal, state and local laws applicable to the project has been compiled by staff for the applicant's reference. Any reference to "City" pertains to the City of Costa Mesa.

- Plng.
1. All contractors and subcontractors must have valid business licenses to do business in the City of Costa Mesa. Final inspections, final occupancy and utility releases will not be granted until all such licenses have been obtained.
 2. Address assignment shall be requested from the Planning Division prior to submittal of working drawings for plan check. The approved address of individual units, suites, buildings, etc., shall be blueprinted on the site plan and on all floor plans in the working drawings.
 3. Prior to issuance of building permits, applicant shall contact the US Postal Service with regard to location and design of mail delivery facilities. Such facilities shall be shown on the site plan, landscape plan, and/or floor plan.
 4. Pay Park fee prior to building permit issuance or certificate of occupancy. Applicable fee shall be that fee in effect at the time the subdivision application is filed with the City.
 5. Minimum garage door width shall be 16 feet.
 6. All garages shall be provided with automatic garage door openers.
 7. Hours of construction shall comply with Section 13-279, Title 13, of the Costa Mesa Municipal Code.
 8. Two (2) sets of detailed landscape and irrigation plans, which meet the requirements set forth in Costa Mesa Municipal Code Sections 13-101 through 13-108 and the City's Water Efficient Landscape Guidelines, shall be required as part of the project plan check review and approval process. Plans shall be forwarded to the Planning Division for final approval prior to issuance of building permits.
 9. Two (2) sets of landscape and irrigation plans, approved by the Planning Division, shall be attached to two of the final building plan sets.
 10. All on-site utility services shall be installed underground.
 11. Installation of all utility meters shall be performed in a manner so as to obscure the installation from view from any place on or off the property. The installation shall be in a manner acceptable to the public utility and shall be in the form of a vault, wall cabinet, or wall box under the direction of the Planning Division.
 12. Any mechanical equipment such as air-conditioning equipment and duct work shall be screened from view in a manner approved by the Planning Division.
 13. As final building plans are submitted to the City of Costa Mesa for review and approval, the Costa Mesa Police Department shall review all

plans for the purpose of ensuring that design requirements are incorporated into the building design to increase safety and avoid unsafe conditions. These measures focus on security measures that are recommended by the Police Department, including but not limited to the following:

- a. Lighting shall be provided in open areas and parking lots.
- b. Required building address numbers shall be readily apparent from the street and rooftop building identification shall be readily apparent from police helicopters for emergency response agencies.
- c. Landscaping requirements.
- d. Emergency vehicle parking areas shall be designated within proximity to buildings.
- e. Prior to the issuance of a Building Permit, the City of Costa Mesa Police Department shall review and approve the developer's project design features to assess the compliance with local requirements.

14. Prior to approval of plans, the project shall fulfill the City of Costa Mesa Drainage Ordinance No. 06-19 requirements.

Bldg.

15. Comply with the requirements of the following adopted codes 2013 California Residential Code, 2013 California Building Code, 2013 California Electrical code, 2013 California Mechanical code , 2013 California Plumbing code , 2013 California Green Building Standards Code and 2013 California Energy Code (or the applicable adopted, California Residential Code, California Building code California Electrical code, California Mechanical code California Plumbing Code, California Green Building Standards and California Energy Code at the time of plan submittal or permit issuance) and California Code of Regulations also known as the California Building Standards Code, as amended by the City of Costa Mesa.

Requirements for accessibility to sites, facilities, buildings and elements by individuals with disability shall comply with chapter 11A and 11B of the 2013 California Building Code (or the applicable adopted Building Code at time of submittal).

16. This project shall comply with the in-Building Public Safety Radio System Coverage per section 5-130 to 5-137 of the Costa Mesa Municipal Code. At plan check submittal 6 copies of an in-building Public Safety Radio System Coverage report (Radio system report) shall be submitted to the Building and Safety Division. The Radio System report shall be certified by an FCC licensed radio technician as provided by the property owner/applicant. The technician is required by section 5-133 to conduct initial tests and shall be employed by the owner, the engineer or architect of record, or agent of the owner, but not by the contractor or any other person responsible for the work.

17. Submit precise grading plans, an erosion control plan, and a hydrology

study.

18. Submit a soils report for this project. Soil's report recommendations shall be blueprinted on both the architectural and grading plans.
19. On graded sites the top of exterior foundation shall extend above the elevation of the street gutter at point of discharge or the inlet of an approved discharge devise a minimum of 12 inches plus 2 percent. 2013 California Building Code CRC 403.1.7.3.
20. The ground adjacent immediately to the foundation shall be slopes away from the building at a slope of not less than 5% for a minimum distance of 10 feet measured perpendicular to the face of the wall CBC sec. 1804.3. See also exception.
21. Prior to the issuance of Grading Permits, the project Applicant shall provide the City of Costa Mesa Department of Building Safety with a geotechnical investigation of the project site detailing recommendations for remedial grading in order to reduce the potential of onsite soils to cause unstable conditions. Design, grading, and construction shall be performed in accordance with the requirements of the California Building Code applicable at the time of grading, appropriate local grading regulations, and the recommendations of the geotechnical consultant as summarized in a final written report, subject to review by the City of Costa Mesa Department of Building Safety.
22. During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1532.1, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead. Lead-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code.
23. During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1529, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos. Asbestos-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code.
24. All construction contractors shall comply with South Coast Air Quality Management District (SCAQMD) regulations, including Rule 403, Fugitive Dust. All grading (regardless of acreage) shall apply best available control measures for fugitive dust in accordance with Rule 403. To ensure that the project is in full compliance with applicable SCAQMD dust regulations and that there is no nuisance impact off the site, the contractor would implement each of the following:
 - a. Moisten soil not more than 15 minutes prior to moving soil or conduct whatever watering is necessary to prevent visible dust emissions from exceeding 100 feet in any direction.
 - b. Apply chemical stabilizers to disturbed surface areas (completed grading areas) within five days of completing grading or apply dust

suppressants or vegetation sufficient to maintain a stabilized surface.

- c. Water excavated soil piles hourly or covered with temporary coverings.
- d. Water exposed surfaces at least twice a day under calm conditions. Water as often as needed on windy days when winds are less than 25 miles per day or during very dry weather in order to maintain a surface crust and prevent the release of visible emissions from the construction site.
- e. Wash mud-covered tired and under-carriages of trucks leaving construction sites.
- f. Provide for street sweeping, as needed, on adjacent roadways to remove dirt dropped by construction vehicles or mud, which would otherwise be carried off by trucks departing project sites.
- g. Securely cover loads with a tight fitting tarp on any truck leaving the construction sites to dispose of debris.
- h. Cease grading during period when winds exceed 25 miles per hour.

- Eng. 25. Pay Offsite Plan Check fee per Section 13-231 of the C.C.M.M.C. and approved Offsite Plan shall be required prior to Engineering Permits being issued by City of Costa Mesa.
26. Obtain an encroachment permit from the Engineering Division for any work in the City public right-of-way. Pay required permit fee and cash deposit or surety bond to guarantee construction of off-site street improvements at time of permit per section 15-31 & 15-32, C.C.M.M.C. as approved by City Engineer. Cash deposit or surety bond amount to be determined by City Engineer.
27. Obtain a permit from the City of Costa Mesa, Engineering Division, at the time of development and construct P.C.C. driveway approach per City of Costa Mesa Standards as shown on Offsite Plan. Location and dimensions are subject to the approval of the Transportation Services Manager. ADA compliance required for new driveway approach.
28. Fulfill Drainage Fee requirements per City of Costa Mesa Ordinance No. 06-19 prior to issuance of permits.
29. Obtain a permit from the City of Costa Mesa, Engineering Division, and provide a minimum of 4ft clear sidewalk around existing and proposed obstructions.
- Trans. 30. Construct all proposed driveway approaches to comply with city standards.
31. Fulfill mitigation of off-site traffic impacts at the time of issuance of occupancy by submitting to the Planning Division the required traffic impact fee pursuant to the prevailing schedule of charges adopted by the City Council. The traffic impact fee is calculated including credits for all existing uses. NOTE: The Traffic Impact Fee will be recalculated at the time of issuance of building permit/certificate of occupancy based upon any changes in the prevailing schedule of charges adopted by the City Council and in effect at that time.

- Fire
 - 32. Prior to the issuance of a Building Permit, the City of Costa Mesa Fire Department shall review and approve the project design features to assess compliance with the California Building Code and California Fire Code.
 - 33. The project shall provide an automatic fire sprinkler system according to NFPA 13 R.
- Street Trees
 - 34. Plant 24" box Tabebuia Avellanadae in the ROW on West 16th Street.
- WQMP
 - 35. In order to comply with the 2003 DAMP, the proposed project shall prepare a Storm Drain Plan, Stormwater Pollution Prevention Plan (SWPPP), and Water Quality Management Plan (WQMP) conforming to the current National Pollution Discharge Elimination System (NPDES) requirements, prepared by a Licensed Civil Engineer or Environmental Engineer, which shall be submitted to the Department of Public Works for review and approval.
 - 36. The SWPPP shall be prepared and updated as needed during the course of construction to satisfy the requirements of each phase of development. The plan shall incorporate all necessary Best Management Practices (BMPs) and other City requirements to eliminate polluted runoff until all construction work for the project is completed. The SWPPP shall include treatment and disposal of all dewatering operation flows and for nuisance flows during construction.
 - 37. A WQMP shall be maintained and updated as needed to satisfy the requirements of the adopted NPDES program. The plan shall ensure that the existing water quality measures for all improved phases of the project are adhered to.
 - 38. Location of the BMPs shall not be within the public right-of-way.
 - 39. The project shall comply with the NPDES requirements, as follows:
 - a. Construction General Permit Notice of Intent (NOI) Design: Prior to the issuance of preliminary or precise grading permits, the project applicant shall provide the City Engineer with evidence that an NOI has been filed with the Storm Water Resources Control Board (SWRCB). Such evidence shall consist of a copy of the NOI stamped by the SWRCB or Regional Water Quality Control Board (RWQCB), or a letter from either agency stating that the NOI has been filed.
 - b. Construction Phase Storm Water Pollution Prevention Plan (SWPPP): Prior to the issuance of grading permits, the applicant shall prepare a SWPPP that complies with the Construction General Permit and will include at a minimum the following:
 - c. Discuss in detail the BMPs planned for the project related to control of sediment and erosion, non-sediment pollutants, and potential pollutants in non-storm water discharges.
 - d. Describe post-construction BMPs for the project.
 - e. Explain the maintenance program for the project's BMPs.
 - f. List the parties responsible for the SWPPP implementation and the BMP maintenance during and after grading. The project

Applicant shall implement the SWPPP and modify the SWPPP as directed by the Construction General Permit.

SPECIAL DISTRICT REQUIREMENTS

The requirements of the following special districts are hereby forwarded to the applicant:

- | | |
|--------|--|
| Sani. | <ol style="list-style-type: none">1. Applicant will be required to construct sewers to serve this project, at his own expense, meeting the approval of the Costa Mesa Sanitary District.2. County Sanitation District fees, fixture fees, inspection fees, and sewer permit are required prior to installation of sewer.3. Applicant shall submit a plan showing sewer improvements that meets the District Engineer's approval to the Building Division as part of the plans submitted for plan check.4. The applicant is required to contact the Costa Mesa Sanitary District at (714) 754-5307 to arrange final sign-off prior to certificate of occupancy being released.5. Unless an off-site trash hauler is being used, applicant shall contact the Costa Mesa Sanitary District at (714) 754-5043 to pay trash collection program fees and arrange for service for all new residences. Residences using bin or dumpster services are exempt from this requirement.6. Applicant shall contact Costa Mesa Sanitary District at (949) 654-8400 for any additional district requirements. |
| AQMD | <ol style="list-style-type: none">7. Applicant shall contact the Air Quality Management District (AQMD) at (800) 288-7664 for potential additional conditions of development or for additional permits required by AQMD. |
| Water | <ol style="list-style-type: none">8. Customer shall contact the Mesa Water District – Engineering Desk and submit an application and plans for project review. Customer must obtain a letter of approval and a letter of project completion from Mesa Water District. |
| School | <ol style="list-style-type: none">9. Pay applicable Newport Mesa Unified School District fees to the Building Division prior is issuance of building permits. |
| State | <ol style="list-style-type: none">10. Comply with the requirements of the California Department of Food and Agriculture (CDFA) to determine if red imported fire ants (RIFA) exist on the property prior to any soil movement or excavation. Call CDFA at (714) 708-1910 for information. |

RESOLUTION NO. PC-16-

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COSTA MESA DENYING PLANNING APPLICATION FINAL MASTER PLAN PA-09-15 TO REPLACE PROPOSED OFFICE USE WITH EXPANSION OF EXISTING ASSISTED LIVING FACILITY, A CLUB FITNESS CENTER, AND A COMMUNITY EVENT CENTER WITHIN THE WESTSIDE LOFTS MIXED USE DEVELOPMENT AT 1640 MONROVIA AVENUE.

THE PLANNING COMMISSION OF THE CITY OF COSTA MESA HEREBY RESOLVES AS FOLLOWS:

WHEREAS, an application was filed by W-W Westside Gateway Owner VII, LLC, the property owner, requesting approval of the following:

Master Plan Amendment PA-09-15 A1: The proposed Vivante Phase II includes a request to amend the Master Plan PA-09-15 to allow the replacement of the previously approved 42,000 square feet of office building with a proposed 111-unit independent and assisted living facility, 1700 square foot Club Fitness Center, and a 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 15 studio units, 77 one-bedroom units, and 19 two-bedroom units. The project also would contain a surface parking lot, one level underground parking on the easterly portion of the property, and multiple amenities such as a kitchen/restaurant style dining room, dance studio, café, bar/lounge, activity rooms, library/computer room, art room, outdoor plaza park and some ancillary office space for management services. The project requires a deviation from the required street setback of 10 feet from the Mesa West Bluffs Urban Plan to a proposed 0-foot setback to maximize the number of parking spaces within the underground parking structure.

WHEREAS, a duly noticed public hearing was held by the Planning Commission on JULY 11, 2016 with all persons having the opportunity to speak for and against the proposal;

BE IT RESOLVED that, based on the evidence in the record and the findings contained in Exhibit A, the Planning Commission hereby **DENIES** Planning Application PA-09-15 A1.

PASSED AND ADOPTED this 11th day of July, 2016.

Robert L. Dickson, Jr., Chair
Costa Mesa Planning Commission

EXHIBIT A

FINDINGS (DENIAL)

- A. The proposed project does not comply with Title 13, Section 13-83.52(c), Mixed-Use Overlay District, of the Municipal Code due to the following:

The project is not consistent with the General Plan, does not meet the purpose and intent of the mixed-use overlay district, and the stated policies of the Urban Plan.

The project does not include adequate resident-serving amenities in the common open space areas and/or private open space areas in areas including, but not limited to, patios, balconies, roof terraces, walkways, and landscaped areas.

The project is not consistent with the compatibility standards for residential development in that it does not provide adequate protection for residents from excessive noise, odors, vibration, light and glare, and toxic emanations.

The proposed residences do not have adequate separation and screening from adjacent commercial/industrial uses.

- B. The proposed project does not comply with Title 13, Section 13-83.52(d), Mixed-Use Overlay District, of the Municipal Code because:

The strict interpretation and application of the mixed-use overlay district's development standards would not result in practical difficulty inconsistent with the purpose and intent of the General Plan and Mesa West Bluffs Urban Plan, while the deviation to the regulation allows for a development that does not achieve the purposes and intent of the General Plan and the Urban Plan.

The granting of this deviation results in a mixed-use development which does not exhibit excellence in design, site planning, integration of uses and structures, and compatibility standards for mixed use development.

The granting of this deviation will be detrimental to the public health, safety, or welfare, or be materially injurious to properties or improvements in the vicinity.

- C. The subdivision of the property for a residential common interest development is not consistent with the City's General Plan and Zoning Code.
- D. The Costa Mesa Planning Commission has denied Planning Application PA-14-29 and Vesting Tentative Tract Map VTT-17800. Pursuant to Public Resources Code Section 21080(b) (5) and CEQA Guidelines Section 15270(a) CEQA does not apply to this project because it has been rejected and will not be carried out.
- E. The project is exempt from Chapter IX, Article 11, Transportation System Management, of Title 13 of the Costa Mesa Municipal Code.

EXHIBIT C – MITIGATION MONITORING PROGRAM

Table 13					
Mitigation Measure Implementation Schedule and Monitoring Checklist					
Mitigation Measures	Monitoring Action	Responsible Implementation Agency	1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
1. TRAFFIC					
<i>Mitigation Measures</i>					
<ul style="list-style-type: none"> • Prior to issuance of a Certificate of Occupancy, the Applicant shall develop a Parking Strategy and Management Plan and shall submit said Plan to the Director of Development Services for review and approval. The Parking Strategy and Management Plan shall address the “booking of outside groups to assure that the parking needs of the function would reasonably balance with the available on-site spaces, after excluding spaces explicitly assigned to residents, staff, or for other needs such as outside Fitness Center users” and be utilized by the event coordinator at Vivante. 					
2. AIR QUALITY					
<i>Mitigation Measures</i>					
<ul style="list-style-type: none"> • Apply soil stabilizers or moisten inactive areas • Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times per day) • Cover all stock piles with tarps at the end of each day or as needed • Provide water spray during loading and unloading of earthen materials • Minimize in-out traffic from construction zone • Cover all trucks hauling dirt, sand, or loos material and require all trucks to maintain at least two feet of freeboard 					

<ul style="list-style-type: none"> • Sweep streets daily if visible soil material is carried out from the construction site • Utilize well-tuned off-road construction equipment • Establish a preference for contractors using Tier 3 or better heavy equipment • Enforce 5-minute idling limits for both on-road trucks and off-road equipment 					
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**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
1. AESTHETICS					
<i>Standard Conditions</i>					
<ul style="list-style-type: none"> Design of the perimeter wall shall incorporate landscape elements to soften the edge and incorporate materials, color and texture that will be compatible with the surrounding community. A wall treatment plan shall be prepared that includes wall locations, heights, landscape treatments and materials and submitted for review and approval by the Development Services Director. Prior to the issuance of grading permits, the developer shall submit a Lighting Plan and Photometric Study for the approval of the City's Development Services Department. The Lighting Plan shall demonstrate compliance of the following: <ul style="list-style-type: none"> The mounting height of lights on light standards shall not exceed 25 feet in any location on the project site; The intensity and location of lights on buildings shall be limited to minimize nighttime light and glare to residents and shall be subject to the Development Services Director's approval; All site lighting fixtures shall be provided with a flat glass lens. Photometric calculations shall indicate the effect of the flat glass lens fixture efficiency; Lighting design and layout shall limit spill light to no more than 0.5 foot-candle at the property line of the surrounding neighbors, consistent with the level of lighting that is determined necessary for safety and security purposes on site; and Structures shall use low reflective glass and building materials to minimize daytime glare to the fullest extent possible. 	Submittal of wall treatment plan.	Development Services Department	1. Pre-Construction Development Services Dept. 2. Development Services Dept.		
<ul style="list-style-type: none"> All site lighting fixtures shall be provided with a flat glass lens. Photometric calculations shall indicate the effect of the flat glass lens fixture efficiency; Lighting design and layout shall limit spill light to no more than 0.5 foot-candle at the property line of the surrounding neighbors, consistent with the level of lighting that is determined necessary for safety and security purposes on site; and Structures shall use low reflective glass and building materials to minimize daytime glare to the fullest extent possible. 	Submittal of a Lighting Plan and Photometric Study.	Development Services Department	1. Pre-Construction (prior to issuance of grading permits) Development Services Dept. 2. Development Services Dept.		
<i>Mitigation Measures</i>					
No mitigation measures are required.					

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**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
2. AGRICULTURAL RESOURCES					
No mitigation measures are required.					
3. AIR QUALITY					
<i>Standard Conditions</i>					
There are no standard conditions of approval related to air quality that apply to the proposed project.					
<i>Mitigation Measures</i>					
<p>5.3-1 Prior to the issuance of grading permits, the applicant shall include a note on all grading plans which requires the construction contractor to implement the following dust suppression measures during grading. During construction, the contractor will comply with those measures identified in SCAQMD's Rules 402 and 403 to minimize the air quality impacts from the proposed project.</p> <ul style="list-style-type: none"> a. During earthmoving or excavation operations, fugitive dust emissions shall be controlled by regular watering, paving of roads, or other dust preventive measures using the following procedures: b. All material excavated shall be sufficiently watered to prevent excessive amounts of dust. Watering, with complete coverage, shall occur at least twice daily, preferably in the late morning and after work is done for the day. • All earthmoving or excavation activities shall cease during periods of high winds (i.e., winds greater than 20 mph averaged over one hour) or during first and second stage ozone episodes. • All material transported off site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust. 	Periodic monitoring during grading.	Development Services Department	<ul style="list-style-type: none"> 1. Pre-Construction (Grading Operations) 2. Development Services Dept. 3. Development Services Dept. 		

Table 6.2-1 Mitigation Measure Implementation Schedule and Monitoring Checklist					
Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<ul style="list-style-type: none"> • The area disturbed by earthmoving or excavation operations shall be minimized at all times. c. After earthmoving or excavation operations, fugitive dust emissions shall be controlled using the following measures: <ul style="list-style-type: none"> • Portions of the construction area to remain inactive longer than a period of three months shall be revegetated and watered until cover is grown. • All active portions of the construction site shall be watered to prevent excessive amounts of dust. d. At all times, fugitive dust emissions shall be controlled using the following procedures: <ul style="list-style-type: none"> • On-site vehicle speed shall be limited to 15 mph. • Road improvements shall be paved as soon as feasible, watered periodically, or chemically stabilized. e. At all times during the construction phase, ozone precursor emissions from mobile equipment shall be controlled using the following procedures: <ul style="list-style-type: none"> • Equipment engines shall be maintained in good condition and in proper tune according to manufacturer's specifications. • On-site mobile equipment should not be left idling for a period of longer than 60 seconds. 					

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**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>f. Outdoor storage piles of construction materials shall be kept covered, watered, or otherwise chemically stabilized with a chemical wetting agent to minimize fugitive dust emissions and wind erosion.</p>		Development Services Department	1. Pre-Construction (Prior to commencement of construction activities) 2. Development Services Dept. 3. Development Services Dept.		
5.3-2	Prior to commencement of construction activities, project applicants shall identify to the City a construction relations officer to act as a community liaison concerning on-site activity, including resolution of issues related to dust generation from grading/paving activities.	Development Services Department	1. Pre-Construction (Prior to approval of building permits) 2. Development Services Dept. 3. Development Services Dept.		
5.3-3	Prior to approval of building permits, the project applicant shall ensure that the plans minimize ROG emissions. Building permits for the project shall specify and require the use of pre-coated materials, use of all high pressure-low volume (HPLV) paint applicators with 50% efficiency, and use of lower volatility paint not exceeding 100 grams of ROG per liter.	Development Services Department	1. Pre-Construction (Prior to issuance of building permits) 2. Development Services Dept. 3. Development Services Dept.		
5.3-4	Prior to issuance of building permits, the building plans shall demonstrate that all residences are equipped with a mechanical ventilation system that will properly filter the indoor air. The ventilation system can be a component of the air conditioning system with the distinction being that clean, ventilated air flow does not necessarily need coolant. The ventilation system shall be effective with all doors and windows closed. It shall be required to have a filtration efficiency of at least 90 percent and the ability to remove particulate matter with diameters equal to or greater than 0.5 micron.	Development Services Department	1. Pre-Construction (Prior to issuance of building permits) 2. Development Services Dept. 3. Development Services Dept.		
4. BIOLOGICAL RESOURCES No mitigation measures are required.					

**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
5. CULTURAL RESOURCES					
<i>Standard Conditions</i>					
<ul style="list-style-type: none"> In the event that archaeological materials are encountered during grading and construction, all construction activities shall temporarily be halted or redirected to permit the sampling, identification, and evaluation of archaeological materials as determined by the City, who shall establish, in cooperation with the project applicant and a certified archaeologist, the appropriate procedures for exploration and/or salvage of the artifacts. 	Monitoring during grading.	Project Applicant	<ol style="list-style-type: none"> Pre-Construction (Grading Operations) Development Services Dept. Development Services Dept. 		
<ul style="list-style-type: none"> In the event that paleontological resources are encountered during grading and construction operations, all construction activities shall be temporarily halted or redirected to permit a qualified paleontologist to assess the find for significance and, if necessary, develop a PRIMP for the review and approval of the City prior to resuming excavation activities. 	Monitoring during grading.	Project Applicant	<ol style="list-style-type: none"> Pre-Construction (Grading Operations) Development Services Dept. Development Services Dept. 		
<ul style="list-style-type: none"> If human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. The County Coroner must be notified of the find immediately. If the remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner or his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 24 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials. 	Monitoring during grading.	Development Services Dept.	<ol style="list-style-type: none"> Pre-Construction (Grading Operations) Development Services Dept. Development Services Dept. 		
<i>Mitigation Measures</i>					
No mitigation measures are required.					

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**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
6. GEOLOGY AND SOILS					
<i>Standard Conditions</i>					
There are no standard conditions related to geology and soils that apply to this project.					
<i>Mitigation Measures</i>					
<p>5.6-1 All grading operations and construction will be conducted in conformance with the recommendations included in the geotechnical report on the proposed project site entitled Preliminary Geotechnical Investigation and Percolation Tests, Proposed Residential and Commercial Developments, 1640 Monrovia Avenue, City of Costa Mesa, California (July 2007) (included in Appendix B of this document). Design, grading, and construction shall be performed in accordance with the requirements of the UBC applicable at the time of grading, appropriate local grading regulations, and the recommendations of the project geotechnical consultant as summarized in a final written report, subject to review by the City of Costa Mesa Building official prior to issuance of demolition permits.</p>	<p>Submit evidence of compliance.</p>	<p>Project Applicant</p>	<p>1. Pre-Construction (prior to issuance of grading permits) 2. Public Services Dept. 3. Public Services Dept.</p>		
<p>Recommendations in the Preliminary Geotechnical Investigation and Percolation Tests, Proposed Residential and Commercial Developments, 1640 Monrovia Avenue, City of Costa Mesa, California are summarized below.</p> <ul style="list-style-type: none"> Seismic Design Parameters. The seismic design parameters for the subject site are presented in the following table in accordance with the International Building Code (IBC), 2006 guidelines and should be considered as the minimum for the seismic analysis of the subject site. 					

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Table 6.2-1 Mitigation Measure Implementation Schedule and Monitoring Checklist																		
Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Agency 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance													
<p>Mitigation Measures</p> <table border="1"> <thead> <tr> <th colspan="2">IBC Site Categorization and Site Coefficients</th> </tr> <tr> <th>Categorization/Coefficient</th> <th>Design Value</th> </tr> </thead> <tbody> <tr> <td>Site Class</td> <td>D</td> </tr> <tr> <td>Short Period (0.2 sec) Site Coefficient, F_s</td> <td>1.0</td> </tr> <tr> <td>Long Period (1.0 sec) Site Coefficient, F_l</td> <td>1.5</td> </tr> <tr> <td>Design (5% damped) spectral response accel. parameter at short period, S_{0.2}</td> <td>1.2g</td> </tr> <tr> <td>Design (5% damped) spectral response accel. parameter at a period of 1 sec, S₁</td> <td>0.67g</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • Site Preparation. Prior to construction, the site should be cleared of vegetation, trash, and debris, which should be disposed of offsite. Remnants of the existing development including all foundations, slabs, pavements and other unsuitable materials should be completely removed. Efforts should be made to locate any existing or abandoned utility lines in the area. Existing utility conduits should be removed or rerouted if they interfere with the proposed construction, and the resulting cavities should be properly backfilled and compacted. • Overexcavation and Recompaction. Depending on the encountered subsurface soil conditions and anticipated structural loads, remedial overexcavation limits for the proposed developments are recommended in the following table. Remedial overexcavation limits (both vertical and lateral) for the proposed building structures for different types of foundations are shown in the following Table. 	IBC Site Categorization and Site Coefficients		Categorization/Coefficient	Design Value	Site Class	D	Short Period (0.2 sec) Site Coefficient, F _s	1.0	Long Period (1.0 sec) Site Coefficient, F _l	1.5	Design (5% damped) spectral response accel. parameter at short period, S _{0.2}	1.2g	Design (5% damped) spectral response accel. parameter at a period of 1 sec, S ₁	0.67g				
IBC Site Categorization and Site Coefficients																		
Categorization/Coefficient	Design Value																	
Site Class	D																	
Short Period (0.2 sec) Site Coefficient, F _s	1.0																	
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Design (5% damped) spectral response accel. parameter at a period of 1 sec, S ₁	0.67g																	

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**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures		Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Agency 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance																								
<p>Overexcavation Limits for the Proposed Structures</p> <table border="1"> <thead> <tr> <th>Proposed Structure</th> <th>Maximum Structural Loads</th> <th>Depth of Overexcavation (feet)</th> <th>Lateral Limit of Overexcavation¹ (feet)</th> </tr> </thead> <tbody> <tr> <td>Four-Story Building</td> <td>Column load 150 kips; wall footing load 7.5 kips/foot.</td> <td>10 footing) 5 (mat foundation)</td> <td>10 (spread footing) 5 (mat foundation)</td> </tr> <tr> <td>One to two-story commercial buildings</td> <td>Column load 100 kips; wall footing load 5 kips/foot.</td> <td>5</td> <td>5</td> </tr> <tr> <td>4-5-level parking structure</td> <td>Column load 200 kips; wall footing load 10 kips/foot.</td> <td>10 footing) 5 (mat foundation)</td> <td>10 (spread footing) 5 (mat foundation)</td> </tr> <tr> <td>Four-story residential condominiums²</td> <td>Column load 200 kips; wall footing load 7.5 kips/foot.</td> <td>10 footing) 5 (mat foundation)</td> <td>10 (spread footing) 5 (mat foundation)</td> </tr> <tr> <td>Three-story live/work/residential lofts³</td> <td>Column load 100 kips; wall footing load 5 kips/foot.</td> <td>5</td> <td>5</td> </tr> </tbody> </table> <p>¹ Lateral limit is from the edge of outermost foundation elements. ² Anticipated to be cast-in-place concrete structures. ³ Anticipated to be wood frame structures.</p>							Proposed Structure	Maximum Structural Loads	Depth of Overexcavation (feet)	Lateral Limit of Overexcavation ¹ (feet)	Four-Story Building	Column load 150 kips; wall footing load 7.5 kips/foot.	10 footing) 5 (mat foundation)	10 (spread footing) 5 (mat foundation)	One to two-story commercial buildings	Column load 100 kips; wall footing load 5 kips/foot.	5	5	4-5-level parking structure	Column load 200 kips; wall footing load 10 kips/foot.	10 footing) 5 (mat foundation)	10 (spread footing) 5 (mat foundation)	Four-story residential condominiums ²	Column load 200 kips; wall footing load 7.5 kips/foot.	10 footing) 5 (mat foundation)	10 (spread footing) 5 (mat foundation)	Three-story live/work/residential lofts ³	Column load 100 kips; wall footing load 5 kips/foot.	5	5
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Mitigation Measure Implementation Schedule and Monitoring Checklist

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<p>Since the existing building will be demolished for the construction of the new buildings, additional overexcavation to remove the remnants of existing building may be required. The actual depth and extent of overexcavation should be evaluated at the time of construction by a representative of the geotechnical engineer. In-place testing of removal bottoms should be performed during grading to determine the competency of materials being left in place. A minimum criterion of 100 pounds-per-cubic-foot (pcf) or 85 percent relative compaction (ASTM D1557) should be considered for competent removal bottoms.</p> <ul style="list-style-type: none"> - Pavement and Concrete Flatwork Areas - In pavement and concrete flatwork areas, a minimum remedial removal and recompaction of 18 inches below the existing grade or finish grade, whichever is deeper, should be performed. 					
<ul style="list-style-type: none"> • Subgrade Preparation. Exposed subgrade soil surfaces, including all excavation or removal bottoms, should be observed by a representative of the geotechnical engineer prior to placement of fill or construction of other improvements to verify that suitable soil is exposed. The exposed subgrade should be scarified to a depth of 6 inches, moisture-conditioned to near optimum-moisture content and then compacted to a minimum of 90 percent of the ASTM Test Method D1557 laboratory maximum density. 					
<ul style="list-style-type: none"> • Fill Placement and Compaction - The onsite soil, free of organic material, oversize particles (cobbles, boulders, rubble, etc.) greater than 6 inches in largest dimension, is suitable to be used as general fill. Import soil should be evaluated and tested by the geotechnical consultant before delivering to the site. In general, fill material should be low in expansion potential (EI less than 51), non-organic and free of debris or other deleterious materials. 					

**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>All fill soil should be placed in thin, loose lifts no more than 8 inches thick, moisture-conditioned as necessary to approximately 2 to 3 percent above the optimum moisture content, and compacted using appropriate equipment to minimum of 90 percent relative compaction (ASTM D1557).</p> <ul style="list-style-type: none"> • <u>Spread Footings</u>. Spread footings (continuous wall and/or column) for the proposed structures should be bearing on a zone of newly placed properly compacted fill. Preliminary design parameters for spread footings are described for the following in more detail in the Preliminary Geotechnical Investigation (Appendix B): <ul style="list-style-type: none"> - Minimum Footing Dimensions and Embedment - Allowable Vertical Bearing - Lateral Loads - Settlement Estimates <p><u>Mat Foundations</u>. As an alternative to spread footings, mat foundations may be recommended for the proposed structures. If mat foundations are used refer to the Preliminary Geotechnical Investigation (Appendix B) for recommendations.</p> <ul style="list-style-type: none"> • <u>Concrete Slab-on-Grade</u>. Slab-on-grade floors utilized with conventional foundations should be designed with a minimum thickness as indicated by the project engineer consistent with a modulus of subgrade reaction of 150 pounds-per-cubic-inch (pci) and reinforced in accordance with at least No. 3 reinforcing bars spaced no more than 18-inches on-center in two perpendicular directions ("each-way"). A slip-sheet or equivalent should be used if crack-sensitive floor coverings (such as ceramic tiles, etc.) are to be placed directly on the concrete slab-on-grade. 					

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Table 6.2-1

Mitigation Measure Implementation Schedule and Monitoring Checklist

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Agency 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>Interior slab-on-grade floors should be underlain by a 10-mil Visqueen moisture retarder (or equivalent). This moisture retarder can be covered by a 2-inch layer of sand (SE of 30 or greater) to reduce curling, only if a hot weather concrete pour is anticipated. Visqueen sheets should overlap at least 6-inches. If long-term storage of moisture sensitive records (files) or floor coverings (e.g. vinyl tile, etc.) is to be used, additional moisture mitigation measures may be employed within or beneath concrete slab-on-grade floors. Moisture retarders do not completely eliminate moisture vapor movement from the underlying soils up through the slabs or from the unbonded water in the concrete. To reduce moisture vapor emissions that may result in delamination and other tile damage, we suggest the following, only for areas where moisture sensitive floor coverings are anticipated:</p> <ul style="list-style-type: none"> - Vapor Barrier - A 15-mil vapor retarder should be placed directly onto the properly compacted subgrade. If a laser screed or similar equipment is used during concrete placement, a more durable vapor barrier could be used such as Stego-Wrap™ 15-mil, or equivalent, to reduce the potential for tearing and/or ripping the vapor barrier. Concrete should be allowed to pour out uniformly across this vapor barrier, without a sand layer over the vapor barrier. - Concrete - A concrete mix design with a low water to cement ratio (less than 0.45) should be used. Water should not be added to this mix during placement. The concrete should be cured in a manner to eliminate slab curling. - Post Curing - Before floor coverings are placed, any bond breaker coating and all other contaminants should be removed from the slab-on-grade surface. Shot blasting the slab surface may be required. Once the building has been 					

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Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Enforcement Agency 2. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>enclosed, and environmental control (heating and air conditioning) are installed and operational, the slab-on-grade should be tested for moisture vapor emission, in accordance with ASTM E 1907-97.</p> <ul style="list-style-type: none"> <p>Floor Coverings – We should review the proposed floor covering and adhesive products and placement procedures to be used. Adhesives and coverings should be compatible, and the manufacturer's requirements should be compatible, and the manufacturer's requirements should be followed. The tested moisture vapor emission rate (MVER) should be below the specified rate for the floor covering products used (e.g. MVER < 5), before the product is placed. Expansion gaps should be provided where floor tiles are placed adjacent walls under molding, and along appropriate grids for large expanses of tile. Carpet strips or expansion joint flashing plates can be used in open areas at these joints.</p> <p><u>Construction Considerations</u> – Cracking of concrete is normal as it cures, but is often aggravated by a high water/cement ratio, high concrete temperature at the time of placement, small nominal aggregate size, and rapid moisture loss due to hot, dry and/or windy weather conditions also be expected. The use of low slump concrete can reduce the potential for shrinkage cracking. Concrete placement during hot weather should be minimized due to the potential for slab curling. Slabs should be designed and constructed as promulgated by the Portland Cement Association. To reduce the potential for excessive cracking, concrete slabs-on-grade should be provided with construction or weakened plane joints at frequent intervals. Joints should be laid out to form approximately square panels.</p> <p><u>Retaining Walls</u>. Based on the conceptual site plan, no above-graded retaining wall is planned at this site. However, retaining</p> 					

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Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Agency 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance									
<p>walls may be anticipated for elevator puts, utility vaults, aesthetic grade separation in landscape areas, etc. Any type of retaining walls should be designed for lateral earth pressures. The magnitude of these pressures depends on the amount that the wall can yield horizontally under load. If the wall can yield enough to mobilize full shear strength of backfill soils, then the wall can be designed for "active" pressure. If the wall cannot yield under the applied load, the shear strength of the soils cannot be mobilized and the earth pressure will be higher. Such walls should be designed for "at rest" conditions. If a structure moves toward the soils, the resulting resistance developed by the soil is the "passive" resistance. Retaining walls backfilled with non-expansive soils (EI values less than 51) should be designed using the following equivalent fluid pressures:</p> <table border="1" data-bbox="868 1228 1063 1795"> <thead> <tr> <th>Retaining Wall Design Earth Pressure (State District)</th> <th>Equivalent Fluid Density for Level Backfill (pcf)</th> </tr> </thead> <tbody> <tr> <td>Active</td> <td>35</td> </tr> <tr> <td>At-Rest</td> <td>55</td> </tr> <tr> <td>Passive</td> <td>300</td> </tr> <tr> <td colspan="2">1 Maximum passive pressure not to exceed 3,000 psf at depth.</td> </tr> </tbody> </table> <p>Unrestrained (yielding) cantilever walls should be designed for the active equivalent fluid-weight value provided above for very low to low expansive soils that are free draining. In the design of walls restrained from movement at the top (non-yielding) such as basement walls, elevator pits, and utility vaults, the at-rest equivalent fluid pressure should be used. Total depth of retained earth for design of cantilever walls should be measured as the vertical distance below the ground surface measured at the wall face for stem design, or measured at the heel of the footing for</p>	Retaining Wall Design Earth Pressure (State District)	Equivalent Fluid Density for Level Backfill (pcf)	Active	35	At-Rest	55	Passive	300	1 Maximum passive pressure not to exceed 3,000 psf at depth.					
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Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>overturning and sliding calculations. Should a sloping backfill other than a 2:1 (horizontal:vertical) be constructed above the wall (or a backfill is loaded by an adjacent surcharge load), the equivalent fluid weight values above should be re-evaluated on an individual case basis by Leighton.</p> <p>In addition to the above lateral forces due to retained earth, surcharge due to above grade loads on the wall backfill, such as adjacent structure, should be considered in design of the retaining wall. Vertical surcharge loads behind the retaining wall on or in the backfill within a 1:1 (horizontal:vertical) plane projection up and out from the retaining wall top, should be considered as lateral and vertical surcharge. Unrestrained (canilever) retaining walls should be designed to resist one-third of these surcharge loads applied as a uniform horizontal pressure on the wall. Braced walls should also be designed to resist an additional uniform horizontal-pressure equivalent to one-half of uniform vertical surcharge-loads.</p> <p>Retaining wall foundations should be at least 18 inches wide and embedded a minimum of 18 inches below the lowest adjacent grade. Non-standard wall designs should be reviewed by Leighton prior to construction to check that the proper soil parameters have been incorporated into the wall design.</p> <p>All retaining walls should be provided with appropriate drainage. The outlet pipe should be sloped to drain to a suitable outlet. Typical wall drainage design is illustrated in Figure 2, <i>Retaining Wall Backfill and Subdrain Detail</i>, for non-expansive backfill. Wall backfill should be compacted by mechanical methods to a minimum of 90 percent relative compaction (ASTM D1557). Walls should not be backfilled until wall concrete attains the 28-day compressive strength and/or as determined by the Structural</p>					

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Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Agency 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance								
<p>Mitigation Measures</p> <p>Engineer that the wall is structurally capable of supporting backfill. Lightweight compaction equipment should be used, unless otherwise approved by the Structural Engineer.</p> <ul style="list-style-type: none"> • Temporary Excavations and Shoring. Based on the materials encountered in the borings, sloped temporary excavations may be constructed to the slope ratios presented in the table below. <table border="1"> <thead> <tr> <th colspan="2">Slope Ratios for Temporary Excavation</th> </tr> <tr> <th>Maximum Depth of Cut (feet)</th> <th>Maximum Slope Ratio* (horizontal:vertical)</th> </tr> </thead> <tbody> <tr> <td>0-5</td> <td>Vertical</td> </tr> <tr> <td>5-20</td> <td>1:1</td> </tr> </tbody> </table> <p>* Slope ratio assumed to be uniform from top to toe of slope.</p> <p>Surfaces exposed in slope excavations should be kept moist but not saturated to retard raveling and sloughing during construction. Adequate provisions should be made to protect the slopes from erosion during periods of rainfall. Surcharge loads should not be permitted within a horizontal distance equal to the depth of the cut from the top of slopes. Workers entering excavations should be protected from possible caving and raveling.</p> <p>Based on the conceptual site plan, temporary shoring may be needed during construction. Temporary shoring may consist of shoulder piles and lagging. Preliminary geotechnical design parameters for temporary shoring will be provided after review of the final site plan.</p> <ul style="list-style-type: none"> • Utility Trenches. Utility trenches should be backfilled with compacted fill in accordance with Sections 306-1.2 and 306-1.3 of the Standard Specifications for Public Works Construction, 	Slope Ratios for Temporary Excavation		Maximum Depth of Cut (feet)	Maximum Slope Ratio* (horizontal:vertical)	0-5	Vertical	5-20	1:1					
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<p>(“Greenbook”), 2003 Edition or corresponding sections in the later editions. Fill material should be placed in horizontal layers of thickness compatible to the type of equipment being used and should be compacted to at least 90 percent relative compaction (ASTM D 1557) by mechanical means only.</p> <p>Where granular backfill is used in utility trenches adjacent to moisture sensitive subgrades and foundation soils, a cut-off “plug” of impermeable material should be placed in these trenches at the perimeter of buildings, and at pavement edges adjacent to irrigated landscaped areas. A “plug” can consist of a 5-foot long section of clayey soils with more than 35-percent passing the No. 200 sieve, or a Controlled Low Strength Material (CLSM) consisting of one sack of Portland-cement plus one sack of bentonite per cubic-yard of sand. CLSM should generally conform to Section 201-6 of the Standard Specifications for Public Works Construction, (“Greenbook”), 2003 Edition or corresponding sections in the later editions. Then CLSM plug is intended to reduce the likelihood of water migrating from landscaped areas, then seeping along permeable trench backfill into the building and pavement subgrades, resulting in wetting of moisture sensitive subgrade earth materials under buildings and pavements.</p> <p>Excavation of utility trenches should be performed in accordance with the project plans, specifications and the California Construction Safety Orders (2003 Edition or more current). The contractor must be responsible for providing a “competent person” as defined in Article 6 of the California Construction Safety Orders. All safety precautions should be properly implemented at all times. Spoil piles from the excavation(s) and construction equipment should be kept away from the sides of the trenches.</p>					

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Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance															
<p>• Site Soil Corrosivity. A summary of the results of corrosion suite tests (pH, resistivity, chloride, and sulfate contents) for one representative bulk sample obtained from shallow depth at this site and corresponding hazard levels are presented in the following table. These limited test results indicate that the near surface soil is anticipated to be moderately corrosive to buried ferrous metals. Water soluble sulfate and chloride contents of the onsite soils are found to be negligible (per Table 19-A-4 of CBS, 2001) and non-corrosive, respectively, to buried concrete.</p> <table border="1" data-bbox="760 1213 1182 1953"> <thead> <tr> <th>Test Parameter</th> <th>Test Results</th> <th>General Classification of Hazard</th> </tr> </thead> <tbody> <tr> <td>Water-soluble sulfate content</td> <td>0.01 percent by weight</td> <td>Negligible sulfate exposure to buried concrete (per CBS, 2001)</td> </tr> <tr> <td>Water-soluble chloride content</td> <td>52 ppm</td> <td>Non-corrosive to buried concrete (per Caltrans Specifications)</td> </tr> <tr> <td>pH</td> <td>8.19</td> <td>Alkaline, relatively passive to buried metals</td> </tr> <tr> <td>Minimum resistivity (in saturated condition)</td> <td>2,870 ohm-cm</td> <td>Moderately corrosive to buried ferrous pipes (per ASTM¹)</td> </tr> </tbody> </table> <p>¹ ASTM STP 1013 titled <i>Effects of Soil Characteristics on Corrosion</i> (February, 1989).</p> <p>Ferrous pipe buried in moist to wet site earth materials should be avoided by using high-density polyethylene bags, tap or coatings, di-electric fittings or other means to separate the pipe from on-site soils. If buried ferrous pipes are planned for the project, further testing of soil samples corrosivity should be performed</p>	Test Parameter	Test Results	General Classification of Hazard	Water-soluble sulfate content	0.01 percent by weight	Negligible sulfate exposure to buried concrete (per CBS, 2001)	Water-soluble chloride content	52 ppm	Non-corrosive to buried concrete (per Caltrans Specifications)	pH	8.19	Alkaline, relatively passive to buried metals	Minimum resistivity (in saturated condition)	2,870 ohm-cm	Moderately corrosive to buried ferrous pipes (per ASTM ¹)					
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<p>Mitigation Measures</p> <p>and specific recommendations for corrosion protection will need to be provided by a qualified corrosion engineer.</p> <ul style="list-style-type: none"> • Field Percolation Test Results. Field percolation tests conducted on three borings on the north and south portions of the site (Boring B-2 and B-3 on the north and Boring B-7 on the south) indicate a fairly uniform percolation rate varying from 0.23 to 0.25 gallons/square feet/day averaged over depths up to approximately 16.5 feet below the existing grade. These rates are typical for silty soils. • Asphalt Concrete Pavements. Based on our field investigation findings, existing paved surface at the site consists of asphalt concrete overlying soil subgrade or aggregate base of variable thicknesses at different locations. Existing pavement sections are listed below. <table border="1" data-bbox="922 1228 1198 1969"> <thead> <tr> <th colspan="3">Existing Asphalt Pavement Sections</th> </tr> <tr> <th>Boring No.</th> <th>Asphalt Concrete (inches)</th> <th>Aggregate Base (inches)</th> </tr> </thead> <tbody> <tr> <td>B-1</td> <td>4.5</td> <td>1.0</td> </tr> <tr> <td>B-2</td> <td>4.0</td> <td>None</td> </tr> <tr> <td>B-3</td> <td>2.5</td> <td>None</td> </tr> <tr> <td>B-4</td> <td>5.0</td> <td>1.5</td> </tr> <tr> <td>B-5</td> <td>2.5</td> <td>3.0</td> </tr> <tr> <td>B-6</td> <td>5.0</td> <td>2.0</td> </tr> <tr> <td>B-7</td> <td>2.0</td> <td>7.0</td> </tr> <tr> <td>B-8</td> <td>5.5</td> <td>None</td> </tr> <tr> <td>B-9</td> <td>5.5</td> <td>None</td> </tr> </tbody> </table> <p>Laboratory tests of one representative bulk sample of the existing pavement subgrade soils indicate an R-value of 36. Due to relative uniformity of the onsite soils within upper 5 feet as encountered during our field investigation, we assume as average</p>	Existing Asphalt Pavement Sections			Boring No.	Asphalt Concrete (inches)	Aggregate Base (inches)	B-1	4.5	1.0	B-2	4.0	None	B-3	2.5	None	B-4	5.0	1.5	B-5	2.5	3.0	B-6	5.0	2.0	B-7	2.0	7.0	B-8	5.5	None	B-9	5.5	None					
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<p>Mitigation Measures</p> <p>R-value of 35 for preliminary design purpose. Considering this assumed R-value and following the Highway Design manual (Caltrans, 2006) guidelines, minimum asphalt pavement sections for different Traffic Indices (TIs) ranging from 4 through 8 are listed in below.</p> <table border="1" data-bbox="950 808 1193 1302"> <thead> <tr> <th>Asphalt Pavement Section Thickness</th> <th>Design Traffic Index (TI)</th> <th>Asphalt Concrete (inches)</th> <th>Aggregate Base¹ (inches)</th> <th>Total Thickness (inches)</th> </tr> </thead> <tbody> <tr> <td>General Traffic Condition</td> <td>4.0</td> <td>3.0</td> <td>3.0</td> <td>6.0</td> </tr> <tr> <td>Automobile Parking</td> <td>4.5</td> <td>3.0</td> <td>4.0</td> <td>7.0</td> </tr> <tr> <td>Automobile Parking Lanes</td> <td>5.0</td> <td>3.0</td> <td>5.0</td> <td>8.0</td> </tr> <tr> <td>Truck Access & Parking</td> <td>5.5</td> <td>3.5</td> <td>4.0</td> <td>7.5</td> </tr> <tr> <td>Public Roadway</td> <td>6.0</td> <td>3.5</td> <td>6.0</td> <td>9.5</td> </tr> <tr> <td></td> <td>6.5</td> <td>4.0</td> <td>7.0</td> <td>11.0</td> </tr> <tr> <td></td> <td>7.0</td> <td>4.0</td> <td>8.0</td> <td>12.0</td> </tr> <tr> <td></td> <td>7.5</td> <td>5.0</td> <td>8.0</td> <td>13.0</td> </tr> <tr> <td></td> <td>8.0</td> <td>5.0</td> <td>9.0</td> <td>14.0</td> </tr> </tbody> </table> <p><i>1 Minimum design R-value of aggregate base is 78.</i></p> <p>Appropriate Traffic Index (TI) data should be selected by the project civil engineer or traffic engineering consultant and appropriate R-value of the subgrade soils will need to be determined after completion of rough grading to finalize the pavement design. Final pavement sections should be in general accordance with local, county and industry standards. Portland cement concrete may be used, rather than asphalt, in point and impact load areas such as trash truck bin loading areas.</p> <p>Subgrade soils in the upper 18 inches of the driveways and parking areas should be properly compacted to at least 90 percent</p>	Asphalt Pavement Section Thickness	Design Traffic Index (TI)	Asphalt Concrete (inches)	Aggregate Base ¹ (inches)	Total Thickness (inches)	General Traffic Condition	4.0	3.0	3.0	6.0	Automobile Parking	4.5	3.0	4.0	7.0	Automobile Parking Lanes	5.0	3.0	5.0	8.0	Truck Access & Parking	5.5	3.5	4.0	7.5	Public Roadway	6.0	3.5	6.0	9.5		6.5	4.0	7.0	11.0		7.0	4.0	8.0	12.0		7.5	5.0	8.0	13.0		8.0	5.0	9.0	14.0					
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Public Roadway	6.0	3.5	6.0	9.5																																																			
	6.5	4.0	7.0	11.0																																																			
	7.0	4.0	8.0	12.0																																																			
	7.5	5.0	8.0	13.0																																																			
	8.0	5.0	9.0	14.0																																																			

Table 6.2-1

Mitigation Measure Implementation Schedule and Monitoring Checklist

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>relative compaction (ASTM D1557) and should be moisture-conditioned to above optimum moisture contents, and kept in this condition until the pavement section is constructed. Minimum relative compaction requirements for aggregate base should be 95 percent of the maximum laboratory density (ASTM D1557).</p> <p>Asphalt concrete and aggregate base should conform to Caltrans Standard Specifications (July 1995 Edition) Sections 39 and 26-1.02A, respectively. As an alternative, asphalt concrete can conform to Section 203-6 of the <i>Standard Specifications for Public Works Construction</i> (Green Book), 2003 Edition. Crushed aggregate base or crushed miscellaneous base can conform to Sections 200-2.2 and 200-2.4 of the <i>Standard Specifications for Public Works Construction</i> (Green Book), 2003 Edition, respectively.</p> <ul style="list-style-type: none"> • <u>Portland Cement Concrete Pavements</u>. For preliminary planning purposes, proposed pavements at ground surface may be constructed of a minimum of 6 inches thick Portland Cement Concrete (PCC) overlying a minimum of 4 inches thick Class 2 aggregate base. These minimum sections are considered assuming an average daily truck traffic (ADTT) in both direction not exceeding 300. All PCC pavements should have a minimum 28-day concrete compressive strength of 3,000 psi and have appropriate joints and saw cuts in accordance with either Portland Cement Association (PCA) or American Concrete Institute (ACI) guidelines. Subgrade underneath the PCC pavements should be compacted to a minimum of 90 percent compaction within upper 18 inches. Use of concrete cutoff or edge barriers should be considered at the perimeter of the common parking or driveway areas when they are adjacent to either open (unfinished) or landscaped areas. 					

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Table 6.2-1 Mitigation Measure Implementation Schedule and Monitoring Checklist					
Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Agency 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>Mitigation Measures</p> <ul style="list-style-type: none"> • <u>Surface Drainage.</u> Ponding of water adjacent to structures should be avoided. During and after construction, positive drainage should be provided to direct surface water away from structures and towards suitable, nonerosive drainage devices. Locating planters adjacent to buildings or structures should be avoided. Where unavailable, planters should be properly lined, such as with a membrane, to reduce penetration of irrigation water into the adjacent footing subgrades. Wherever possible, exposed soil areas should be above paved grades. Planters should not be depressed below adjacent paved grades unless drainage, such as catch basins and drains are provided. • <u>Additional Geotechnical Services.</u> The geotechnical recommendations are based on subsurface conditions as interpreted from limited subsurface explorations and laboratory testing. Conclusions and recommendations presented in this report should be reviewed and verified by the project geotechnical consultant during site construction and revised accordingly if exposed geotechnical conditions vary from our preliminary findings and interpretations. The recommendations presented in this report are only valid if Leighton verifies the site conditions during construction. Geotechnical observation and testing should be provided during the following activities: <ul style="list-style-type: none"> - Grading and excavation of the site - Overexcavation and compaction of all fill materials; - Excavation and installation of foundations; - After excavation of all slabs and footings and prior to placement of steel or concrete to confirm the slabs and footings are founded in firm, compacted fill; - Utility trench backfilling and compaction; - Pavement subgrade preparation and base course compaction; 					

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**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>and - When any conditions are encountered that vary significantly from the conditions described in this report.</p>					
7. HAZARDS AND HAZARDOUS MATERIALS					
<i>Standard Conditions</i>					
<ul style="list-style-type: none"> During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1529, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practices by workers exposed to asbestos. Asbestos-containing debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code. 	Submit evidence of compliance.	Project Applicant	<ol style="list-style-type: none"> Pre-Construction (prior to issuance of demolition permit) Development Services Dept. Development Services Dept. 		
<ul style="list-style-type: none"> During demolition, grading, and excavation, workers shall comply with the requirements of Title 8 of the California Code of Regulations, Section 1532.1, which provides for exposure limits, exposure monitoring, respiratory protection, and good working practice by workers exposed to lead. Lead-contaminated debris and other wastes shall be managed and disposed of in accordance with the applicable provision of the California Health and Safety Code. 	Submit evidence of compliance.	Project Applicant	<ol style="list-style-type: none"> Pre-Construction (prior to issuance of demolition permit) Development Services Dept. Development Services Dept. 		
<i>Mitigation Measures</i>					
<p>5.7-1 Prior to demolition of the buildings on-site, friable and nonfriable asbestos-containing materials (ACMs) that can become friable (greater than 1 percent), lead based paint (LBP) and polychlorinated biphenyls (PCBs) shall be removed, handled, and properly disposed of by appropriately licensed contractors according to all applicable regulations during demolition of structures (40 CFR, Subchapter R, TSCA, Parts 745, 761, and 763). Air monitoring shall be completed by appropriately licensed and qualified individuals in accordance with</p>	Submit evidence of compliance.	Project Applicant	<ol style="list-style-type: none"> Pre-Construction (prior to issuance of demolition permit) Development Services Dept. Development Services Dept. 		

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Table 6.2-1 Mitigation Measure Implementation Schedule and Monitoring Checklist					
Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>applicable regulations both to ensure adherence to applicable regulations (e.g., SCAQMD Rule 1403) and to provide safety to workers and the adjacent community. The project applicant shall provide documentation (e.g., all required waste manifests, sampling, and air monitoring analytical results) to the Orange Health Care Agency or State DTSC showing that abatement of any ACMs, LBP, and PCBs identified in these structures has been completed in full compliance with all applicable regulations and approved by the appropriate regulatory agency(ies) (40 CFR, Subchapter R, TSCA, Parts 716, 745, 761, 763, and 795 and CCR Title 8, Article 2.6).</p>					
<p>5.7-2 Prior to issuance of building permits, the project applicant shall provide the Development Services Director a certification from the State DTSC or County Health Care Agency that the site has been remediated to their satisfaction. The applicant shall satisfy the requirements of the State DTSC for the Response Plan. Such requirements may include, but not be limited to, the project applicant providing a supplemental health risk assessment performed by a licensed health risk assessor. The Health Risk Assessment shall evaluate any potential threats to human health on the subject site. If the Health Risk Assessment identifies any potential threats to human health which have not been mitigated through implementation of the Draft Response Plan, the applicant shall work with the State DTSC to obtain clearance. This may involve submission of evidence to the DTSC that the appropriate remedial measures will be implemented to ensure that cancer risks do not exceed 1E-6 ILCR and noncancer hazards are not more than 1.0. Such measures may include additional excavation, installation of vapor barriers, and/or increased ventilation rates.</p>	Submit evidence of compliance.	Project Applicant	<ol style="list-style-type: none"> 1. Pre-Construction (prior to issuance of building permits) 2. Development Services Dept. 3. Development Services Dept. 		
<p>5.7-3 Prior to the issuance of building permits, the applicant shall submit evidence to the Development Services Director that the State DTSC is satisfied with the vapor protection system. The vapor protection system may include that all habitable structures are constructed with a vapor protection system, such as "Liquid Boot," under the foundations</p>	Submit evidence of compliance	Project Applicant	<ol style="list-style-type: none"> 1. Pre-Construction (prior to issuance of building permits) 2. Development Services Dept. 		

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**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Agency 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>to reduce exposure to hazardous materials to a level below actionable thresholds. The vapor barrier may be enhanced by other vapor protection measures, as approved by DTSC. The vapor protection system may be associated with a long term Operation and Maintenance Plan and Land Use Control.</p>			<ol style="list-style-type: none"> 1. Pre-Construction (prior to the issuance of building permits) 2. Development Services Dept. 3. Development Services Dept. 		
<p>5.7-4 Prior to the issuance of building permits, the applicant shall submit evidence indicating that the DTSC is satisfied with the plan for monitoring PCE levels in all habitable structures required to be constructed with a vapor protection system. Included in the plan shall be a description of at least two monitoring events in one or more areas that are likely to have the highest concentrations of PCE within the building (e.g., subsurface building features such as a subterranean garage or a deep elevator shaft), at least one of which shall be performed following completion of building construction and prior to issuance of a certificate of occupancy and at least one other performed between six months and one year after the issuance of a certificate of occupancy. The plan shall also include a description of the monitoring protocol, validation procedures, and a QA/QC plan for the monitoring events. A report of monitoring results demonstrating that the vapor protection system is functioning shall be certified by DTSC and submitted to the Development Services Director prior to the issuance of certificate of occupancy. If a subsequent monitoring event indicates that a significant cancer or noncancer risk exists, the applicant shall submit to the DTSC as needed within 30 days a plan for reducing the risk below the threshold of significance (e.g., installation of an additional protection system, increased ventilation) and for additional monitoring sufficient to determine the effectiveness of the plan.</p>	<p>Submit evidence of compliance</p>	<p>Project Applicant</p>	<ol style="list-style-type: none"> 1. Pre-Construction (prior to issuance of building permits) 2. Development Services Dept. 3. Development Services Dept. 		
<p>5.7-5 Prior to the issuance of building permits, the applicant shall provide evidence indicating that DTSC is satisfied that soils with elevated concentrations of trichloroethane (TCA), tetrachloroethene (PCE), Total Petroleum Hydrocarbons (TPH), and polychlorinated biphenyls (PCB) (down to 5 feet below ground surface) have been removed and the concentration goal of $\leq 100 \mu\text{g}/\text{Kg}$ of TCA, $\leq 50 \mu\text{g}/\text{Kg}$ of PCE,</p>	<p>Submit evidence of compliance.</p>	<p>Project Applicant</p>	<ol style="list-style-type: none"> 1. Pre-Construction (prior to issuance of building permits) 2. Development Services Dept. 3. Development Services Dept. 		

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Table 6.2-1

Mitigation Measure Implementation Schedule and Monitoring Checklist

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency Dept.	Monitor (Signature Required)	Date of Compliance
<p>≤1000 mg/Kg of TPH, and ≤0.089 µg/Kg of PCBs has been met.</p> <p>8. HYDROLOGY AND WATER QUALITY</p> <p>Standard Conditions</p> <p>There are no standard conditions related to hydrology and water quality that apply to this project.</p> <p>Mitigation Measures</p> <p>5.8-1 Prior to the issuance of grading permits, the applicant shall submit for approval to the State Water Resources Control Board, a Notice of Intent to be covered under the Storm Water Permit. Additionally, the project proponent shall prepare a SWPPP which will: 1) require implementation of Best Management Practices (BMPs) so as to prevent a net increase in sediment load in storm water discharges relative to preconstruction levels; 2) prohibit during the construction period discharges of storm water or non-storm water at levels which would cause or contribute to an exceedance of applicable water quality standards contained in the Basin Plan; 3) discuss in detail the BMPs planned for the project related to control of sediment and erosion, non-sediment pollutants, and potential pollutants in non-storm water discharges; 4) describe post-construction BMPs for the project; 5) explain the maintenance program for the project's BMPs; 6) during construction, require reporting of violations to the Regional Board; and 7) list the parties responsible for SWPPP implementation and BMP maintenance during and after grading. The project proponent shall implement the SWPPP and will modify the SWPPP as directed by the Storm Water Permit.</p> <p>5.8-2 Prior to the issuance of grading permits, the applicant shall provide the City Engineer with evidence that a Notice of Intent (NOI) has been filed with the State Water Resources Control Board. Such evidence shall consist of a copy of the NOI stamped by the State Water Resources Control Board or the Regional Water Quality Control Board, or a letter from either agency stating that the NOI has been</p>	<p>Provide evidence that NOI has been filed and approval of SWPPP.</p> <p>Provide evidence that NOI has been filed.</p>	<p>Project Applicant</p> <p>Project Applicant</p>	<p>1. Pre-Construction (prior to issuance of grading permits) 2. Public Services Dept. 3. Public Services Dept.</p> <p>1. Pre-Construction (prior to issuance of grading permits) 2. Public Services Dept. 3. Public Services Dept.</p>		

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**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>5.8-3 Prior to the issuance of precise grading permits, the applicant shall submit, and the Development Services Director shall have approved, a Water Quality Management Plan (WQMP). The WQMP shall identify the Best Management Practices (BMPs) that will be used on the site to control predictable pollutant runoff.</p>	<p>Submittal and approval of WQMP.</p>	<p>Project Applicant</p>	<p>1. Pre-Construction (prior to issuance of precise grading permits) 2. Development Services Dept. 3. Development Services Dept.</p>		
<p>9. LAND USE AND PLANNING</p> <p><i>Standard Conditions</i></p> <ul style="list-style-type: none"> A "Notice to Buyers" shall disclose the existing surrounding industrial land uses, including but not limited to, operational characteristics such as hours of operation, delivery schedules, outdoor activities, noise and odor generation. The Buyer's Notice shall be reviewed/approved by the City Attorney's office and Development Services Director prior to recordation. The Buyer's Notice shall serve as written notice of the then existing noise environment and any odor generating uses within the mixed-use development and within a 500-foot radius of the mixed use development, as measured from the legal property lines of the development lot. The Buyer's Notice shall be remitted to any prospective purchaser or tenant at least 15 days prior to close of escrow, or within three days of the execution of a real estate sales contract or rental/lease agreement, whichever is longer. <p><i>Mitigation Measures</i></p> <p>No mitigation measures are required.</p>					
<p>10. MINERAL RESOURCES</p> <p>No mitigation measures are required.</p>					

Table 6.2-1

Mitigation Measure Implementation Schedule and Monitoring Checklist

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
11. NOISE					
<i>Standard Conditions</i>					
<ul style="list-style-type: none"> During construction, the contractor shall ensure that construction activity complies with the City's Noise Ordinance. Exceptions may be made for activities that will not generate noise audible from off-site, such as painting and other quiet indoor work. 	Compliance with the City's Noise Ordinance.	Project Applicant	<ol style="list-style-type: none"> Construction Development Services Dept. Development Services Dept. 		
Mitigation Measures					
<p>5.11-1 Prior to issuance of each grading permit, the applicant shall incorporate the following measures as a note on the grading plan cover sheet to ensure that the greatest distance between noise sources and sensitive receptors during construction activities has been achieved. This language shall be approved by the Development Services Director.</p> <ul style="list-style-type: none"> During all project site excavation and grading, the project contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers consistent with manufacturers' standards. The project contractor shall place all stationary construction equipment so that emitted noise is directed away from sensitive receptors nearest the project site. The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receptors (existing mobile homes) nearest the project site during all project construction. 	Show on grading plans.	Project Applicant	<ol style="list-style-type: none"> Pre-Construction (prior to issuance of grading permits) Dept. Development Services Dept. 		

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Table 6.2-1 Mitigation Measure Implementation Schedule and Monitoring Checklist					
Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase	Monitor (Signature Required)	Date of Compliance
<p>5.11-2 Prior to the issuance of building permits, the applicant shall show evidence, and the Development Services Director shall approve, that building façade upgrades such as double-paned windows with a minimum STC-34 are constructed for all residences on the project site.</p>	Submit evidence of compliance	Project Applicant	<ol style="list-style-type: none"> 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency <ol style="list-style-type: none"> 1. Pre-Construction 2. Development Services Dept. 3. Development Services Dept. 		
<p>12. POPULATION AND HOUSING No mitigation measures are required.</p>					
<p>13. PUBLIC SERVICES <i>Standard Conditions</i></p>					
<ul style="list-style-type: none"> • Each final master plan for a development in the project area shall provide sufficient capacity for fire flows required by the City of Costa Mesa Fire Department. 	Approval of final master plan.	City of Costa Mesa Fire Department	<ol style="list-style-type: none"> 1. Pre-Construction 2. City of Costa Mesa Fire Department. 3. Development Services Dept. 		
<ul style="list-style-type: none"> • Vehicular access must be provided and maintained serviceable throughout construction to all required fire hydrants. 	Approval of vehicular access.	City of Costa Mesa Fire Department	<ol style="list-style-type: none"> 1. Pre-Construction 2. City of Costa Mesa Fire Department 3. Development Services Dept. 		
<ul style="list-style-type: none"> • Fire Department response time goals shall be continually monitored and reassessed as the area is redeveloped. 	Monitor Fire Department response time.	City of Costa Mesa Fire Department	<ol style="list-style-type: none"> 1. Pre-Construction 2. City of Costa Mesa Fire Department 3. Development Services Dept. 		
<ul style="list-style-type: none"> • Prior to the issuance of a building permit, the City of Costa Mesa Fire Department shall review and approve the developer's project design features to assess compliance with the California Building Code and California Fire Code. Fire staff shall examine the projected demands of the proposed project and make recommendations to ensure that adequate personnel/resources will be available to meet projected demand. 	Submit evidence of compliance.	Project Applicant	<ol style="list-style-type: none"> 1. Pre-Construction (Prior to issuance of a building permit) 2. Costa Mesa Fire Department 3. Development Services 		

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**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency Dept.	Monitor (Signature Required)	Date of Compliance
<p>Recommendations of the study shall be implemented to the satisfaction of the Fire Department to ensure that emergency response impacts are minimized to below a level of significance.</p> <ul style="list-style-type: none"> • As final building plans are submitted to the City of Costa Mesa for review and approval, the Costa Mesa Police Department shall review all plans for the purpose of ensuring that design requirements are incorporated into the building design to increase safety and avoid unsafe conditions. These measures focus on security measures that are recommended by the Police Department, including but not limited to, the following: <ul style="list-style-type: none"> — Lighting shall be provided in open areas and parking lots. — Required building address numbers shall be readily apparent from the street and rooftop building identification shall be readily apparent from police helicopters for emergency response agencies. — Landscaping requirements. — Emergency vehicle parking areas shall be designated within proximity to buildings. — The applicant shall fund all costs associated with police and fire radio reception enhancement, including a Bi-Directional Amplifying 800 MHz antenna (BDA). • Prior to the issuance of a grading permit, the City of Costa Mesa Police Department shall review and approve the developer's project design features to ensure adequate security measures are incorporated into the project design and that sufficient personnel/resources are available to meet the demands of the proposed project. Any requirements with regard to additional resources shall be completed by the Developer and shall be implemented to the 	<p>Approval of final building plans.</p>	<p>Project Applicant.</p>	<p>1. Pre-Construction (prior to issuance of building permit) 2. Development Services Dept. 3. Development Services Dept.</p>		
	<p>Submit evidence of compliance.</p>	<p>City of Costa Mesa Police Department</p>	<p>1. Pre-Construction (prior to the issuance of a grading permit) 2. Development Services Dept. 3. Development Services</p>		

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**Table 6.2-1
Mitigation Measure Implementation Schedule and Monitoring Checklist**

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
<p>satisfaction of the Police Chief to ensure that emergency response impacts are minimized to below a level of significance.</p> <ul style="list-style-type: none"> • Prior to issuance of building permits, the Developer shall pay a school impact fee currently calculated at \$1.84 per square foot for residential development and \$0.30 per square foot for commercial development. 	<p>Payment of School Impact Fees.</p>	<p>Project Applicant</p>	<p>Dept. 1. Pre-Construction 2. Development Services 3. Development Services</p>		
<ul style="list-style-type: none"> • Prior to issuance of occupancy permits, the Developer shall pay a park impact fee or dedicate parkland to meet the demands of the proposed development. The current park impact fee is calculated at \$10,829.00 per new multi-family dwelling unit. 	<p>Payment of Park Impact Fees.</p>	<p>Project Applicant</p>	<p>1. Pre-Construction (prior to issuance of occupancy permits) 2. Development Services 3. Development Services</p>		
<p><i>Mitigation Measures</i></p>					
<p>No mitigation measures are required.</p>					
<p>14. RECREATION</p>					
<p><i>Standard Conditions</i></p>					
<ul style="list-style-type: none"> • Prior to issuance of occupancy permits, the Developer shall pay a park impact fee or dedicate parkland to meet the demands of the proposed development. The current park impact fee is calculated at \$10,829.00 per new multi-family dwelling unit. 	<p>Payment of park impact fees</p>	<p>Project Applicant</p>	<p>1. Pre-Construction (prior to issuance of occupancy permits) 2. Development Services 3. Development Services</p>		
<p><i>Mitigation Measures</i></p>					
<p>No mitigation measures are required.</p>					

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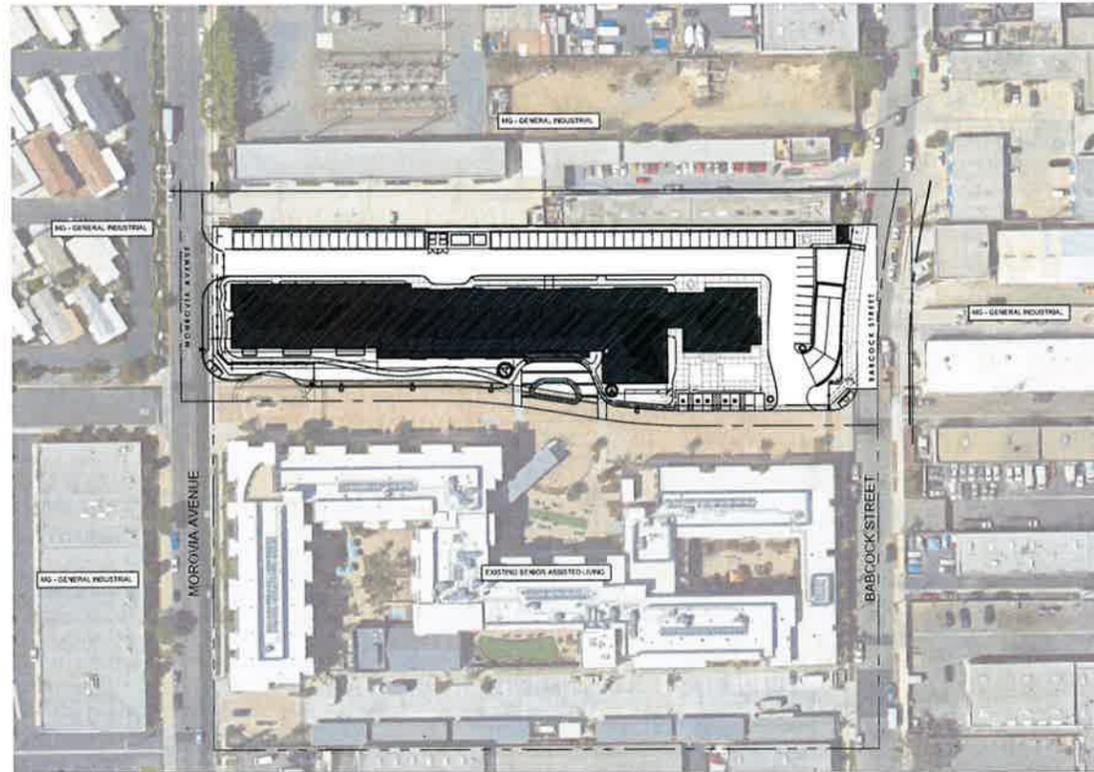
Table 6.2-1

Mitigation Measure Implementation Schedule and Monitoring Checklist

Mitigation Measures	Monitoring Action	Responsible Implementation Agency	Monitoring Phase 1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
15. TRANSPORTATION / TRAFFIC					
<i>Standard Conditions</i>					
<ul style="list-style-type: none"> The project applicant shall be responsible for the payment of fees in accordance with Costa Mesa's traffic impact fee program to mitigate project-generated traffic impacts (including regional traffic). 	Payment of traffic impact fees.	Project Applicant	<ol style="list-style-type: none"> Pre-Construction Public Services Dept. Public Services Dept. 		
<i>Mitigation Measures</i>					
No mitigation measures are required.					
16. UTILITIES AND SERVICE SYSTEMS					
<i>Planning Design Feature</i>					
<ul style="list-style-type: none"> Prior to final map recordation, the applicant shall prepare storm drain improvement plans which incorporate the appropriate storm drain pipe sizing. 	Approval of storm drain improvement plans.	Project Applicant	<ol style="list-style-type: none"> Pre-Construction (prior to final map recordation) Public Services Dept. Public Services Dept. 		
<i>Standard Conditions</i>					
<ul style="list-style-type: none"> Prior to issuance of building permits, the Developer shall obtain a letter from the Costa Mesa Sanitary District and the Orange County Sanitary District verifying that there is sufficient capacity in the receiving trunk lines to serve the project. 	Show evidence of compliance.	Project Applicant	<ol style="list-style-type: none"> Pre-Construction (prior to issuance of building permits) Public Services Dept. Public Services Dept. 		
<ul style="list-style-type: none"> Prior to the issuance of connection permit(s), the applicant shall pay the applicable connection fees. 	Payment of connection fees.	Project Applicant	<ol style="list-style-type: none"> Pre-Construction Public Services Dept. Public Services Dept. 		
<i>Mitigation Measures</i>					
No mitigation measures are required.					

SHEET INDEX

SHEET	
ARCHITECTURAL	
0.0	COVER SHEET
A100	OVERALL EXISTING SITE PLAN
A101	OVERALL PROPOSED SITE PLAN
A102	SITE PLAN WITH GROUND FLOOR PLAN
A102.1	PAVILION FLOOR PLAN & UNDERGROUND PARKING PLAN
A103	TYPICAL FLOOR PLAN
A104	ROOF PLAN
A200	EXTERIOR ELEVATIONS - NORTH AND SOUTH
A201	EXTERIOR ELEVATIONS - EAST AND WEST
A202	MULTI-PURPOSE ROOM ELEVATIONS
LANDSCAPE	
L1.1	PRELIMINARY PLANTING PLAN
L2.1	ENLARGEMENT PLANS
L3.1	PLANT PALETTE IMAGERY
CIVIL	
C1	PRELIMINARY GRADING PLAN
C2	PRELIMINARY GRADING SITE SECTION



NEXUS VIVANTE - PHASE II

1650 MONROVIA AVE.
COSTA MESA, CA 92627

SITE PLAN: NTS

PROJECT DATA, BUILDING ANALYSIS

PROJECT DATA

LOT AREA: 98,016 SF 100%
OPEN SPACE AREA: 33,046 SF 33.8%
DRIVEWAY AND OPEN PARKING: 24,470 SF 24.9%
BLDG. FOOTPRINT & CARPORT: 40,502 SF 41.3%

BUILDING AREA SUMMARY:
MAIN BUILDING: 127,695 SF
CARPORT: 8,432 SF
TOTAL: 136,127 SF

NUMBER OF PARKING SPACES
ON-GRADE OPEN: 17 STALLS
ON-GRADE CARPORT: 52 STALLS
UNDERGROUND: 59 STALLS
TOTAL PROVIDED: 128 STALLS (ACCESSIBLE STALLS)

SUMMARY OF DWELLING UNITS

STUDIO: 15
1 BEDROOM: 77
2 BEDROOM: 19
TOTAL: 111 UNITS

PLANNING & ZONING INFORMATION

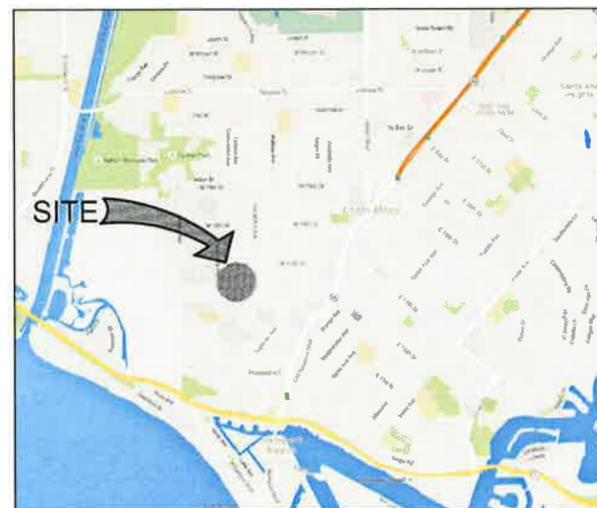
ZONE: MG - GENERAL INDUSTRIAL

FRONT SETBACK: 10'
SIDE SETBACK: 0'
REAR INTERIOR SETBACK: 0'
REAR ABUTTING PUBLIC STREET SETBACK: 0'

HEIGHT LIMIT: 60'

FLOOR	TOTAL	UNIT TYPES PER FLOOR				
		UNIT 1 (STUDIO)	UNIT 2 (1 BEDROOM)	UNIT 3 (1 BEDROOM)	UNIT 4 (1 BEDROOM)	UNIT 5 (2 BEDROOM)
1	6	0	0	4	1	1
2	35	5	8	15	1	6
3	35	5	8	15	1	6
4	35	5	8	15	1	6
TOTAL	111	15	24	49	4	19

VICINITY MAP



PROJECT TEAM

ARCHITECT:
DLR GROUP
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PASADENA, CA 91105
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FAX - (626) 796-8735
CONTACT: DAVID BIRCHER
EMAIL: dblrcher@dlrgroup.com

CIVIL, & PLUMBING ENGINEER:
WALDEN AND ASSOCIATES
2552 WHITE ROAD
IRVINE, CA 92614
TEL - (949) 660-0110
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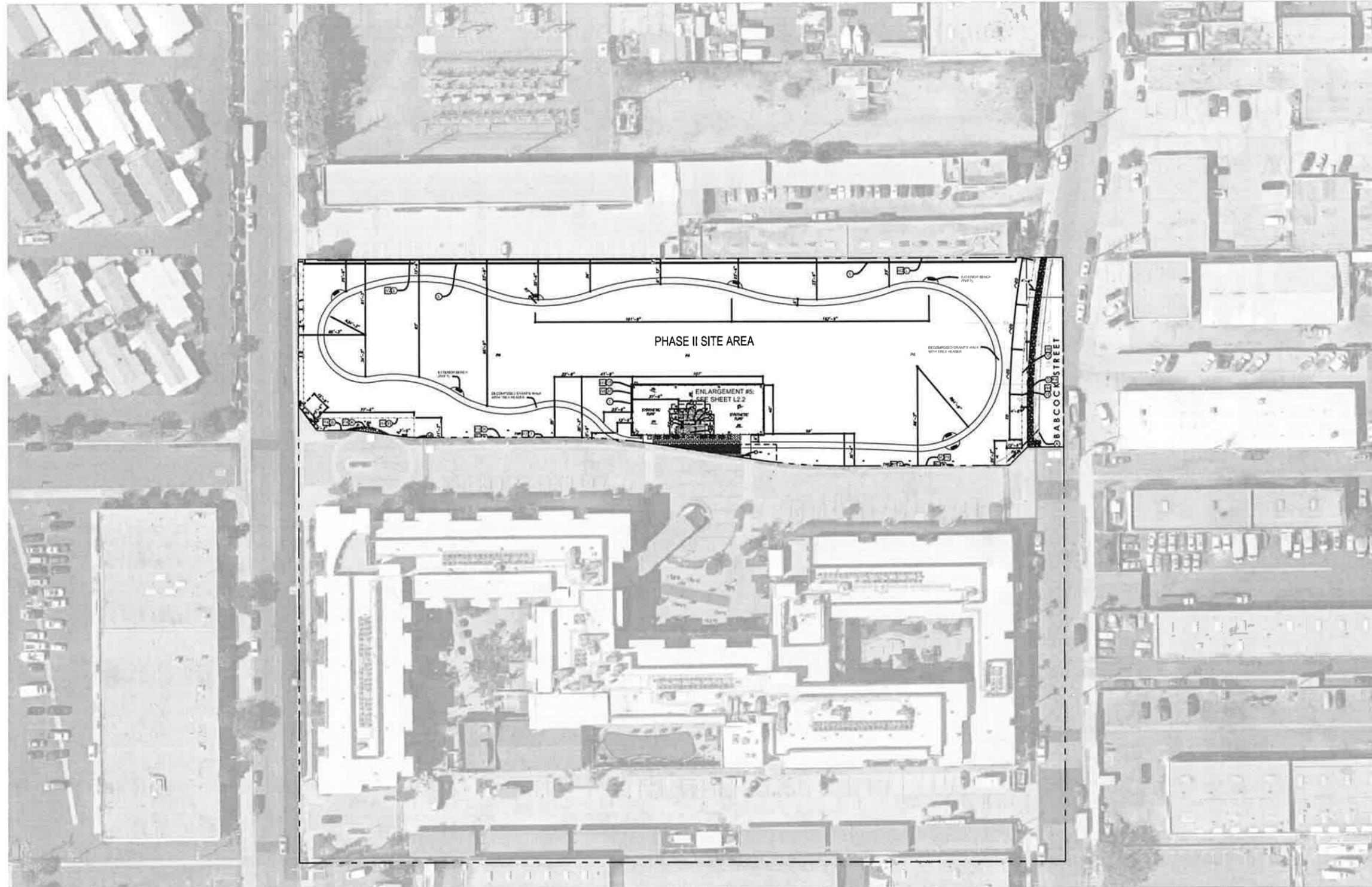
LANDSCAPE:
RIDGE LANDSCAPE ARCHITECTS
8841 RESEARCH DR. #200
IRVINE, CA 92618
TEL - (949) 387-1323

OWNER:
NEXUS DEVELOPMENT CORPORATION
1 MacARTHUR PLACE, SUITE 300
SANTA ANA, CA 92707
TEL - (714) 546-5600

CONTACT: JIM RIDGE
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CONTACT: ROBERT ERES
EMAIL: rwe@nexusd.com

COVER SHEET / INDEX 0.0



SCALE: 1" = 40' - 0"



OVERALL EXISTING SITE PLAN :: A100

NEXUS VIVANTE - PHASE II

COSTA MESA, CA

 1650 Monrovia Ave
Costa Mesa, CA 92627

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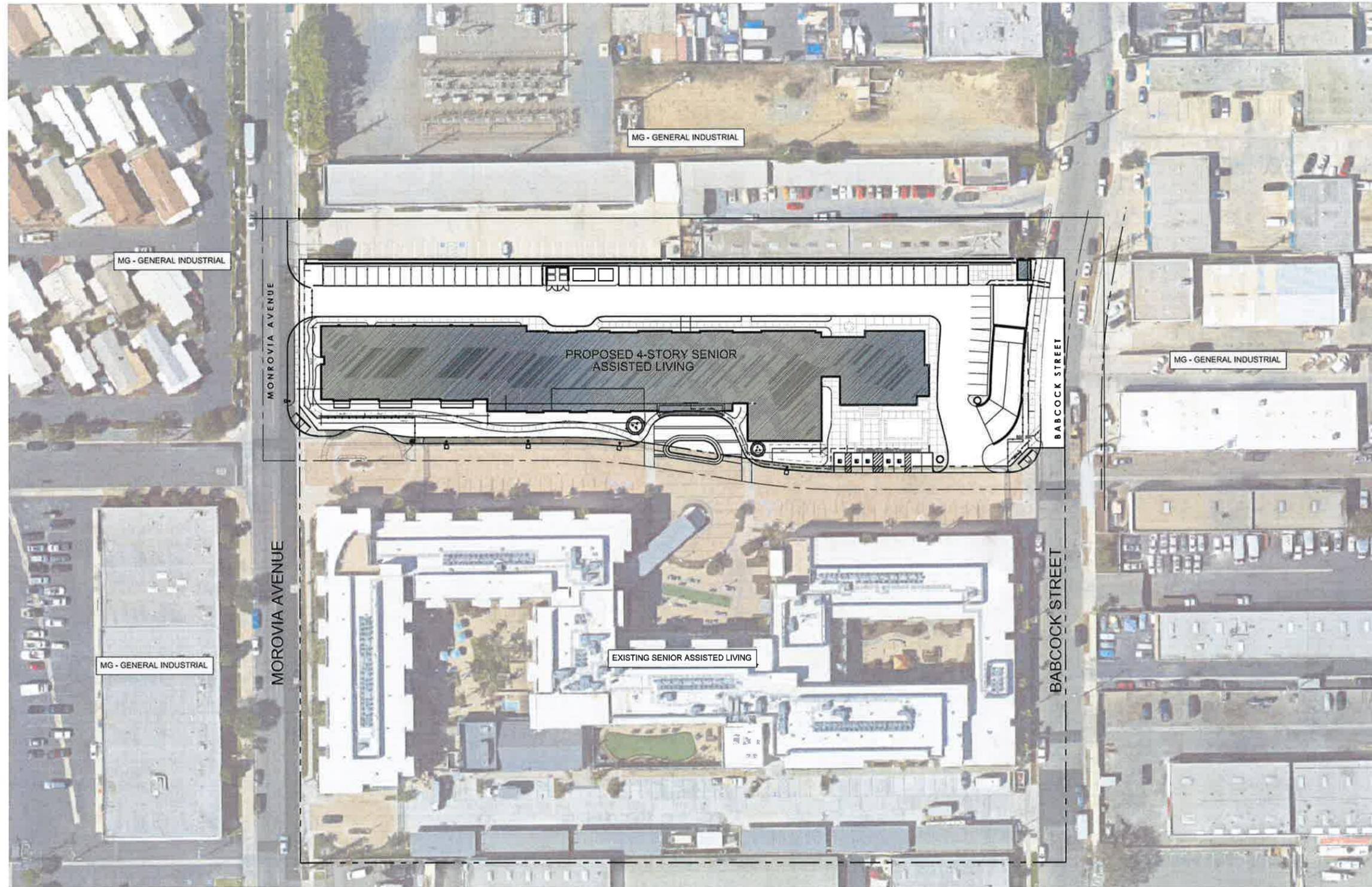
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DECEMBER 10, 2015

75-15750-00

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Blvd. 5th Floor
Pasadena, CA 91105
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f: 626.796.8735

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SCALE: 1" = 40' - 0"
 0' 20' 40' 80'

OVERALL PROPOSED SITE PLAN :: A101

NEXUS VIVANTE - PHASE II

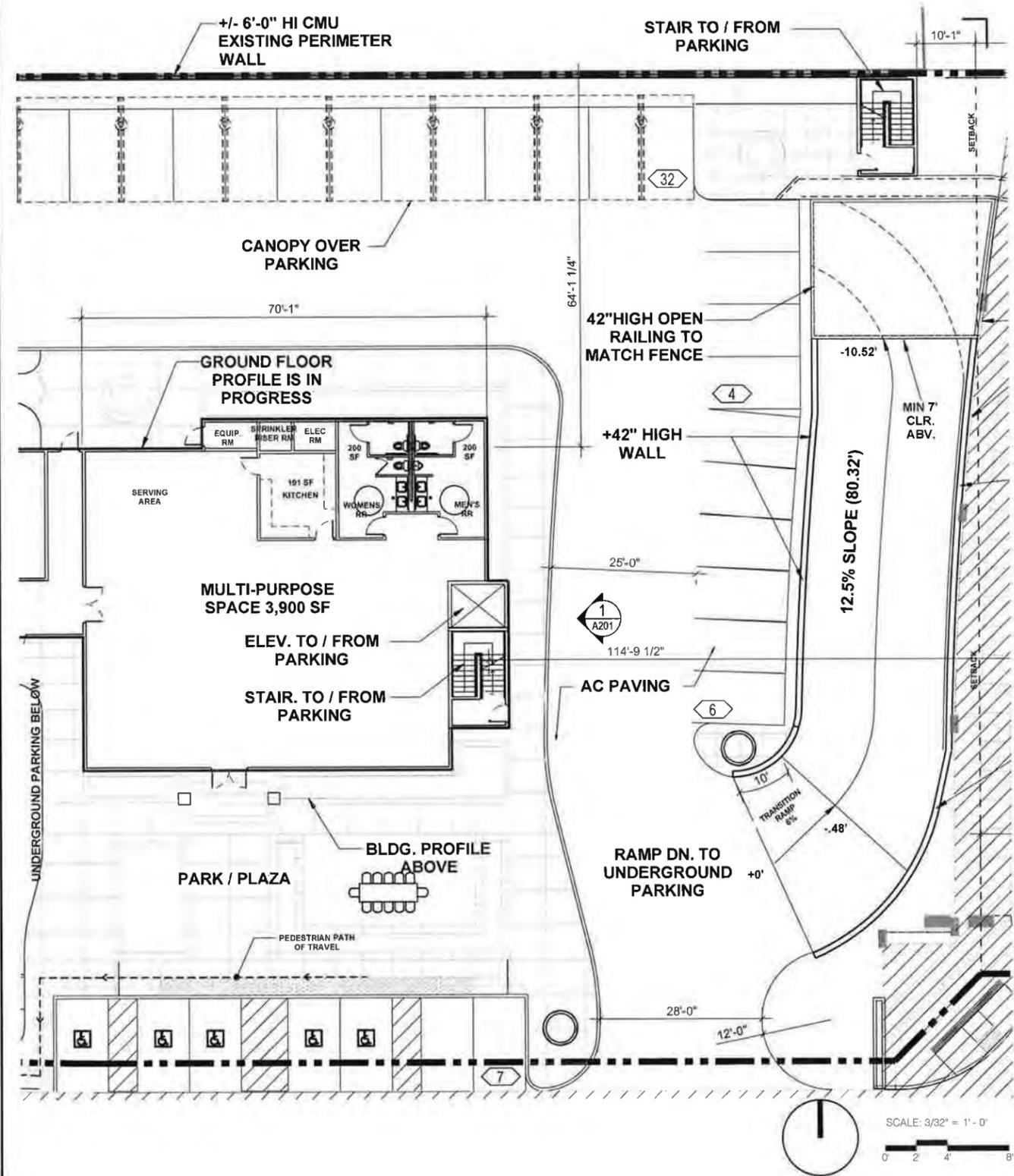
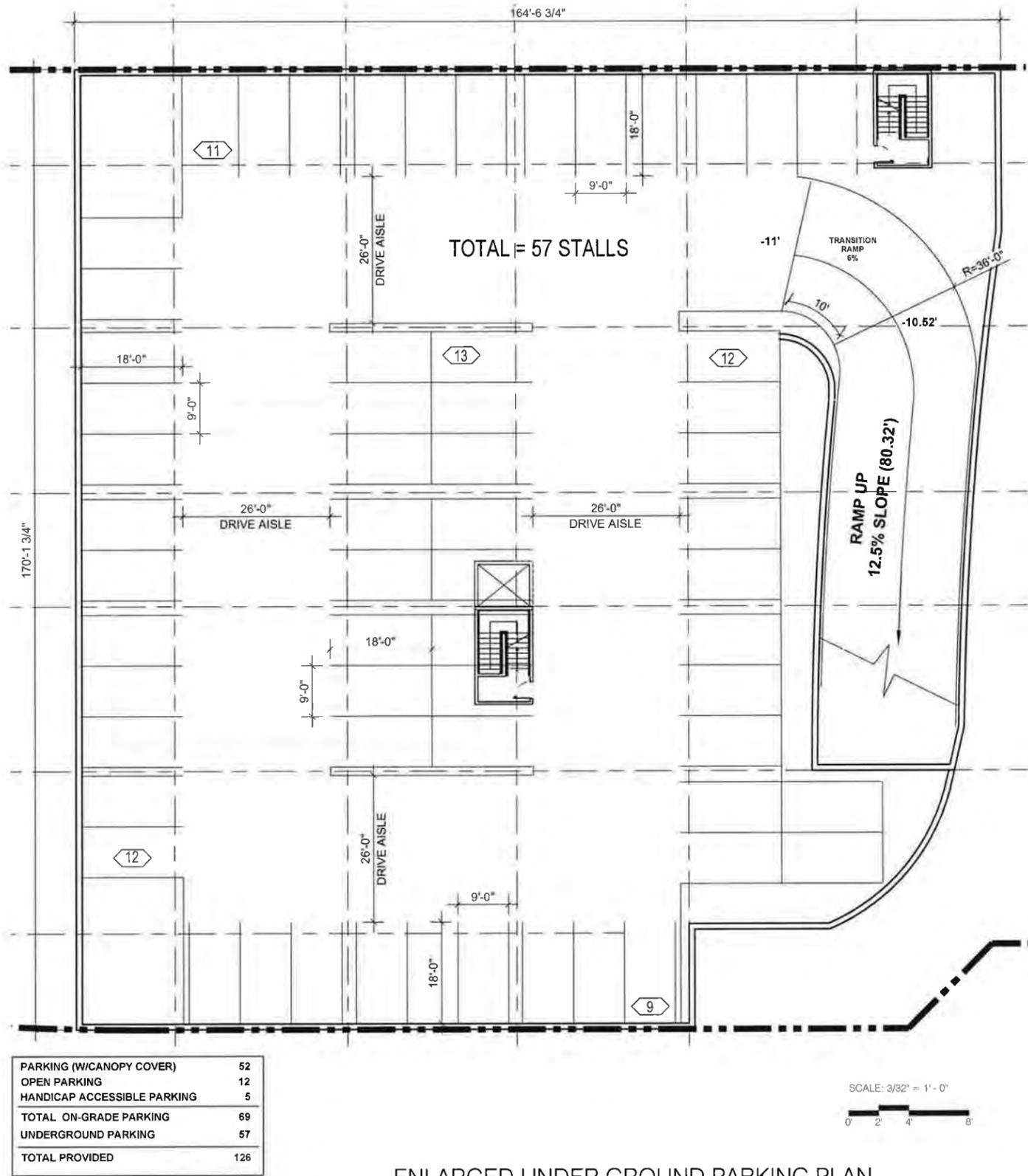
COSTA MESA, CA

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PARKING (W/CANOPY COVER)	52
OPEN PARKING	12
HANDICAP ACCESSIBLE PARKING	5
TOTAL ON-GRADE PARKING	69
UNDERGROUND PARKING	57
TOTAL PROVIDED	126

ENLARGED UNDER GROUND PARKING PLAN

ENLARGED PAVILION PLAN A-102.1

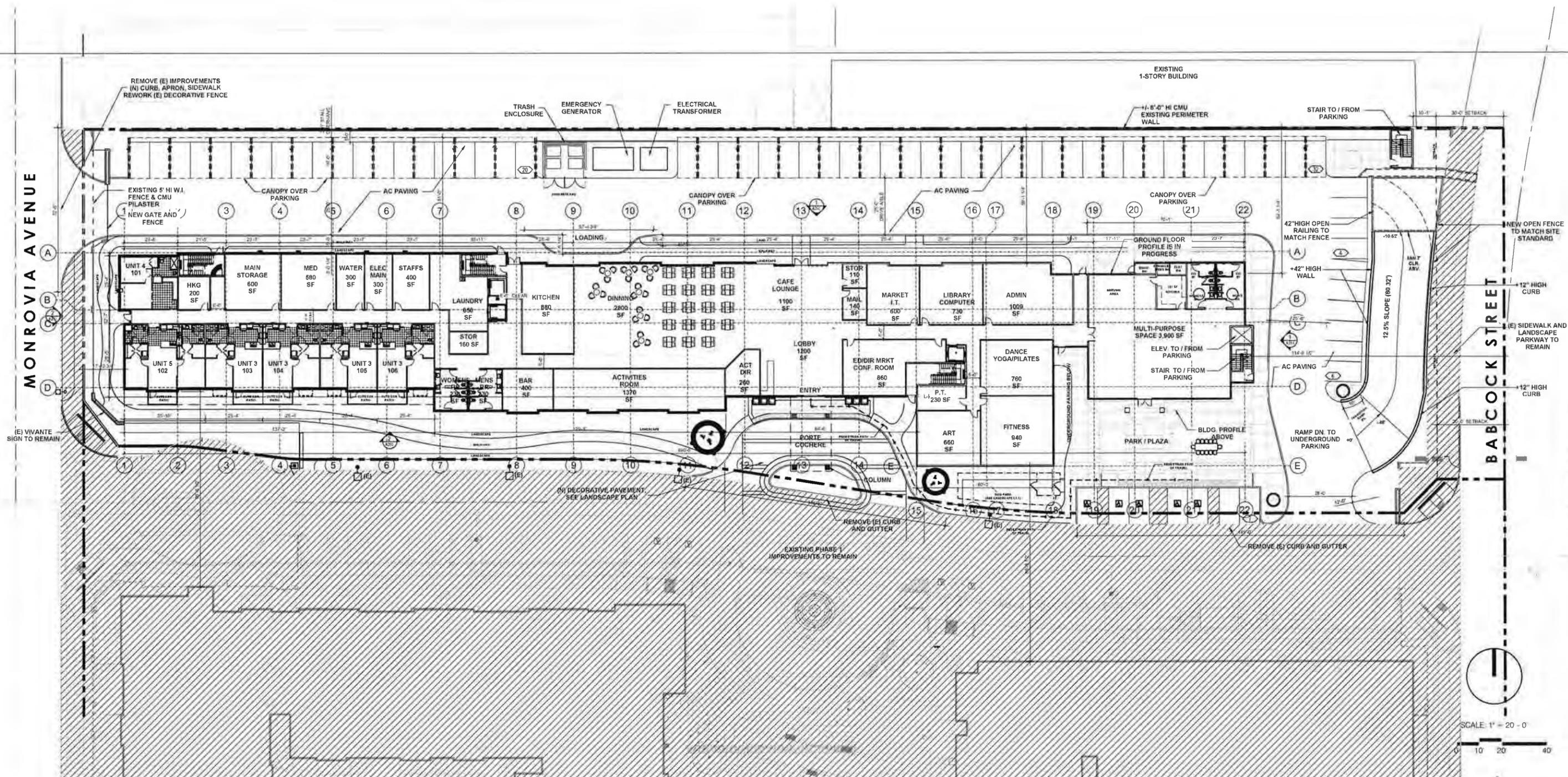
NEXUS VIVANTE - PHASE II

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SITE PLAN WITH GROUND FLOOR PLAN A102

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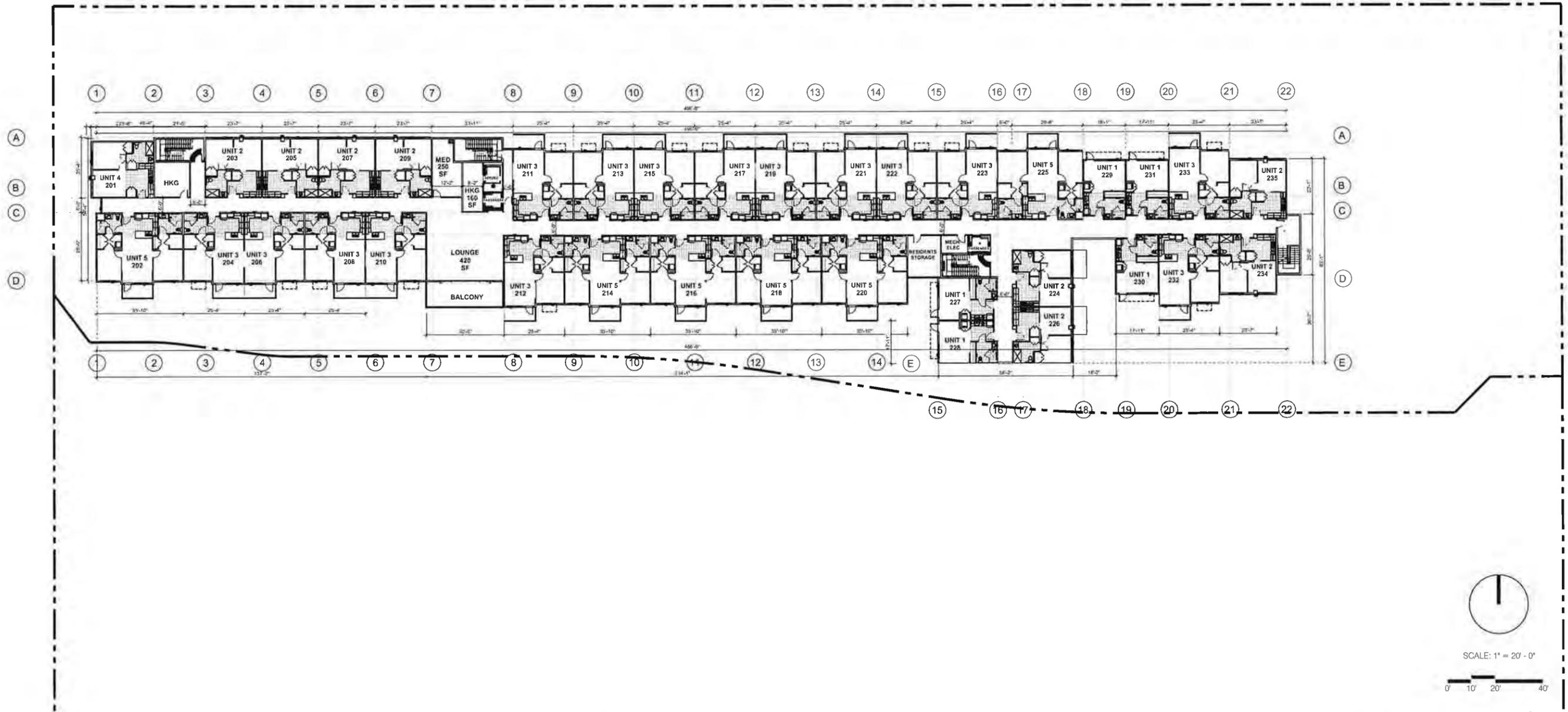
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TYPICAL FLOOR PLANS 2ND - 4TH :: A103

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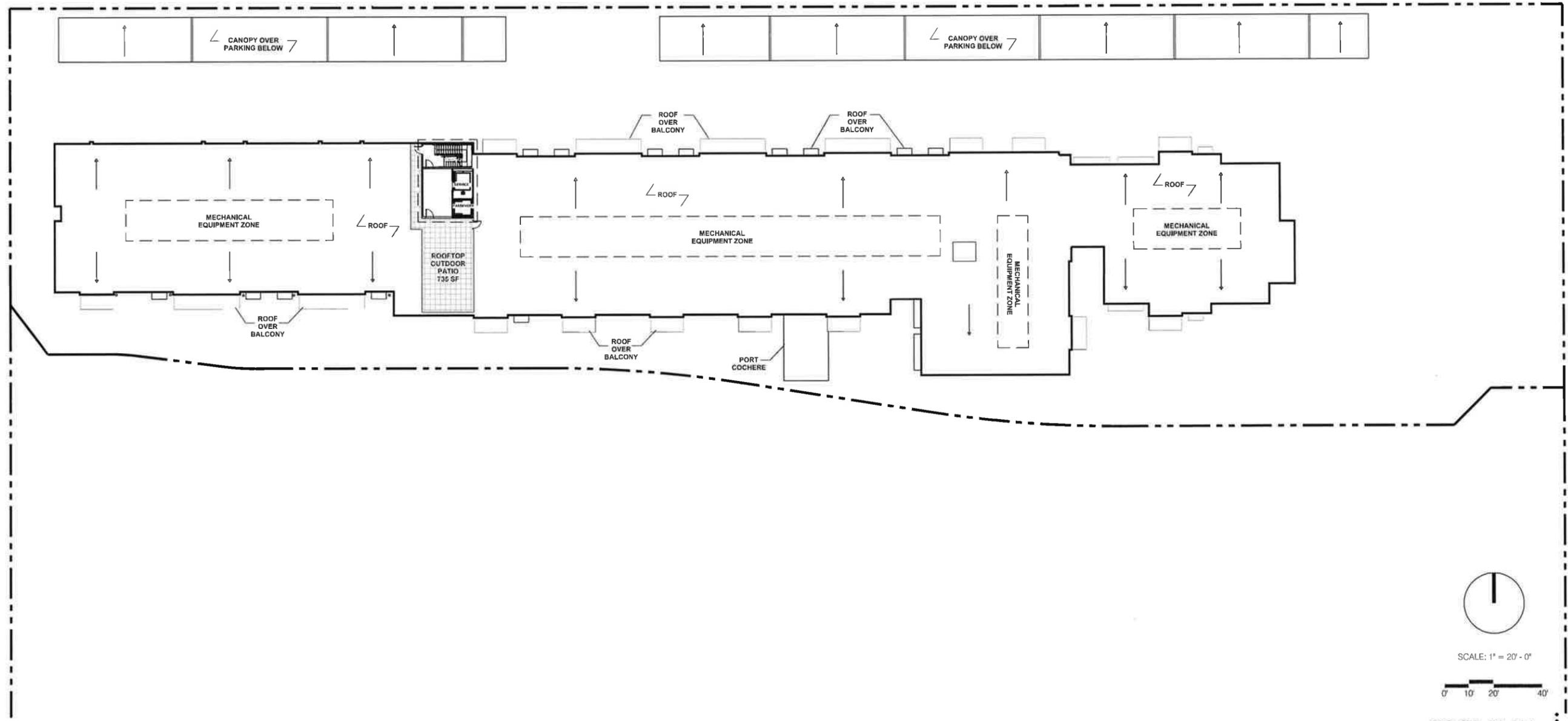
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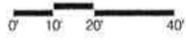
75-15750-00

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SCALE: 1" = 20' - 0"



ROOF PLAN A104

NEXUS VIVANTE - PHASE II

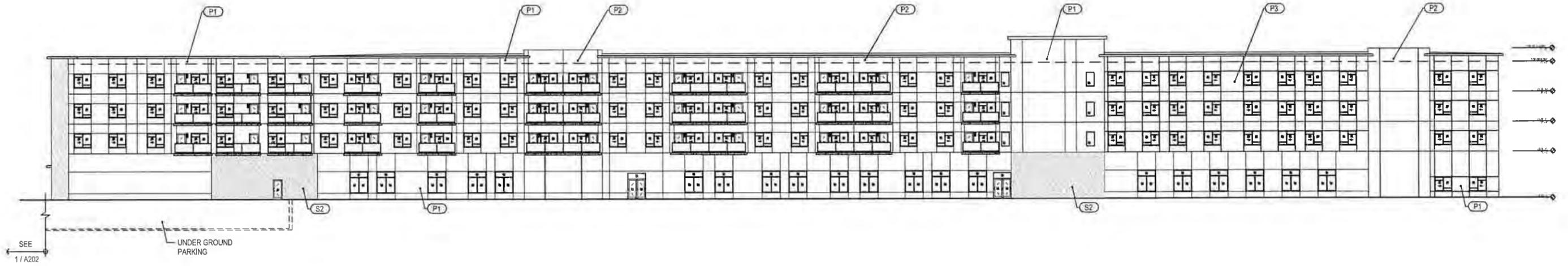
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1650 Monrovia Ave
Costa Mesa, CA 92627

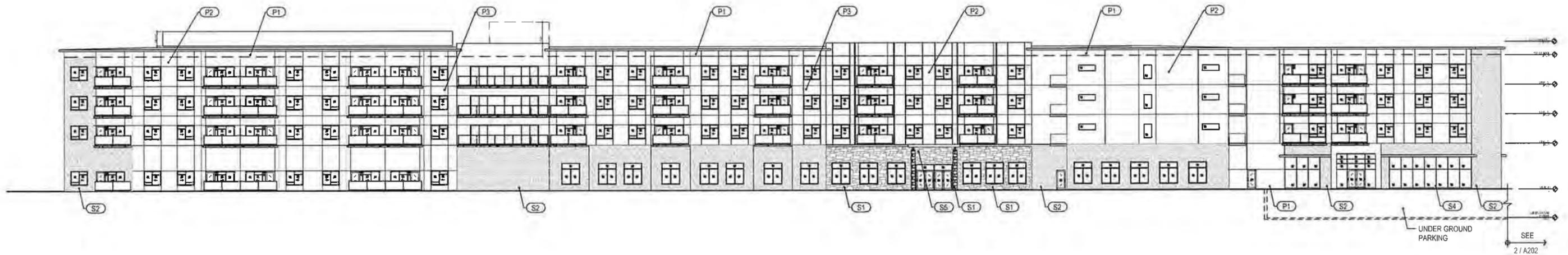
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① North Elevation



② South Elevation

Legend Notes	
P1	FRAZEE TRACING PAPER C.2820W @ BASE PLASTER AREAS
P2	FRAZEE TROTTING CLOTH @ "POPPED" AREAS OF PLASTER
P3	FRAZEE DECK CHAIR CLOTH @ INSET AREAS OF PLASTER EXPOSED
S1	CANTIERA ESPECIAL STONE 12" x 24" COQUINA ENTRY COLUMNS & SITE COLUMNS
S2	RED STONE TILE TO MATCH EXISTING ADJACENT BUILDING
S3	CANOPY OVER PARKING
S4	ALUMINUM STOREFRONT GLAZING SYSTEM
S5	METAL CANOPY

SCALE: 1/16" = 1'-0"



NORTH AND SOUTH ELEVATIONS :: A200

NEXUS VIVANTE - PHASE II

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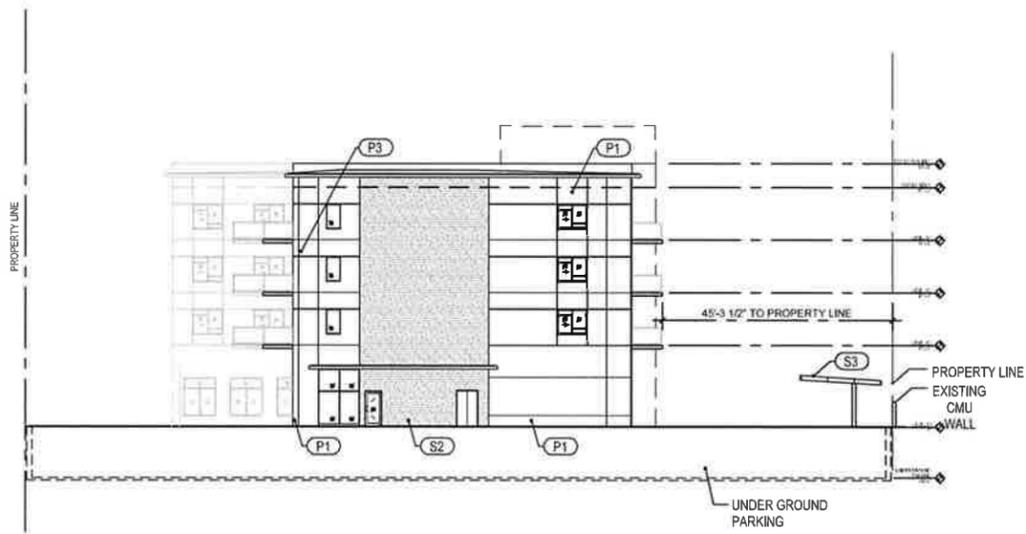
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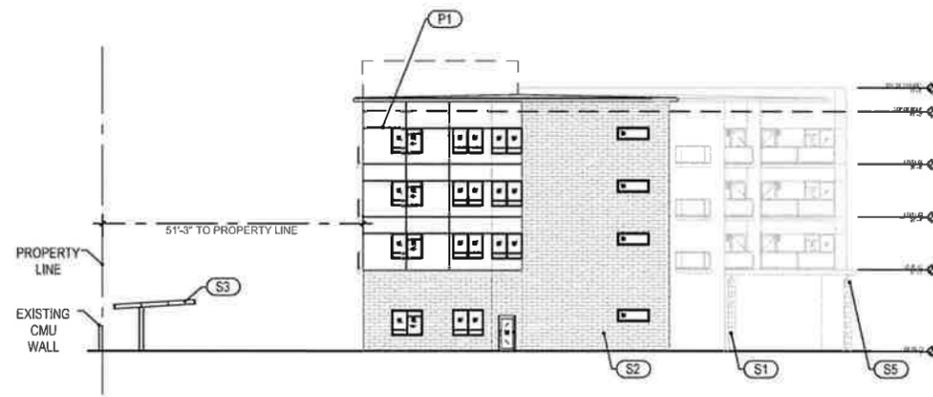
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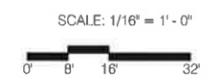


① East Elevation



② West Elevation

Legend Notes	
P1	FRAZEE TRACING PAPER CL2809V (@ BASE PLASTER AREAS)
P2	FRAZEE TROTTING CL2821W (@ "POPPED" AREAS OF PLASTER)
P3	FRAZEE DECK CHAIR CL2840 (INSET AREAS OF PLASTER, EXPOSED)
S1	CANTERA ESPECIAL STONE 12" x 24" COLUMNS (ENTRY COLUMNS & SITE COLUMNS)
S2	RED STONE TILE TO MATCH EXISTING ADJACENT BUILDING
S3	CANOPY OVER PARKING
S4	ALUMINUM STOREFRONT GLAZING SYSTEM
S5	METAL CANOPY



EAST AND WEST ELEVATIONS :: A201

NEXUS VIVANTE - PHASE II

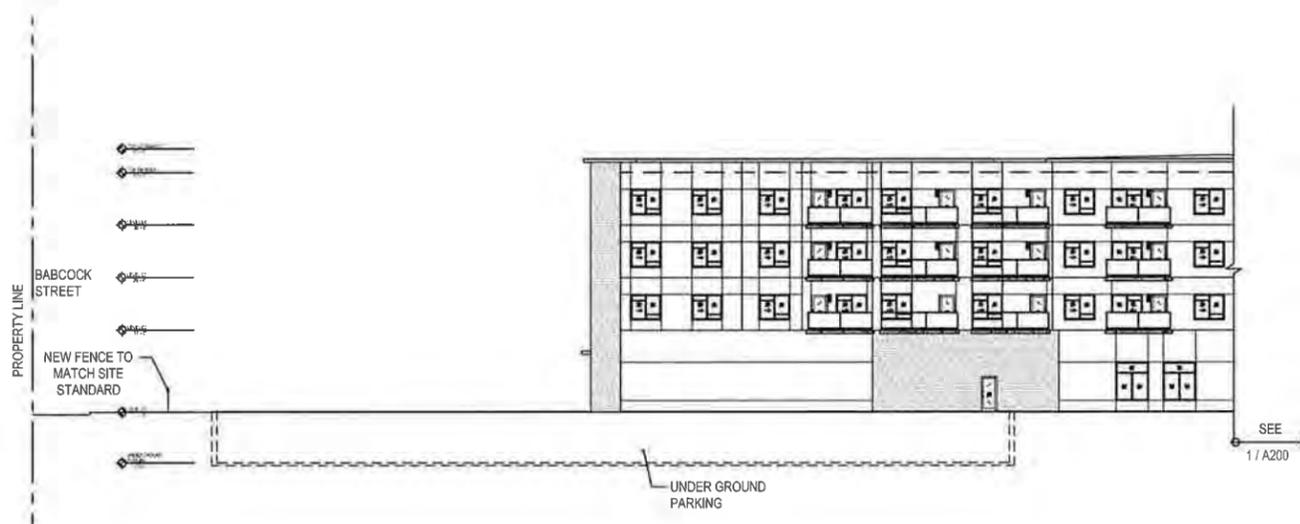
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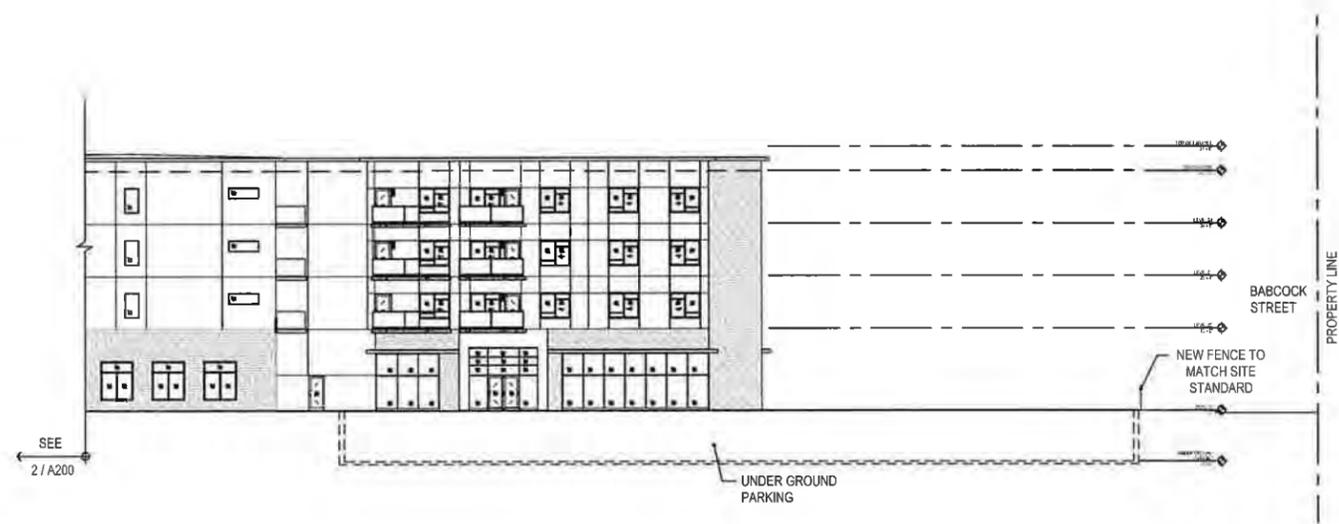
117 E. Colorado Blvd., 5th Floor
Pasadena, CA 91105
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f: 626.796.8735





① Multi-purpose Room North Elevation

SCALE: 1/16" = 1'-0"



② Multi-purpose Room South Elevation

SCALE: 1/16" = 1'-0"



MULTI-PURPOSE ROOM ELEVATIONS :: A202

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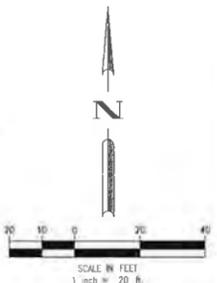
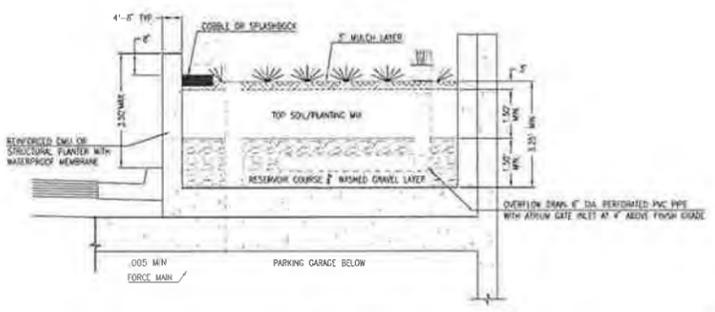
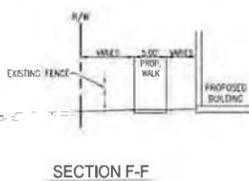
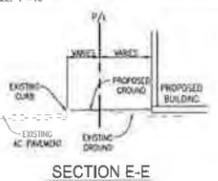
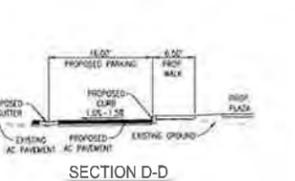
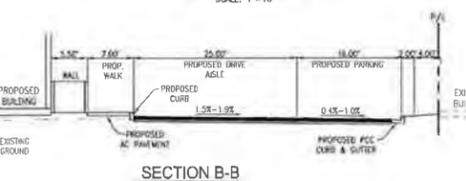
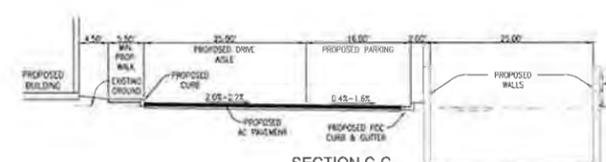
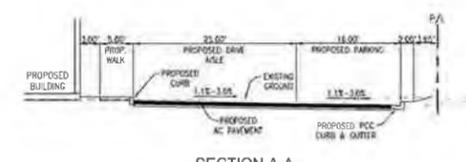
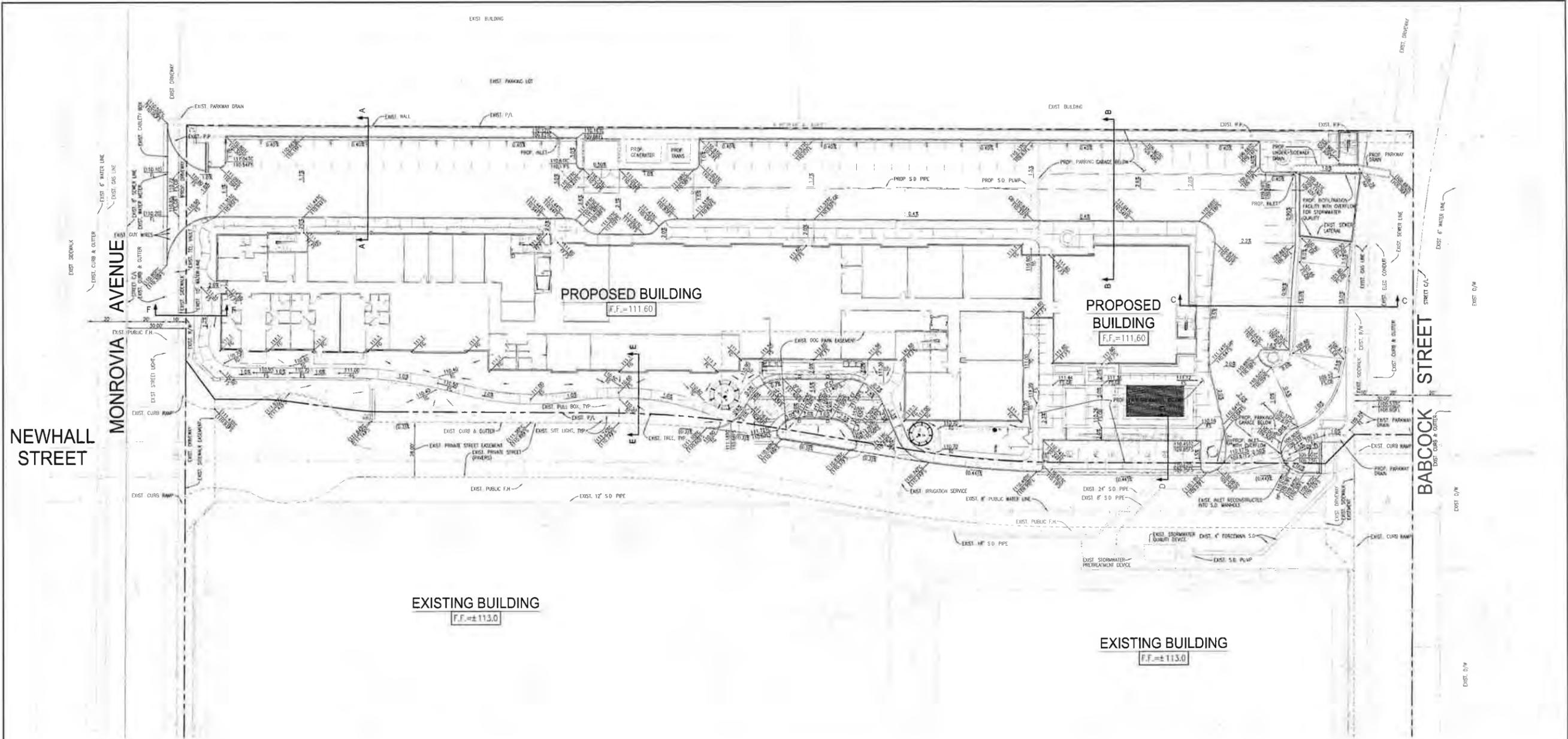
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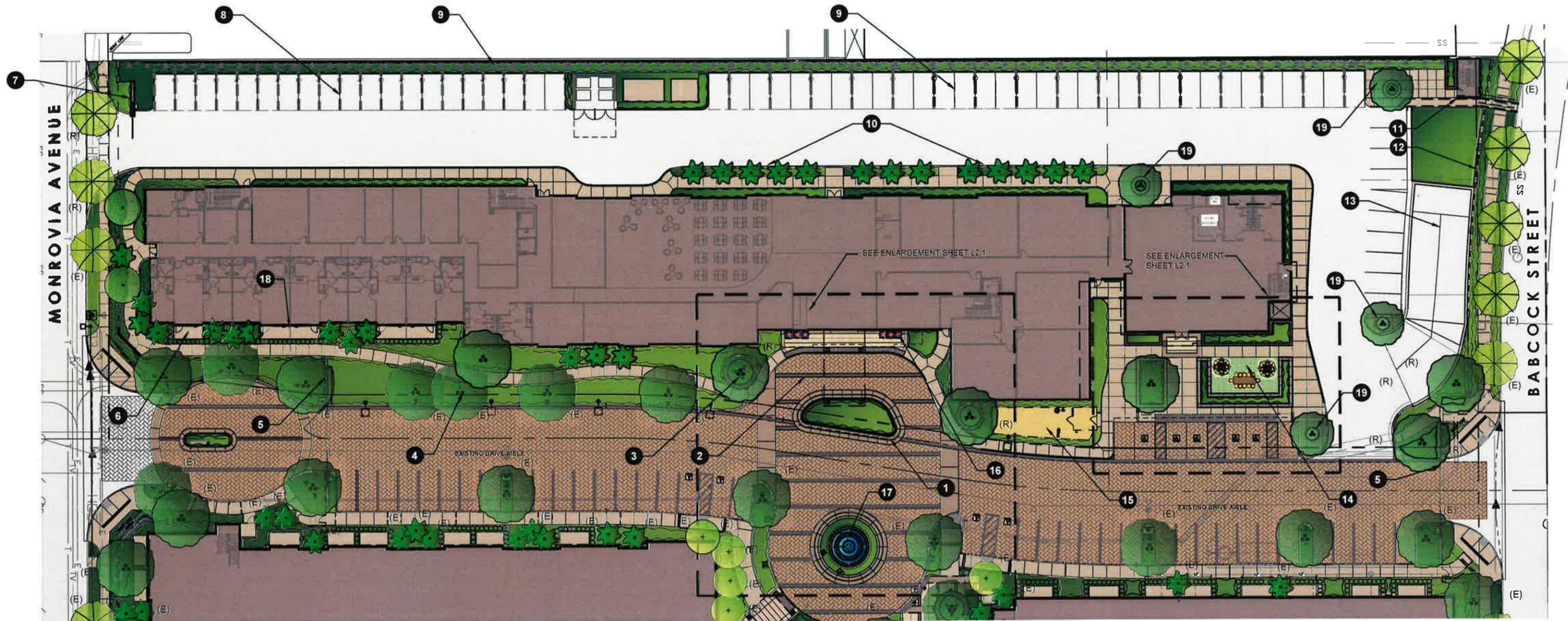
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<p>WALDEN & ASSOCIATES 280 WHITE ROAD, SUITE B IRVINE, CA 92614 (949) 261-1110 FAX 949-261-1111</p>	<p>CIVIL ENGINEERS PLANNERS LAND SURVEYORS</p>	<p>PRELIMINARY GRADING PLAN</p>		<p>JOB NUMBER 1701-01001</p>
		<p>FOR VIVANTE ON THE COAST - PHASE 2 1640 MONROVIA AVENUE COSTA MESA, CALIFORNIA</p>		<p>DATE: 12/07/2015 DRAWN: M.P. CHECKED: D.B.</p>
<p>SHEET 1 OF 1</p>				



LEGEND

- 1 DROP-OFF PLANTER ISLAND WITH CUSTOM CURB TO MATCH EXISTING.
- 2 PRECAST CONCRETE PAVERS TO MATCH EXISTING.
- 3 RAISED PLANTERS FOR OLIVE SPECIMEN TREES TO MATCH EXISTING.
- 4 EXISTING OLIVES TO REMAIN.
- 5 CONVERT SINGLE LEAF GATE TO SLIDING GATE.
- 6 PRIVATE PATIOS.
- 7 SINGLE SLIDING GATE EXIT ONLY.
- 8 PARKING CANOPY TO MATCH EXISTING.
- 9 EXISTING VINES TO BE PROTECTED IN PLACE.
- 10 FAN PALM SKYLINE.
- 11 PEDESTRIAN ENTRY TO UNDERGROUND PARKING.
- 12 NEW PERIMETER FENCE WITH PILASTERS TO MATCH EXISTING.
- 13 VEHICULAR ENTRY TO UNDERGROUND PARKING.
- 14 PAVILION PLAZA AREA.
- 15 DOG PARK WITH 4' HIGH ENCLOSURE FENCE.
- 16 PLANT CONTAINERS AT BUILDING ENTRY.
- 17 EXISTING WATER FEATURE.
- 18 PRIVATE PATIO LANDSCAPE SCREEN TO MATCH EXISTING
- 19 PLANT CONTAINER ON DECK FOR TREES.

PLANT LEGEND PHASE II

SYMBOL	BOTANICAL / COMMON NAME	SIZE	COMMENTS	WUCOLS
	MAYTENUS BOARIA / MAYTEN TREE	36" BOX	12'H X 5'W X 2-1/2" CAL.	MOD (0.4-0.8)
	OLEA EUROPAEA 'SWAN HILL' / OLIVE TREE NOTE: PROVIDE UNIT COST IN BID FOR 36" BOX AND 48" BOX TREES.	36" BOX 48" BOX	8'H X 7'W X 2" CAL. 12'H X 11'W X 3" CAL.	LOW (0.1-0.3)
	WASHINGTONIA ROBUSTA / MEXICAN FAN PALM	16' - 32' BTH		LOW (0.1-0.3)
	METROSIDEROS EXCELSA / NEW ZEALAND CHRISTMAS TREE	24" BOX STD.	10'H X 4'W X 1-1/2" CAL.	LOW (0.1-0.3)

EXISTING TREE LEGEND

SYMBOL	BOTANICAL / COMMON NAME	SYMBOL	BOTANICAL / COMMON NAME
	OLEA EUROPAEA 'SWAN HILL' / SWAN HILL OLIVE		PYRUS CALLERYANA / ORNAMENTAL PEAR
	WASHINGTONIA ROBUSTA / MEXICAN FAN PALM		CITRUS SPP.

NOTE:
TREES TAGGED (E) - EXISTING TO REMAIN
TREES TAGGED (R) - EXISTING TREE RELOCATED

PROPOSED SITE PLAN SK-4



NEXUS VIVANTE
COSTA MESA, CA

PRELIMINARY PLANTING PLAN

90

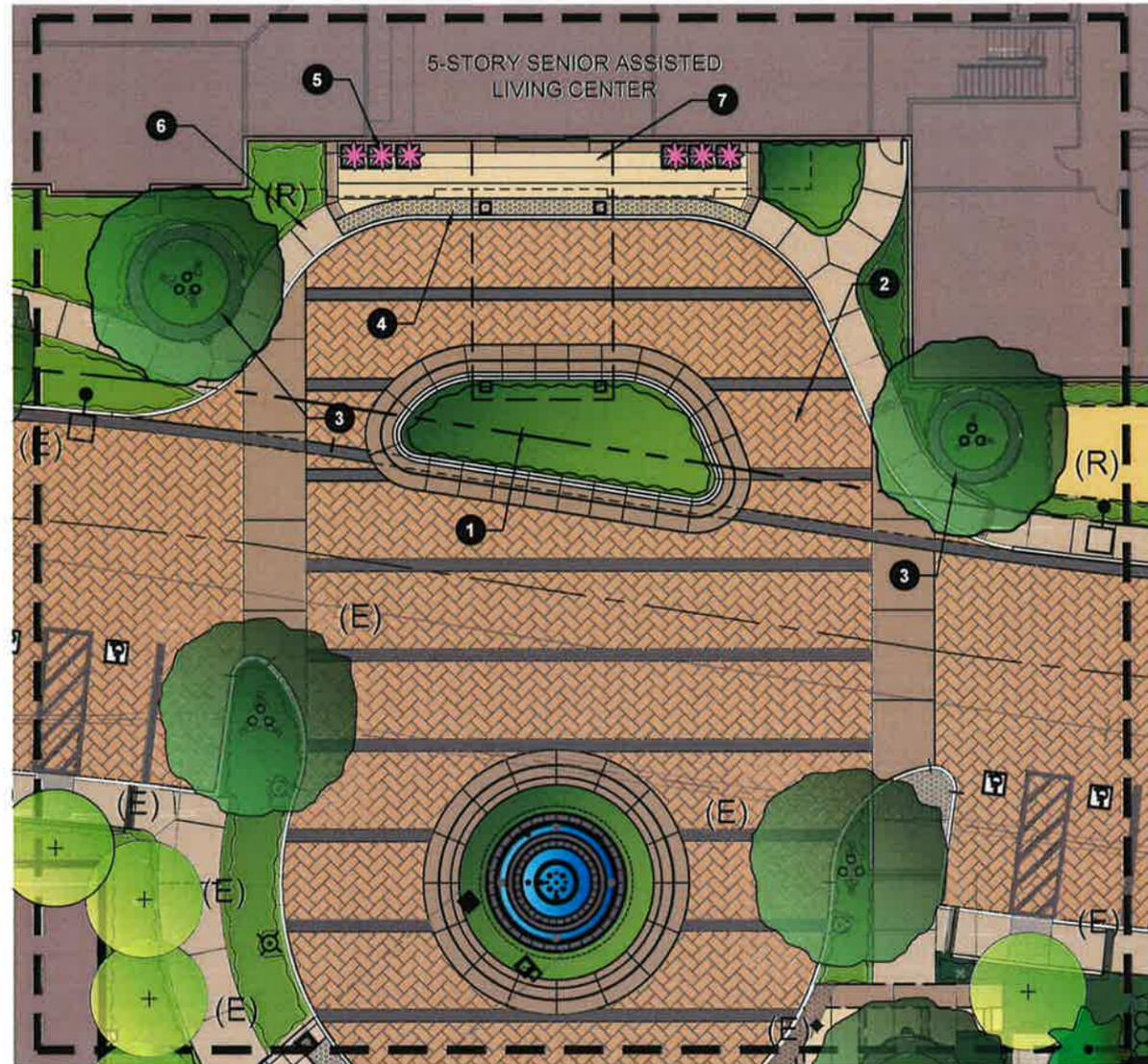


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FARMERSVILLE, CA 91105
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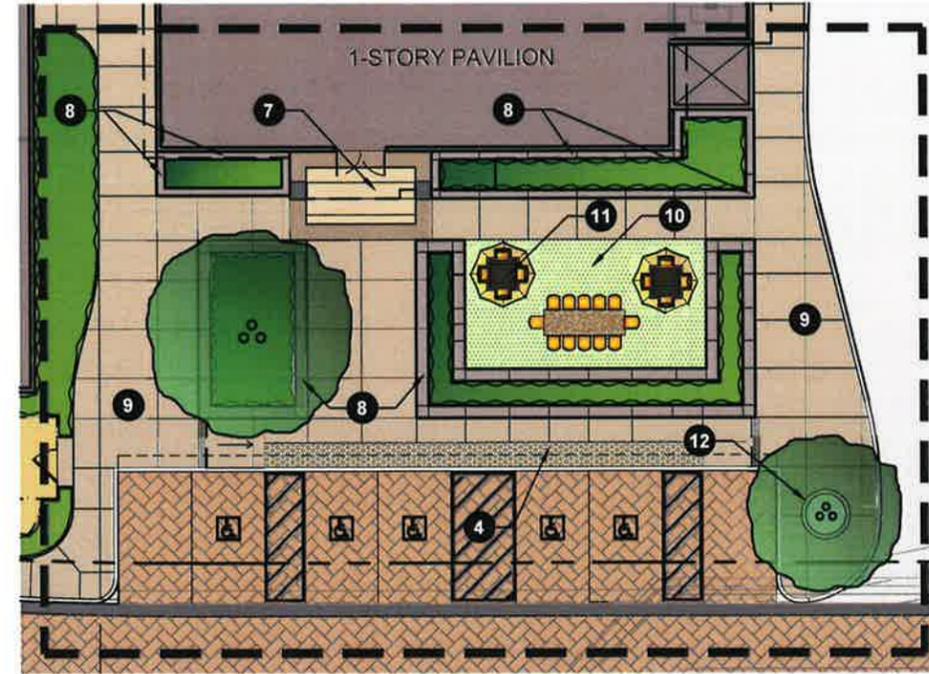
L1.1



BUILDING ENTRY ENLARGEMENT

PLANT LEGEND PHASE II

SYMBOL	BOTANICAL / COMMON NAME	SIZE	COMMENTS	WUCOLS
	MAYTENUS BOARIA / MAYTEN TREE	36" BOX	12'H X 5'W X 2-1/2" CAL.	MOD. (0.4-0.6)
	OLEA EUROPAEA 'SWAN HILL' / OLIVE TREE NOTE: PROVIDE UNIT COST IN BID FOR 36" BOX AND 48" BOX TREES	36" BOX 48" BOX	9'H X 7'W X 2" CAL. 12'H X 11'W X 3" CAL.	LOW (0.1-0.3)
	WASHINGTONIA ROBUSTA / MEXICAN FAN PALM	16" - 32" BTH		LOW (0.1-0.3)
	METROSIDEROS EXCELSA / NEW ZEALAND CHRISTMAS TREE	24" BOX STD.	10'H X 4'W X 1-1/2" CAL.	LOW (0.1-0.3)



PAVILION PLAZA

LEGEND

- 1 DROP-OFF PLANTER ISLAND WITH CUSTOM CURB TO MATCH EXISTING.
- 2 PRECAST CONCRETE PAVERS TO MATCH EXISTING.
- 3 RAISED CONCRETE PLANTERS FOR OLIVE SPECIMEN TREES TO MATCH EXISTING.
- 4 TRUNCATED DOME PAVERS.
- 5 PLANT CONTAINERS AT BUILDING ENTRY.
- 6 CONCRETE SIDE WALK.
- 7 INTEGRAL COLOR CONCRETE PAVING AT BUILDING ENTRY.
- 8 RAISED P.I.P. CONCRETE PLANTER
- 9 NATURAL GRAY COLOR CONCRETE PAVING WITH SAW CUT JOINTS.
- 10 SYNTHETIC TURF SURFACING.
- 11 SITE FURNISHINGS. TABLES, CHAIRS, UMBRELLAS AND DINING TABLES.
- 12 PLANT CONTAINER ON DECK FOR TREES.

PROPOSED SITE PLAN SK-4

NEXUS VIVANTE
COSTA MESA, CA

ENLARGEMENT PLANS

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L2.1

TREES



MAYTENUS BOARIA /
MAYTEN TREE



OLEA EUROPAEA 'SWAN HILL' /
SWAN HILL FRUITLESS OLIVE



METROSIDEROS EXCELSA /
NEW ZEALAND CHRISTMAS TREE



WASHINGTONIA ROBUSTA /
MEXICAN FAN PALM



AEONIUM SPP.
AEONIUM



AGAPANTHUS A. 'QUEEN ANNE' /
LILY OF THE NILE



AGAVE ATTENUATA 'ARBOLEDA BLUE' /
BLUE FOX TAIL AGAVE



ANIGOZANTHOS 'BUSH RANGER' /
KANGAROO PAW



AUCUBA JAPONICA /
JAPANESE AUCUBA



AZALEA SOUTHERN INDICA 'RED' /
RED AZALEA



BACCHARIS P. 'TWIN PEAKS' /
COYOTE BRUSH

SHRUBS &
GROUNDCOVER



BUXUS JAPONICUM 'GREEN BEAUTY' /
JAPANESE BOXWOOD



CALLISTEMON 'LITTLE JOHN' /
DWARF BOTTLEBRUSH



CALLIANDRA HAEMATOCEPHALA /
PINK POWDER PUFF



CAREX DIVULSA /
BERKELEY SEDGE



DISTICTIS 'RIVERS' /
ROYAL TRUMPET VINE



FESTUCA MAIREI /
ATLAS FESCUE



HEMEROCALLIS SPP. /
DAYLILY



JUNIPERUS SPP. /
JUNIPER



LANTANA MONTEVIDENSIS /
PURPLE TRAILING LANTANA



LIGUSTRUM J. 'TEXANUM' /
TEXAS PRIVET



LIRIOPE MUSCARI /
BIG BLUE LILY TURF



MISCANTHUS S. 'MORNING LIGHT' /
SILVER GRASS



NANDINA DOMESTICA /
HEAVENLY BAMBOO



OPHIPOGON JAPONICUS /
MONDO GRASS



PITTOSPORUM T. 'WHEELER'S DWARF' /
DWARF MOCK ORANGE



SENECIO SERPENS /
BLUE CHALK STICKS



ROSMARINUS O. 'PROSTRATA' /
PROSTRATE ROSEMARY



STIPA TENUISSIMA /
MEXICAN FEATHER GRASS



STRELITZIA REGINAE /
BIRD OF PARADISE



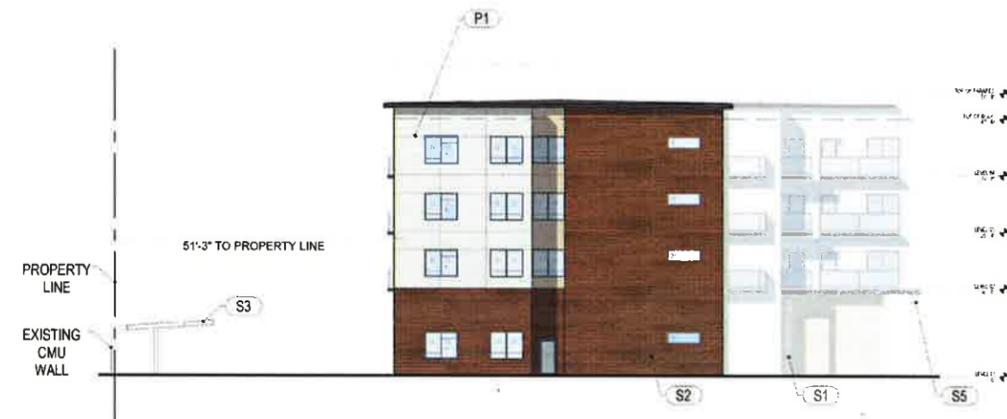
TRACHELOSPERMUM JASMINOIDES /
STAR JASMINE



ROSA 'ICEBERG' /
ICEBERG ROSE

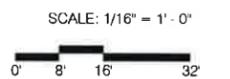


1 East Elevation



2 West Elevation

Legend Notes	
P1	FRAZEE TRACING PAPER CL202W (@ BASE PLASTER AREAS)
P2	FRAZEE TROTTING CL2673W (@ "POPPED" AREAS OF PLASTER)
P3	FRAZEE DECK CHAIR CL2684D (@ INSET AREAS OF PLASTER, EXPOSED)
S1	CANTERA ESPECIAL STONE 12" x 24" COQUINA (ENTRY COLUMNS & SITE COLUMNS)
S2	RED STONE TILE TO MATCH EXISTING ADJACENT BUILDING
S3	CANOPY OVER PARKING
S4	ALUMINUM STOREFRONT GLAZING SYSTEM
S5	METAL CANOPY



EAST AND WEST ELEVATIONS :: A201

NEXUS VIVANTE - PHASE II

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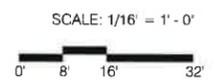


1 North Elevation



2 South Elevation

Legend Notes	
P1	FRAZEE TRACING PAPER CL262W (@ BASE PLASTER AREAS)
P2	FRAZEE TROTTING CL267W (@ "POPPED" AREAS OF PLASTER)
P3	FRAZEE DECK CHAIR CL264D (@ INSET AREAS OF PLASTER, EXPOSED)
S1	CANTERA ESPECIAL STONE 12" x 24" COQUINA (ENTRY COLUMNS & SITE COLUMNS)
S2	RED STONE TILE TO MATCH EXISTING ADJACENT BUILDING
S3	CANOPY OVER PARKING
S4	ALUMINUM STOREFRONT GLAZING SYSTEM
S5	METAL CANOPY



NORTH AND SOUTH ELEVATIONS :: A200

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**ADDENDUM TO
INITIAL STUDY / MITIGATED NEGATIVE
DECLARATION
FOR THE
VIVANTE SENIOR LIVING - PHASE II ASSISTED
LIVING FACILITY (MASTER PLAN PA-09-15 A1)**

July 11, 2016



Prepared By:



Templeton Planning Group
20250 SW Acacia Street, Suite 260
Newport Beach, CA 92660

Prepared For:



City of Costa Mesa
77 Fair Drive
Costa Mesa, CA 92626

**ADDENDUM TO
INITIAL STUDY / MITIGATED NEGATIVE
DECLARATION
FOR THE
VIVANTE SENIOR LIVING – PHASE II ASSISTED
LIVING FACILITY (MASTER PLAN PA-09-15 A1)**

Lead Agency:

City of Costa Mesa
Development Services Department
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Costa Mesa, CA 92626
Contact: Dan Inlose, AICP, Senior Planner
(714) 754-5088

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1 INTRODUCTION

1.1 PURPOSE

The purpose of this Initial Study/Mitigated Negative Declaration Addendum for Master Plan PA-09-15 A1 for Phase II the Vivante independent and assisted living complex (Project) north of 1640 Monrovia Avenue. (Reference Exhibits 4 and 5) This document provides the City of Costa Mesa with information to use as the basis for making an environmental determination regarding appropriate California Environmental Quality Act (CEQA) documentation for the Project. An Addendum to the original Mitigated Negative Declaration was prepared as appropriate, adequate and supportable environmental documentation for the Project because substantial evidence indicates development and implementation of the Project will not result in environmental impacts greater in scope or scale than those identified in the original certified Mitigated Negative Declaration. This Addendum to the Initial Study/Mitigated Negative Declaration addresses environmental effects associated with development of Phase II of the Vivante project.

Data for the original environmental document and this Addendum was obtained from on-site field observations, discussions with the City of Costa Mesa and affected agencies, analyses of adopted plans and policies, review of existing studies and specialized environmental studies that include previously-conducted studies pertaining to air quality, geology, phase I and II environmental site assessments, remediation action plan, water quality, noise, traffic and sewer capacity as well as newly-prepared studies pertaining to traffic generation, parking needs, air quality and greenhouse gas emissions. Pertinent documents relating to the original Initial Study/Mitigated Negative Declaration are listed in Section 1.3 of that document. Additional pertinent documents relating to this addendum to the original Initial Study and Mitigated Negative Declaration are the following.

- Trip General Assessment for the Vivante North Project, Costa Mesa, California, Linscott, Law and Greenspan, June 20, 2016
- Parking Needs Study, Vivante Senior Living Community-Phase II (“Vivante North”), Costa Mesa, California, Linscott, Law and Greenspan, June 20, 2016
- Air Quality and GHG Impact Analyses, Vivante North Project, Costa Mesa, California, Giroux and Associates, June 29, 2016

Previous Environmental Documentation

Preparation of this Addendum to the Initial Study/Mitigated Negative Declaration has relied upon information within the original Initial Study/Mitigated Declaration prepared for the Westside Lofts project (Master Plan PA-07-20 and Vesting Tentative Tract Map 16999), dated September 4, 2007. In addition to the administrative record and other informational resources identified in that document, the following have become part of the updated administrative record for the Project environmental

documentation and are available for review at the City of Costa Mesa, 77 Fair Drive, Costa Mesa, CA 92618, (714) 754-5245.

- City of Costa Mesa 2015-2035 General Plan (June, 2016)
- City of Costa Mesa 2015-2035 General Plan Final Environmental Impact Report (June, 2016)
- Linscott, Law and Greenspan, "Trip Generation Assessment for the Vivante North Project, Costa Mesa, California," (June 20, 2016)
- Linscott, Law and Greenspan, "Parking Needs Study, Vivante Senior Living Community – Phase II ("Vivante North"), Costa Mesa, California," (June 20, 2016)
- Giroux and Associates, "Air Quality and GHG Impact Analyses, Vivante North Project, Costa Mesa, California," (June 29, 2016)

1.2 PROJECT HISTORY

The original discretionary approval for the Vivante project occurred on June 23, 2008, when the Costa Mesa Planning Commission approved a Master Plan (PA-07-20) and Vesting Tentative Tract Map (VT-16999) that allowed development of 151 residential condominiums within two four-story buildings, five live/work units, six industrial office buildings occupying 42,000 square feet, and associated parking and infrastructure on the 6.8-acre property. The Planning Commission (Resolution PC-07-09) required all 151 residential units and live/work units to be marketed as "for sale" units. An approved Zoning Application (ZA-08-17) modified that requirement to allow the units to be offered initially on a rental basis. A subsequent Master Plan Amendment (PA-09-15) modified the previously entitled, but unbuilt, project by eliminating the residential and live/work units and replaced them with a 185-unit (145 studio or one-bedroom units; 40 two-bedroom units) assisted living facility. The discretionary action also retained the 42,000 square feet of commercial office uses. The assisted living facility has been constructed on the southerly portion of the 6.8-acre property and is occupied as Phase I of the overall Vivante project. However, the northerly portion of the property that would have held the office uses remains vacant and is the property on which the currently proposed Project would be located.

2 PROJECT DESCRIPTION

The proposed project (Project; or Vivante Phase II) consists of an Amendment to Master Plan PA-09-15, which would allow elimination of the previously proposed and approved 42,000 square feet of office uses in Phase II of the Vivante development and replacement of the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center (both of which may occasionally be used by non-residents of the Project) within a 127,695 square foot, four-story building on the northerly 2.25 acres (98,018 square feet) of the 6.8 acre Vivante property. Unit sizes are proposed to be as follows: 15 studio units; 77 one-bedroom units; and, 19 two-bedroom units. The Project also would contain amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services. The building footprint and carport will spread over 41.3 percent (40,502 square feet) of the Project site. An underground parking level will contain 57 spaces; surface parking areas will provide 17 open spaces and 52 carport stalls. The underground parking level will be accessed via a sloped vehicular ramp. The sloped vehicular ramp encroaches into the required 10 feet setback from a public street. The vehicular ramp which provides access to the 57 underground parking spaces encroaches to the property line that abuts Babcock Street. This is a deviation from the Mesa West Bluffs development standards however its placement allows for the maximum number of parking spaces in the underground parking structure and generates minimal above-ground visual obstruction within the ten feet setback. The wall which must extend into the ten-foot setback to surround the ramp for safety purposes will be wrought iron and pilaster to propose a more transparent barrier and ensure that the passive landscaping provide along Babcock is visible from the public right of way. The parking and driveway will occupy 24.9 percent (24,470 square feet) of the Project site. Five handicap parking stalls will be part of the total 126 parking spaces to be provided. Open space will occupy 33 percent (33,046 square feet) of the 2.25-acre Project site. (Reference Exhibits 4 through 7)

The Preliminary Planting Plan (Reference Exhibit 8) indicates Mayten Trees, Olive Trees, Mexican Fan Palm Trees and New Zealand Christmas Trees will be planted within and bordering the entry road dividing Phase II from Phase I of Vivante. Ornamental Pear Trees will be planted along the east (Babcock Street) and west (Monrovia Avenue) boundaries of the 2.25-acre Project site. Various Citrus species also will be planted. Some existing trees and perimeter vines (generally along the northerly project boundary) will be retained. A new perimeter fence will be installed.

The Building Entry and Pavilion Plaza (Reference Exhibit 9) will incorporate previously-identified tree species, synthetic turf, plant containers, decorative pavement and site furnishings such as tables, chairs, umbrellas and dining tables.

3

ENVIRONMENTAL SETTING

The Project site occupies the northerly 2.5-acres of the overall 6.8-acre Vivante assisted living project site. There are no significant topographic features on the Project site. The surface elevation is approximately 111 feet above mean sea level and the terrain is relatively flat. Existing vegetation on the Project site is limited and consists of weeds and some ornamental trees and shrubs.

The Project site is located in a highly industrialized area consisting of industrial businesses and scattered commercial and residential developments. The Project site originally was developed in the 1950s with manufacturing businesses particularly related to the aerospace industry and from the mid-1980s through 2005 was used by the Eaton Corporation for fabrication and assembly of aerospace cockpit controls.

Vivante Phase I occupies 4.3-acres immediately south of and bordering the Vivante Phase II Project site. Phase I is comprised of 185 assisted living units, related amenities, landscaping, perimeter fencing and parking (Reference Exhibits 2 and 3).

The Project site is bordered to the north by light industrial uses (European Collectibles) and east by Babcock Street and light industrial uses (Beyer Electric and Sunwest Air Conditioning) beyond. Monrovia Avenue and the Playport Mobile Home Park border the Project site to the west.

4 ENVIRONMENTAL TOPICS

4.1 AESTHETICS

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Aesthetics, including scenic vistas, scenic resources, visual character of the Project site, and light/glare that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Aesthetics is necessary.

4.2 AGRICULTURAL RESOURCES

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Agricultural Resources that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Agricultural Resources is necessary.

4.3 AIR QUALITY / GREENHOUSE GASES

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Air Quality that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Agricultural Resources is necessary.

Giroux and Associates conducted an “Air Quality and GHG Impact Analyses” for the Project (Reference Appendices). Information from the Analyses informs the following text, which is intended to supplement the Air Quality analysis in the previously-certified Initial Study/Mitigated Negative Declaration.

Air Quality Setting

Ambient Air Quality Standards (AAQS)

The Project-related air quality impacts, together with existing background air quality levels, were compared to applicable air quality standards, which represent levels of air quality considered safe (with an adequate margin of safety) to protect public health and welfare. National AAQS standards were established in 1971 for six pollution species with states being able to retain the option to add other pollutants, require more stringent compliance, or to include different exposure periods. California has a quite different ozone standard related than does the federal government. The California standards are provided in Table 1. Table 2 provides sources and health effects of various pollutants.

Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ₃	Method ⁴	Primary ^{3.5}	Secondary _{3.6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	---	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.07 ppm (137 µg/m ³)		0.07 ppm (137 µg/m ³)		

Respirable Particulate Matter (PM10) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		---		
Fine Particulate Matter (PM2.5) ⁹	24 Hour	---	---	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO)	24 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	---	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	---	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		---	---	
Nitrogen Dioxide (NO₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppm (188 µg/m ³)	---	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.03 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	---	Ultraviolet Fluorescence; Spectrophotometry (Pararosaniline Method)
	3 Hour	---		---	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹⁰	---	
	Annual Arithmetic Mean	---		0.03 ppm (for certain areas) ¹⁰	---	
Lead ^{12, 13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	---	---	High Volume Sampler and Atomic Absorption
	Calendar Quarter	---		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3 Month Average	---		0.15 µg/m ³		
Visibility Reducing Particulates ¹⁴	8 Hour	See Footnote 13	Beta Attenuation and Transmittance through Filter Tape	No Additional Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

¹⁻¹⁴ See Footnotes 1-14 on page 5 of the Updated Air Quality Study (Appendix C)

**Table 2
Health Effects of Major Criteria Pollutants**

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust • Natural events, such as decomposition of organic matter 	<ul style="list-style-type: none"> • Reduced tolerance for exercise • Impairment of mental function • Impairment of fetal development • Death at high levels of exposure • Aggravation of some heart diseases (angina)
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> • Motor vehicle exhaust • High temperature stationary combustion • Atmospheric reactions 	<ul style="list-style-type: none"> • Aggravation of respiratory illness • Reduced visibility • Reduced plant growth • Formation of acid rain.
Ozone (O ₃)	<ul style="list-style-type: none"> • Atmospheric reaction of organic gases with nitrogen oxides in sunlight 	<ul style="list-style-type: none"> • Aggravation of respiratory and cardiovascular diseases • Irritation of eyes • Impairment of cardiopulmonary function • Plant leaf injury
Lead (Pb)	<ul style="list-style-type: none"> • Contaminated soil 	<ul style="list-style-type: none"> • Impairment of blood function and nerve construction • Behavioral and hearing problems in children
Fine Particulate Matter (PM-10)	<ul style="list-style-type: none"> • Stationary combustion of solid fuels • Construction activities • Industrial processes • Atmospheric chemical reactions 	<ul style="list-style-type: none"> • Reduced lung function • Aggravation of the effects of gaseous pollutants • Aggravation of respiratory and cardio respiratory diseases • Increased cough and chest discomfort • Soiling • Reduced visibility
Fine Particulate Matter (PM-2.5)	<ul style="list-style-type: none"> • Fuel combustion in motor vehicles, equipment, and industrial sources • Residential and agricultural burning • Industrial processes • Also, formed from photochemical reactions of other pollutants, including NO_x, sulfur oxides, and organics 	<ul style="list-style-type: none"> • Increases respiratory disease • Lung damage • Cancer and premature death • Reduces visibility and results in surface soiling
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> • Combustion of sulfur-containing fossil fuels • Smelting of sulfur-bearing metal ores • Industrial processes 	<ul style="list-style-type: none"> • Aggravation of respiratory diseases (asthma, emphysema) • Reduced lung function • Irritation of eyes • Reduced visibility • Plant injury • Deterioration of metals, textiles, leather, finishes, coatings, etc.

In compliance with the Federal Clean Air Act Amendments of 1990, the United States Environmental Protection Agency (EPA) developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (PM-2.5). New national AAQS were adopted for these pollutants in 1997. United States Supreme Court decisions generally supported the responsibility given EPA; however, EPA subsequently agreed to downgrade the attainment designation for a large number of communities to “non-attainment” for the 8-hour ozone standard. The State of California adopted various stringent standards for PM-2.5 and other air pollutants between 2002 and 2010.

Baseline Air Quality

South Coast Air Quality Management District ambient air quality measurements at its Costa Mesa and Anaheim monitoring stations lead to inference of existing and probable future levels of air quality in Costa Mesa. The two monitoring stations measure regional pollution levels (e.g. particulates; smog) and levels of vehicular pollutants such as carbon monoxide. The following Table 3 presents a summary of the last five years of published data from a composite of gaseous species monitored at Costa Mesa and particulates monitored at Anaheim. No particulate data is available from Costa Mesa. This data lead to the following conclusions.

- Photochemical smog (ozone) levels infrequently exceed standards. All state and federal ozone standards have been exceeded an average of 1 percent or less of all days in the past five years. Measurements from the more recent years demonstrate progressively improved ozone levels in the area; that is, although ozone levels are still occasionally high they are much lower than 10 to 20 years ago.
- Based on Anaheim measurements, respirable dust (PM-10) levels occasionally exceeded the State standard on approximately 2 percent of measured days. The less stringent federal PM-10 standard has not been exceeded in the last 5 years. It is likely particulate levels in Costa Mesa are even lower than in Anaheim.
- The federal ultra-fine particulate (PM-2.5) standard has been exceeded on less than 1 percent of measure days in the last 6 years.
- More localized pollutants such as carbon monoxide and nitrogen oxides are very low near the Project site. There is substantial excess dispersive capacity to accommodate localized vehicular air pollutants without any threat of violating applicable AAQS.

The Air Quality/Greenhouse Gas Analyses indicates “although complete attainment of every clean air standard is not yet imminent, extrapolation of the steady improvement trend suggests that such attainment could occur within the reasonably near future.”

Pollutant/Standard	2010	2011	2012	2013	2014
Ozone					
1-Hour > 0.09 ppm (S)	1	0	0	1	1
8-Hour > 0.07 ppm (S)	2	2	1	2	6
8- Hour > 0.075 ppm (F)	1	0	1	1	4
Max. 1-Hour Conc. (ppm)	0.097	0.093	0.090	0.095	0.096

Max. 8-Hour Conc. (ppm)	0.086	0.077	0.076	0.083	0.079
Carbon Monoxide					
8- Hour > 9. ppm (S,F)	0	0	0	0	0
Max 8-hour Conc. (ppm)	2.1	2.2	1.7	1.7	2.1
Nitrogen Dioxide					
1-Hour > 0.18 ppm (S)	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.070	0.061	0.074	2.0	0.061
Inhalable Particulates (PM-10)					
24-hour > 50 µg/m3 (S)	0/57	2/57	0/61	1/59	2/61
24-hour > 150 µg/m3 (F)	0/57	0/57	0/61	0/59	0/61
Max. 24-Hr. Conc. (µg/m3)	43.	53.	48.	77.	85.
Ultra-Fine Particulates (PM-2.5)					
24-Hour > 35 µg/m3 (F)	0/331	2/352	4/347	1/331	6/344
Max. 24-Hr. Conc. (µg/m3)	31.7	39.2	50.1	37.8	56.2

Air Quality Planning

The Federal Clean Air Act (1977 and subsequent Amendments) required designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating steps that would bring the area into compliance with all national standards. The South Coast Air Basin (SCAB) could not meet the deadlines for ozone, nitrogen dioxide, carbon monoxide, of PM-10. The South Coast Air Quality Management District and the Southern California Association of Governments are the SCAB agencies the governor designated to develop regional air quality plans. These two agencies first adopted an Air Quality Management Plan (AQMP) in 1979.

Thresholds

In response to 1990 Federal Clean Air Act requirements, California revised its State Implementation Plan (SIP) several times over the past decade. Table 4 indicates the most current regional attainment emissions forecast for ozone precursors (ROG) and (NO_x), carbon monoxide (CO) and particulate matter. Substantial reductions in emissions of ROG, NO_x and CO are forecast to continue throughout the next several decades. PM-10 and PM-2.5 are forecast to increase slightly unless new particulate control programs are implemented.

Pollutant	2012^a	2015^b	2020^b	2025^b	2030
NOx	512	451	357	289	266
VOC	466	429	400	393	393
PM-10	154	155	161	165	170
PM-2.5	68	67	67	68	170

In 2003, the Air Quality Management District (AQMD) adopted an updated clean air “blueprint” that outlined air pollution measures needed to meet federal health-based standards for ozone by 2010 and for particulates (PM-10) by 2006. The EPA approved the blueprint in 2004. Subsequently, a new 8-hour federal standard became the context for analysis. The SCAB was re-designated as “non-attainment” for

the 8-hour ozone standard and a new attainment plan was developed. The attainment date was extended to 2021.

Projected attainment by 2021 requires control technologies that do not yet exist. Therefore, the SCAQMD requested a voluntary re-classification from “severe non-attainment” area to an “extreme non-attainment” designation for ozone, which will allow a longer time period for those technologies to develop. EPA approved the requested re-classification, which also set a later attainment deadline (2024), but also required the SCAB to adopt even more stringent controls.

EPA further did not approve part of the AQMP PM-2.5 attainment plan for the SCAB. The current EPA attainment plan relies on PM-2.5 control regulations not yet approved or implemented. However, it is expected a number of pending rules will remove identified deficiencies. The 2012 AQMD is expected to remedy identified PM-2.5 planning deficiencies.

The SCAQMD currently is required to develop an AQMP for the long-revoked one-hour federal ozone standard. The 2012 AQMD is believed to satisfy current 8-hour attainment planning requirements because the 2012 AQMP contains a number of control measures for the 8-hour ozone standard that are equally effective for one-hour levels.

AQMPs are required to be updated every 3 years. The 2012 AQMP was adopted in early 2013. An update was to be adopted in 2016. Current attainment deadlines for all federal non-attainment pollutants extend between 2019 and 2032, depending on the pollutant.

The Air Quality/Greenhouse Gas Analysis states the Project does not directly relate to the AQMP “because there are no specific air quality programs or regulations governing assisted living projects.” The SCAQMD acknowledges the AQMP is a growth-accommodating document but does not favor designating regional impacts as less than significant simply because the Project is consistent with regional growth projections. Therefore, Giroux and Associates analyzed the Project on an individual project basis.

AIR QUALITY ANALYSIS

Standards of Significance

Air quality impacts are considered “significant” if they cause clean air standards to be violated where they are currently met, or if they “substantially” contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would be considered a significant impact.

CEQA Guidelines Appendix G offers the following five tests of air quality impact significance. That is, a project would have a potentially significant impact it –

- a) Conflicts with or obstructs implementation of the applicable air quality plan***
- b) Violates any air quality standard or contributes substantially to an existing or projected air quality violation***
- c) Results in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality***

standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)

- d) Exposes sensitive receptors to substantial pollutant concentrations*
- e) Creates objectionable odors affecting a substantial number of people*

Primary Pollutants

Air quality impacts generally occur as individual sources of emissions or near a collection of sources. Primary pollutants can be evaluated indirectly in comparison to appropriate clean air standards. Violations of these standards where they currently are met or a measurable worsening of an existing or future violation would be considered significant impacts. Many particulates also are primary pollutants. An aggressive dust control program is required to control fugitive dust during project construction due to the non-attainment status of the South Coast Air Basin for PM-10. Mitigation Measures contained at the end of this analysis pertain to this necessity.

Secondary Pollutants

Many pollutants require time to transform from benign to unhealthful. Their impacts occur regionally far from the source. Their regional impact is minute on an individual basis and cannot be quantified other than through complex computer modeling. Analysis of significance of those emissions is based on a specified amount of emissions although there is no way to translate the emissions directly into a corresponding ambient air quality impact.

Projects with daily emissions that exceed any of the following emission thresholds recommended by SCAQMD are considered significant under CEQA Guidelines.

Pollutant	Construction	Operations
ROG	75	55
NOx	100	55
CO	550	550
PM-10	150	150
PM-2.5	55	55
SOx	150	150
Lead	3	3

Additional Indicators

The SCAQMD CEQA Handbook states additional indicators should be used as screening criteria to determine need for further analysis with regard to air quality. Additional indicators are the following.

- The project could interfere with attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation
- The project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build out year
- The project could generate vehicle trips that cause a CO hot spot

Construction Activity Impacts

SCAQMD developed CalEEMod as a model by which to calculate construction and operational emissions for a variety of development projects. This model calculates the daily maximum and annual average emissions for criteria pollutants and total or annual greenhouse gas emissions. Giroux and Associates modeled estimated Project construction emissions using CalEEMod2013.22 to identify maximum daily emissions for each pollutant during Project construction, using default construction equipment and a schedule as indicated in Table 6.

Grading (6 days)	1 Grader
	1 Dozer
	1 Loader/Backhoe
Construction (220 days)	1 Crane
	2 Loaders/Backhoes
	1 Generator Set
	3 Welders
	2 Forklifts
Paving (10 days)	1 Paver
	1 Paving Equipment
	2 Loader/Backhoes
	1 Roller

Table 7 lists worst case daily construction emissions and shows peak daily construction activity emissions are estimated to be below SCAQMD CEQA thresholds without need for added mitigation. One model-based mitigation measure is recommended to require watering of exposed dirt surfaces 3 times daily and is provided in the Mitigation Measures section at the end of the Air Quality topical narrative.

Maximal Construction Emissions	ROG	NOx	CO	SO₂	PM-10	PM-2.5
2017						
Unmitigated	65.7	28.2	22.3	0.0	8.2	4.8
Mitigated	65.7	28.2	22.3	0.0	4.2	2.8
2018						
Unmitigated	65.7	2.1	2.7	0.0	0.3	0.2
Mitigated	65.7	2.1	2.7	0.0	0.3	0.2
SCAQMD Thresholds	75	100	550	150	150	55

Although construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates, the SCAQMD does not generally require analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur.

LOCALIZED SIGNIFICANCE THRESHOLDS

The SCAQMD developed parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. The analysis elements are called Localized Significance Thresholds (LST). Use of LST analysis for a project is optional. LST are applicable to the following criteria pollutants: oxide of nitrogen (NO_x), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LST further represent maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard and are developed based on ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor. LST are applicable for a sensitive receptor where an individual could remain for 24 hours (e.g. residence; hospital; convalescent facility).

The primary source of possible LST impact for the Project would occur during construction. For the Vivante Phase II Project, the nearest sensitive receptor is the mobile home residential park adjacent to the Project site to the west across Monrovia Avenue. Therefore, the most conservative distance – 25 meters – was modeled. In addition, the most stringent thresholds for a one area site were applied to the analysis. Table 8 indicates the following thresholds expressed in pounds per day

LST 1 acre/25 meters North Coastal OC	CO	NO_x	PM-10	PM-2.5
LST Thresholds	647	92	4	3
Max On-Site Emissions				
Unmitigated	22	28	8	5
Mitigated	22	28	8	3

Emissions will meet LST for construction thresholds with application of the dust suppression measures – as contained in the Mitigation Measures section at the end of the Air Quality narrative. LST impacts from Project development will be less than significant with application of the Mitigation Measure pertaining to dust suppression, pursuant to SCAQMD Rule 403.

OPERATIONAL IMPACTS

Operational emissions will not exceed applicable SCAQMD operational emissions CEQA thresholds of significance as demonstrated in Table 9. Operational emissions for the Project were calculated using CALFEEMod2013.2.2 for an assumed Project build out and full occupancy by 2018. In addition to mobile sources from vehicles, smaller “air source” air pollution is generated from on-site energy consumption (such as landscaping) and from off-site electrical generation (Lighting). However, these sources contribute only a minimal percentage of total Project NO_x and CO burdens and a few percent of other pollutants, which is a negligible addition to total significant Project emissions. The following Table 9 indicates operational emissions will not exceed applicable SCAQMD operational emissions CEQA thresholds of significance.

Table 9 Proposed Project Daily Operational Impacts						
	Operational Emissions (lbs/day)					
Source	ROG	NOx	CO	SO₂	PM-10	PM-2.5
Area	31.9	0.8	65.0	0.1	8.5	8.5
Energy	0.0	0.3	0.1	0.0	0.0	0.0
Mobile	1.6	4.5	18.3	0.0	3.4	1.0
Total	33.6	5.6	83.4	0.1	11.9	9.5
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Operational emissions were indicated for previously-approved 42,0900 square feet of office uses (Reference Table 10). Table 11 indicates the net difference between operational emissions for the previously-approved office use and currently proposed Project. It is demonstrable that Project impacts decrease in the current proposal.

Table 10 Advanced Project Daily Operational Impacts						
	Operational Emissions (lbs/day)					
Source	ROG	NOx	CO	SO₂	PM-10	PM-2.5
Area	1.1	0.0	0.0	0.0	0.0	0.0
Energy	0.0	0.1	0.1	0.0	0.0	0.0
Mobile	1.7	5.0	20.9	0.0	3.4	1.0
Total	2.9	5.2	21.0	0.0	3.4	1.0
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Table 11 Daily Operational Emissions Proposed Uses – Approved Uses						
	Operational Emissions (lbs/day)					
Source	ROG	NOx	CO	SO₂	PM-10	PM-2.5
Area	30.8	0.8	65.0	0.1	8.5	8.5
Energy	0.0	0.2	0.0	0.0	0.0	0.0
Mobile	-0.1	-0.5	-2.6	0.0	0.0	0.0
Total	30.7	0.4	62.4	0.1	8.5	8.5
SCAQMD Threshold	55	55	550	150	150	55

MNITIGATION MEASURES

Although construction activities are not anticipated to cause dust emissions that exceed SCAQMD CEQA thresholds, the following Mitigation Measures are recommended to minimize dust because of the non-attainment status of the South Coast Air Basin and the Project proximity to residential use.

- Apply soil stabilizers or moisten inactive areas

-
- Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times per day)
 - Cover all stock piles with tarps at the end of each day or as needed
 - Provide water spray during loading and unloading of earthen materials
 - Minimize in-out traffic from construction zone
 - Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard
 - Sweep streets daily if visible soil material is carried out from the construction site

In addition, although Project-generated ROG and NO_x are calculated not to exceed SCAQMD CEQA thresholds, due to regional non-attainment for photochemical smog, use of the following Mitigation Measures to control diesel exhaust is recommended.

- Utilize well-tuned off-road construction equipment
- Establish a preference for contractors using Tier 3 or better heavy equipment
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment

GREENHOUSE GAS EMISSIONS

Greenhouse gases (GHG) emitted by human activity are implicated in global climate change by contributing to an increase in the temperature of earth's atmosphere. Principal greenhouse gases are carbon dioxide, methane, nitrous oxide, ozone and water vapor. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines greenhouse gases to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and hexafluoride. Fossil fuel consumption in the transportation sector is the single largest source of GHG emissions and accounts for approximately one-half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

The State of California legislature has passed legislation and the governor has signed at least three executive orders pertaining to greenhouse gases. GHG statutes and executive orders include AB 32, SB 1368, EO S--03-05, EO-S-20-06, and EO-S-01-07.

AB 32 is significant and is designed to maintain California's reputation as a "national and international leader on energy conservation and environmental stewardship." It will have wide-ranging effects on California businesses and lifestyles as well as far reaching effects on other states and countries. A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic GHG reductions are the short time frames within which it must be implemented. Principal components of AB 32 include the following.

- Requiring monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions
- Requiring immediate "early action" control programs on the most readily controlled GHG sources
- Mandating that by 2020 California's GHG emissions be reduced to 1990 levels
- Forcing an overall reduction of GHG gases in California by 25-40 percent, from business as usual, to be achieved by 2020

-
- Requiring complement efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminants

The framework for developing implementing regulations for AB 32 is underway statewide. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, from greater use of renewable energy and from increased structural energy efficiency. In addition, through the California Climate Action Registry (now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been developed. GHG sources are categorized as direct sources (company owned) and indirect (not company owned). Direct sources include combustion emissions from on-road and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

THRESHOLDS OF SIGNIFICANCE

The State Resources Agency developed guidelines for treatment of GHG emissions under CEQA in response to SB 97 requirements. In March, 2010, the new guidelines became state law as part of title 14 of the California Code of Regulations and CEQA Appendix G Guidelines were modified to include GHG as a required analysis element. A project would have a potentially significant impact if it:

- Generates GHG emissions, directly or indirectly, that may have a significant impact on the environment; or,
- Conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions

Section 15064.4 of the Code specifies how significance of GHG emissions is to be evaluated. The evaluation process is broken down into quantification of project-related GHG emissions, making a determination of significance, and specification of any appropriate mitigation if impacts are found to be potentially significant. The GHG guidelines afford the lead agency with substantial flexibility at each of these steps. Emissions identification may be accomplished qualitatively, quantitatively, or based on performance standards. The most common practice for transportation combustion GHG emissions quantification is to use a computer model such as CalEEMod (as used in the analysis for this document). The significance of the emissions then must be evaluated. Selection of a threshold of significance must consider what level of GHG emissions would be cumulatively considerable. The guidelines do not support a zero net emissions threshold.

In September, 2010, the SCAQMD CEQA Significance Working Group released revisions that recommended a threshold of 3,000 MT (metric tons) CO_{2e} for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for the analysis for this document. Project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

PROJECT RELATED GHG EMISSIONS GENERATION

Threshold: A project would have a potentially significant impact if it generates GHG emissions, directly or indirectly, that may have a significant impact on the environment. LESS THAN SIGNIFICANT IMPACT.

Analysis

Construction Activity GHG Emissions

It is assumed project construction will require slightly more than one year. During project construction, the CalEEMod2013.2.2 computer model predicts construction activities will generate annual CO_{2e} emissions identified in Table 12. That is, 366.2 metric tons in Year 2017 and 2.9 metric tons in Year 2018.

	CO_{2e}
Year 2017	366.2
Year 2018	2.9
Total	369.1
Amortized	12.3

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime, which is estimated to be 12.3 metric tons. Therefore, GHG impacts from construction are considered individually less than significant.

Project Operation GHG Emissions

The Appendix for the Air Quality/GHG Analysis (Cal EEMod2013.2.2) contains input assumptions for operation GHG emissions calculations and the GHG conversion from consumption to annual regional CO_{2e} emissions. Table 13 below provides total operational and annualized construction emissions for the Project and for the previously-approved (office use) project and demonstrates although the Project operation emissions would amount to 15 metric tons Coe2 per year more than the corresponding emissions for the previously-approved project the guideline threshold is not exceeded. As the Analysis states – “Total Project GHG emissions are well below the proposed annual significance threshold of 3,000 MT....”

Threshold: A project would have a potentially significant impact if it conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions. LESS THAN SIGNIFICANT IMPACT.

The applicable GHG planning document for the project is AB 32 because the City of Costa Mesa has not yet developed a Greenhouse Gas Reduction Plan. Analysis indicates the Project is not expected to result in a significant increase in GHG emissions. Project development and implementation results in GHG emissions below the recommended SCAQMD 3,000-ton threshold. Therefore, the project would not conflict with any applicable plan, policy, or regulation to reduce GHG emissions.

4.4 BIOLOGICAL RESOURCES

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a

kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Biological Resources related to habitat modification, wetlands, movement of native resident or migratory fish or wildlife species, local policies or ordinances protecting biological resources, or provisions of an adopted Habitat Conservation Plan or Natural Community Conservation Plan that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Biological Resources is necessary.

4.5 CULTURAL RESOURCES

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Cultural Resources related to changes to historic, archaeological or paleontological resources or disturbance of any human remains that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Cultural Resources is necessary.

4.6 GEOLOGY AND SOILS

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Geology and Soils related rupture of a known earthquake fault, seismic ground shaking, ground failure including liquefaction, landslides, soil erosion

or loss of topsoil, unstable geology or soil, expansive soil or support of septic tanks that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Geology and Soils is necessary.

4.7 HAZARDS AND HAZARDOUS MATERIALS

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Hazards and Hazardous Materials related to use or transport of hazardous substances or exposure of persons to hazardous substances that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Hazards and Hazardous Materials is necessary.

4.8 HYDROLOGY AND WATER QUALITY

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Hydrology and Water Quality related water quality standards, waste discharge requirements, ground water supplies, drainage patterns, water runoff, exposure of persons or structures to flood hazards, inundation by seiche, tsunami or mudflow, construction or post-construction effects on storm water runoff, or erosion that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated

Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Hydrology and Water Quality is necessary.

4.9 LAND USE AND PLANNING

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Land Use and Planning related to division of an established community or conflict with applicable land use plans or regulations that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Land Use and Planning is necessary.

4.10 MINERAL RESOURCES

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Mineral Resources related to loss of availability of a known mineral resource or locally important mineral resource recovery site that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Mineral Resources is necessary.

4.11 NOISE

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Noise related to exposure of persons to or generation of noise levels in excess of local standards or applicable standards of other agencies, exposure of persons to or generation of excessive groundborne vibration or noise levels, generation of a permanent increase in ambient noise levels, or causing a substantial temporary or periodic increase in ambient noise levels that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Noise is necessary.

4.12 POPULATION AND HOUSING

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Population and Housing related to inducing a substantial population growth in an area through extension of roads or other infrastructure, displacement of substantial numbers of existing housing and thereby necessitating construction of replacement housing elsewhere, or displacement of substantial numbers of people and thereby necessitating construction of replacement of housing elsewhere that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Population and Housing is necessary.

4.13 PUBLIC SERVICES

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Public Services related to requiring new or altered governmental facilities or need for new governmental facilities to maintain acceptable service ratios, response times or other performance objectives that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Public Services is necessary.

4.14 RECREATION

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Recreation related to increasing use and resultant deterioration of existing parks or recreational facilities or constructing or requiring expansion of recreational facilities that would adversely affect the environment that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Recreation is necessary.

4.15 TRAFFIC

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-

bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

Linscott, Law and Greenspan conducted a “Trip Generation Assessment” (Reference Appendix A) for the Vivante Phase II Project. The Assessment expressed traffic generation in terms of vehicle trip ends, which are defined as one-way vehicular movements entering or exiting the generating land use. The forecasting procedure in the Ninth edition of the Institute of Transportation Engineers’ Trip Generation (Washington D.C., 2012) provides traffic generation equations and/or rates. The Assessment provides a summary of trip generation rates used to document the existing full-occupancy generating potential of the Project and to forecast the future Project-related condition. The Table also provides a summary of AM and PM peak hour trip generation characteristics for both Vivante Phase I and Vivante Phase II based on the original site entitlement (2007-2008), amended entitlement (2010), and currently proposed Project. The total 2007-2008 entitlement trip generation potential is determined at 1,369 daily trips (134 during AM peak hour; 145 during PM peak hour). Trip generation for the amended 2010 entitlement totals 1,062 daily trips (98 during AM peak hour; 113 during PM peak hour). The currently proposed Project (including the existing Vivante Phase I development) would generate 1,110 daily trips (59 during AM peak hour; 93 during PM peak hour). Table 1, Projected Traffic Generation Forecast, located in the Updated Traffic Study (Appendix A) demonstrates that the currently proposed Project would generate significantly less traffic (259 fewer overall trips, including 75 fewer AM peak hour trips and 52 fewer PM peak hour trips).

Linscott, Law and Greenspan’s conclusion is stated as follows.

“Given the results of the *Table 1*, we conclude that the proposed Project trips, at full future site occupancy, are expected to be meaningfully less than the forecasts associated with the Original Entitlement (2007-2008). Therefore, the proposed Project is considered to fit comfortably within the trip generation and level of service impact potential of the original project approvals.”

Linscott, Law and Greenspan conducted a “Parking Needs Study” (Reference Appendix B) for the Vivante Phase II Project. The 2010 Vivante Phase I project was approved with a parking ratio of 0.5-0.8 spaces per unit. Phase I build out was constructed at a ratio of 0.71 spaces per unit. The 2010 Vivante project approval anticipated Phase II of the overall Vivante development (then proposed as 42,000 square feet of office uses) and Phase I would share Phase II parking on evenings and weekends. Table 1, Site Development Summary, located in Appendix B, provides a summary of the overall site development living unit count and parking space count for the existing Phase I assisted living facility, the currently requested Phase II Project, and total future parking conditions.

The Parking Needs Study assumes the proposed additional 111 independent and assisted living units would include 15 studio units, 77 one-bedroom units and 19 two-bedroom units and thereby the entire Vivante community would build out to a total 296 units (and a concomitant 335 total beds). Parking proposed with Phase II, combined with existing Phase I parking, would total 258 spaces – an equivalent parking ratio of 0.88 spaces per unit. This represents an increase over the Phase I ratio of 0.72 spaces per unit. The Parking Needs study, based on field observations and comparable projects parking availability, is that the “design” need is 0.67 parking spaces per unit. Table 4, “Design” Parking Needs for

the Vivante Site (Phase I & II), located in Appendix B, provides a summary of overall assisted living parking requirements for a fully occupied existing Vivante community (Phase I), additive needs of the Phase II Project, and the resultant site encompassing needs following full occupancy of the expanded independent and assisted living facility. The greatest anticipated need for parking (Sundays) equates to 0.67 spaces per unit; or, a total 198 parking spaces (exclusive of consideration of potential outside use of the Fitness Center or the Community Event Center).

According to the Parking Needs Study, “with a planned on-site future supply of 260 spaces, a minimum assisted living parking surplus of 62 spaces is indicted.” Furthermore, typical weekday minimum parking surpluses are forecast at 91 spaces. Typical weekend surpluses are forecast at 124 spaces. The forecast surpluses would offset parking needs of outside uses of the Fitness Center and the Community Event Center. (Reference Table 4, “Design” Parking Needs for the Vivante Site (Phase I & II), located in Appendix B) The build out parking supply of 258 spaces translates to a supply ratio of 0.88 spaces per unit, which exceeds that of Vivante Phase I project approval by approximately 24 percent.

Although the Parking Needs Study in part concludes proposed parking more than sufficient to accommodate assisted living facility, Fitness Center and Community Event Center, it is recommended a “Parking Strategy and Management Plan” be prepared to ensure accommodation of outside use of the Fitness Center and Community Event Center. This Plan should be used by the Vivante event coordinator when “...booking of outside groups to assure that the parking needs of the function would reasonably balance with the available on-site spaces, after excluding spaces explicitly assigned to residents, staff, or for other needs such as outside Fitness Center users.” Therefore, the following Mitigation Measure is recommended.

MITIGATION MEASURE

- Prior to issuance of a Certificate of Occupancy, the Applicant shall develop a Parking Strategy and Management Plan and shall submit said Plan to the Director of Development Services for review and approval. The Parking Strategy and Management Plan shall address.

4.16 UTILITIES AND SERVICE SYSTEMS

The Project includes a request to amend Master Plan PA-09-15 to allow elimination of the previously proposed and approved 42,000 square feet of office uses and to replace the office uses with a 111-unit independent and assisted living facility, and 3,900 square foot Community Event Center. The proposed assisted living facility would be housed within a four-story structure and accommodate 92 studio/one-bedroom units and 19 two-bedroom units. The Project also would contain a surface parking lot, one level of underground parking on the easterly portion of the property, and amenities such as a kitchen/restaurant style dining room, café, bar/lounge, library/computer room, activities room, dog park, a 1,700 square foot Fitness Club including a yoga/Pilates/dance studio space, and some ancillary office space for management services.

The Project will not result in potential impacts related to Utilities and Service Systems related to exceeding wastewater treatment requirements of the Regional Water Quality Control Board, requiring new or expanded construction of wastewater treatment facilities or storm water drainage systems, having sufficient water supplies to serve the Project, having sufficient wastewater treatment capacity,

having sufficient solid waste landfill storage, or causing substantial adverse effects on human beings that would adversely affect the environment that are greater in scope or scale than those impacts identified and analyzed for the 42,000 square foot office component in the previous Initial Study/Mitigated Negative Declaration prepared for the Phase I (Westside Lofts) portion of the overall Vivante development. Therefore, the findings of the original Initial Study/Mitigated Negative Declaration for PA-07-20 remain valid and no additional analysis pertaining to Utilities and Service Systems is necessary.

4.17 MANDATORY FINDINGS OF SIGNIFICANCE

The previously-certified document entitled “Draft Initial Study/Mitigated Negative Declaration – Westside Lofts Mixed Use Development Project at 1640 Monrovia Avenue” determined that development of the overall Vivante project (Phases I and II) would not result in any significant impacts that pertain to aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology/soils, hazardous and hazardous materials, hydrology/water quality, land use, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or utilities and service systems.

The original Initial Study/Mitigated Negative Declaration indicated as follows: “The Vivante overall project “...will, however, place an increased demand on public services and utilities/service systems. Short-term air quality impacts will be associated with grading, excavation, demolition and construction activities. The ground water beneath the project is contaminated and will be remediated in accordance with the Remedial Action Plan in coordination with DTSC. In addition, the project will result in land use compatibility impacts from placing residential and commercial uses within a mature industrial area, including impacts related to air quality, odors, noise and health risks.” The originally-certified Mitigated Negative Declaration contained feasible mitigation measures incorporated into the proposed project that would avoid or substantially lessen potentially significant impacts to a less than significant level.

This Addendum to the previously-certified document indicates findings that Project development of Vivante Phase II will not change levels of Impacts as stated in the previously-certified document. The updated traffic and parking analyses indicate the proposed change to the Project entitlement will result in less impacts to traffic generation and on-site parking. Project development will result in GHG impacts that are less than significant and less than the previously approved project.

- a) **Does the project have the potential to degrade the quality of the environment; substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; reduce the number or restrict the range of a rare or endangered plant or animal; or eliminate important examples of the major periods of California history or prehistory?**

No Additional Impact. Vivante Phase II occupies 2.5 acres within an urban area developed with light industrial, commercial and some residential uses. There are no rare, endangered, threatened plant or animal species within the Project site. Project development and implementation will not result in physical deterioration of the environment nor will adversely impact any sensitive biological species, cultural resources, or sensitive resources.

- b) **Does the project have impacts that are individually limited, but cumulatively considerable (“Cumulatively considerable” means that the incremental effects of a project are considerable**

when viewed in connection with the effects of past projects, and the effects of probable future projects)?

No Additional Impact. The Project would have a less than significant impact related to agricultural resources, biological resources, cultural resources, recreation, transportation/traffic and utilities and service systems and no mitigation would be required. Like all southern California property, the Project site would be subject to groundshaking. These impacts are mitigated through compliance with the current Uniform Building Code and recommendations contained in the site specific geology study referenced in the originally-certified Initial Study/Mitigated Negative Declaration. In addition, mitigation measures have been incorporated into the Project (as identified in the originally-certified Initial Study/Mitigated Negative Declaration) for construction-related air quality, hydrology and water quality and noise impacts.

The Project site requires remediation due to soil and ground water contamination. During Vivante Phase I development, the Applicant worked with the Department of Toxic Substances Control to establish a Remedial Action Plan to ensure no significant related impacts would occur. In addition, mitigation measures were incorporated into the previously-certified document to ensure a less than significant impact. Redevelopment of a contaminated Project site is addressed on a case-by-case basis in accordance with federal and State regulations; therefore, no cumulative impacts are anticipated.

The originally-certified Mitigated Negative Declaration contains an analysis of the overall Project's land use compatibility. Redevelopment of a project site within an industrial area with new non-industrial development would result in potential land use compatibility impacts, the scale of which would depend upon the nature of businesses and land uses adjacent to the Vivante project site. Mitigation measures included in the aesthetics, air quality and noise sections of that document were incorporated into the Vivante project to ensure the project would be compatible with surrounding land uses. Potential land use related impacts can be mitigated through specific site design techniques including building orientation, increased setbacks, double paned windows and mechanical ventilation. The City of Costa Mesa required a Master Plan to allow placement of residential land uses within an area designated in the City General Plan as Light Industrial. No cumulative impacts were anticipated because each Master Plan is evaluated on a case-by-case basis.

The overall Vivante project initially was declared to place an increased demand on public services and utilities and service systems. However, development of the property was anticipated and was deemed consistent with the City General Plan. Standard conditions and mitigation measures were incorporated into the original Mitigated Negative Declaration to ensure there would be no significant impacts. Due to the limited increase in Average Daily Trips that would have resulted from the original project, no significant cumulative impacts related to transportation and traffic would occur. The updated traffic and parking analyses indicate the proposed change to the Project entitlement will result in less impacts to traffic generation and on-site parking. Impacts related to air quality, population and housing, and land use were evaluated against a background of local and regional plans and policies, including the South

Coast Air Quality Management District Air Quality Management Plan, City of Costa Mesa General Plan, Mesa West Bluffs Urban Plan, and Southern California Association of Government Regional Housing Needs Assessment. The originally approved Vivante project was found consistent with applicable plans and policies. No significant cumulative impact would result because other projects in the City of Costa Mesa also must demonstrate consistency with said plans.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

No Additional Impact. Project compliance with standard conditions of approval and specified mitigation measures in the originally-certified Mitigated Negative Declaration and Mitigated Negative Declaration Addendum would ensure no significant impacts would occur in any subjects of analyses. Impacts pertaining to air quality, hazards and hazardous materials, geology and soils, or noise that would pose a direct substantial adverse effect to life and health will be mitigated to less than significant levels with installation of mechanical ventilation, double-paned windows, and compliance with the overall Vivante project Remediation Plan and current Uniform Building Code.

With mitigation and compliance with applicable land use plans and policies, Vivante Phase II development will occur in an orderly manner, thereby ensuring adequate provision of public services, sewer and water services, schools and parks. Therefore, Project development and implementation will not result in any significant adverse environmental effects on human beings, either directly or indirectly, with specified mitigation.

5

UPDATED MITIGATION MONITORING PROGRAM

5.1 MITIGATION MONITORING REQUIREMENTS

Public Resources Code Section 21081.6 (enacted by the passage of Assembly Bill 3180) mandates that the following requirements shall apply to all reporting or mitigation monitoring programs:

- The public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval in order to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance during project implementation. For those changes which have been required or incorporated into the project at the request of a responsible agency or a public agency having jurisdiction by law over natural resources affected by the project, that agency shall, if so requested by the lead agency or a responsible agency, prepare and submit a proposed reporting or monitoring program.
- The lead agency shall specify the location and custodian of the documents or other material which constitute the record of proceedings upon which its decision is based.
- A public agency shall provide the measures to mitigate or avoid significant effects on the environment that are fully enforceable through permit conditions, agreements, or other measures. Conditions of project approval may be set forth in referenced documents which address required mitigation measures or in the case of the adoption of a plan, policy, regulation, or other project, by incorporating the mitigation measures into the plan, policy, regulation, or project design.
- Prior to the close of the public review period for a draft environmental impact report (EIR) or mitigated negative declaration (MND), a responsible agency, or a public agency having jurisdiction over natural resources affected by the project, shall either submit to the lead agency complete and detailed performance objectives for mitigation measures which would address the significant effects on the environment identified by the responsible agency or agency having jurisdiction over natural resources affected by the project, or refer the lead agency to appropriate, readily available guidelines or reference documents. Any mitigation measures submitted to a lead agency by a responsible agency or an agency having jurisdiction over natural resources affected by the project shall be limited to measures which mitigate impacts to resources which are subject to the statutory authority of, and definitions applicable to, that agency. Compliance or noncompliance by a responsible agency or agency having jurisdiction over natural resources affected by a project with that requirement shall not limit that authority of the responsible agency or agency having jurisdiction over natural resources affected by a

project, or the authority of the lead agency, to approve, condition, or deny projects as provided by this division or any other provision of law.

5.2 MITIGATION MONITORING PROCEDURES

The mitigation monitoring and reporting program has been prepared in compliance with Public Resources Code Section 21081.6. It describes the requirements and procedures to be followed by the City of Costa Mesa (City) to ensure that all mitigation measures adopted as part of the proposed project will be carried out as described in this MND.

Table 5.1 lists each of the mitigation measures specified in this MND and identifies the party or parties responsible for implementation and monitoring of each measure.

The following Mitigation Monitoring and Reporting Program is intended to supplement the corresponding Program in the “Initial Study/Mitigated Negative Declaration for Westside Lofts – Master Plan (PA-07-20) Vesting Tentative Tract Map 16999.” Like the earlier Program, the following has been prepared in compliance with Public Resources Code requirements to ensure all mitigation measures adopted as part of the Project will be implemented as described in the Initial Study/Mitigated Negative Declaration Addendum.

Table 13 Mitigation Measure Implementation Schedule and Monitoring Checklist					
Mitigation Measures	Monitoring Action	Responsible Implementation Agency	1. Monitoring Phase 2. Enforcement Agency 3. Monitoring Agency	Monitor (Signature Required)	Date of Compliance
1. TRAFFIC					
<i>Mitigation Measures</i>					
<ul style="list-style-type: none"> Prior to issuance of a Certificate of Occupancy, the Applicant shall develop a Parking Strategy and Management Plan and shall submit said Plan to the Director of Development Services for review and approval. The Parking Strategy and Management Plan shall address the “booking of outside groups to assure that the parking needs of the function would reasonably balance with the available on-site spaces, after excluding spaces explicitly assigned to residents, staff, or for other needs such as outside Fitness Center users” 					

and be utilized by the event coordinator at Vivante.					
2. AIR QUALITY					
<i>Mitigation Measures</i>					
<ul style="list-style-type: none"> • Apply soil stabilizers or moisten inactive areas • Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times per day) • Cover all stock piles with tarps at the end of each day or as needed • Provide water spray during loading and unloading of earthen materials • Minimize in-out traffic from construction zone • Cover all trucks hauling dirt, sand, or loos material and require all trucks to maintain at least two feet of freeboard • Sweep streets daily if visible soil material is carried out from the construction site • Utilize well-tuned off-road construction equipment • Establish a preference for contractors sing Tier 3 or better heavy equipment • Enforce 5-minute idling limits for both on-road trucks and off-road equipment 					

6

ORGANIZATIONS & PERSONS CONSULTED

Preparers:

Templeton Planning Group (Consultant to the City of Costa Mesa)

- Peter Templeton, Principal
- Albert Armijo, Environmental Director
- Josh Cortez, Associate Planner

Persons and Organizations Consulted:

City of Costa Mesa (Lead Agency)

- Claire L. Flynn, AICP, Assistant Development Services Director
- Dan Inloes, AICP, Senior Planner

Project Applicant:

Nexus Development

- Rob Eres, Vice President of Development

7

LIST OF REFERENCES

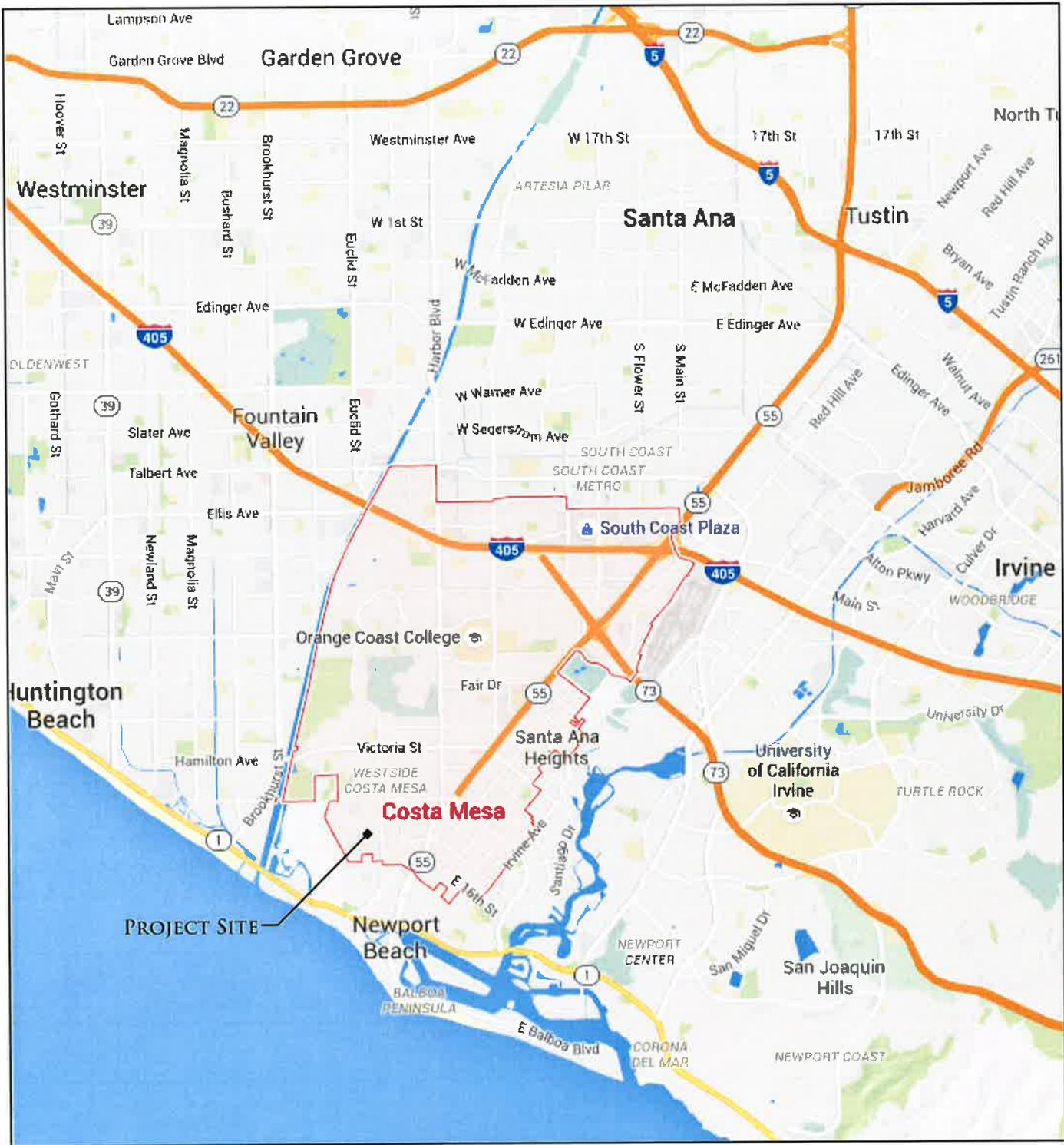
Preparation of this Addendum to the Initial Study/Mitigated Negative Declaration has relied upon information within the original Initial Study/Mitigated Declaration prepared for the Westside Lofts project (Master Plan PA-07-20 and Vesting Tentative Tract Map 16999), dated September 4, 2007. In addition to the administrative record and List of References identified in that document, the following have become part of the amended administrative record for the Project environmental documentation and are available for review at the City of Costa Mesa, 77 Fair Drive, Costa Mesa, CA 92618, (714) 754-5245.

- City of Costa Mesa, 2015-2035 General Plan, (June, 2016)
- City of Costa Mesa, 2015-2035 General Plan Environmental Impact Report, (June, 2016)
- Linscott, Law and Greenspan, Inc., "Trip Generation Assessment for the Vivante North Project, Costa Mesa, California," (June 20, 2016)
- Linscott, Law and Greenspan, Inc., "Parking Needs Study, Vivante Senior Living Community – Phase II ("Vivante North"), Costa Mesa, California," (June 20, 2016)
- Giroux and Associates, "Air Quality and GHG Impact Analyses, Vivante North Project, Costa Mesa, California," (June 29, 2016)

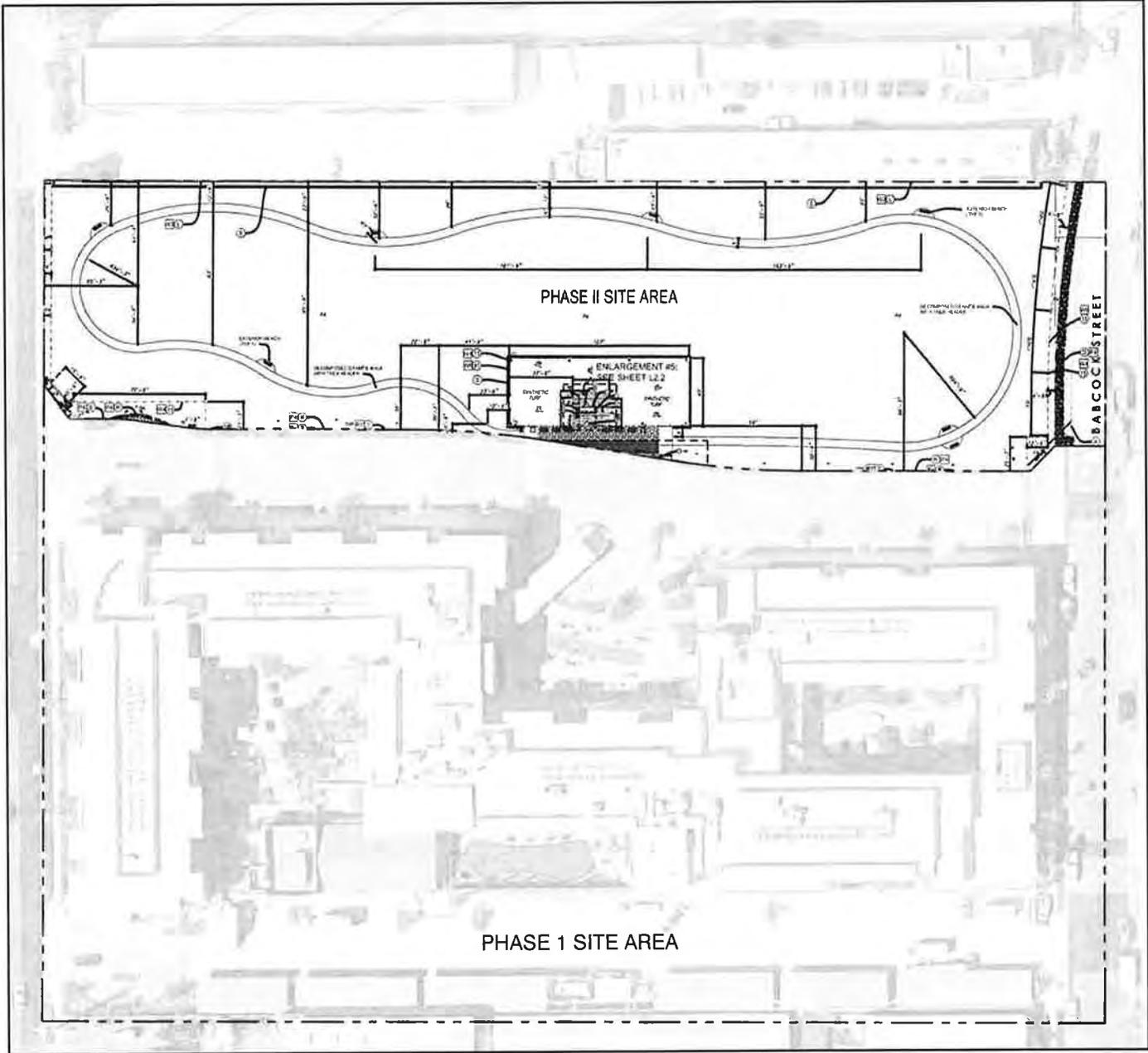
8 EXHIBITS

1. REGIONAL MAP
2. AERIAL VICINITY MAP
3. EXISTING SITE ON AERIAL
4. PROPOSED SITE ON AERIAL
5. PROPOSED SITE PLAN
6. MULTI-PURPOSE ROOM
7. MULTI-PURPOSE ROOM UNDER GROUND PARKING
8. PRELIMINARY PLANTING PLAN
9. BUILDING ENTRY & PAVILION PLAZA
10. ELEVATIONS: NORTH & SOUTH
11. ELEVATIONS: EAST & WEST
12. MULTI-PURPOSE ROOM ELEVATIONS: NORTH & SOUTH

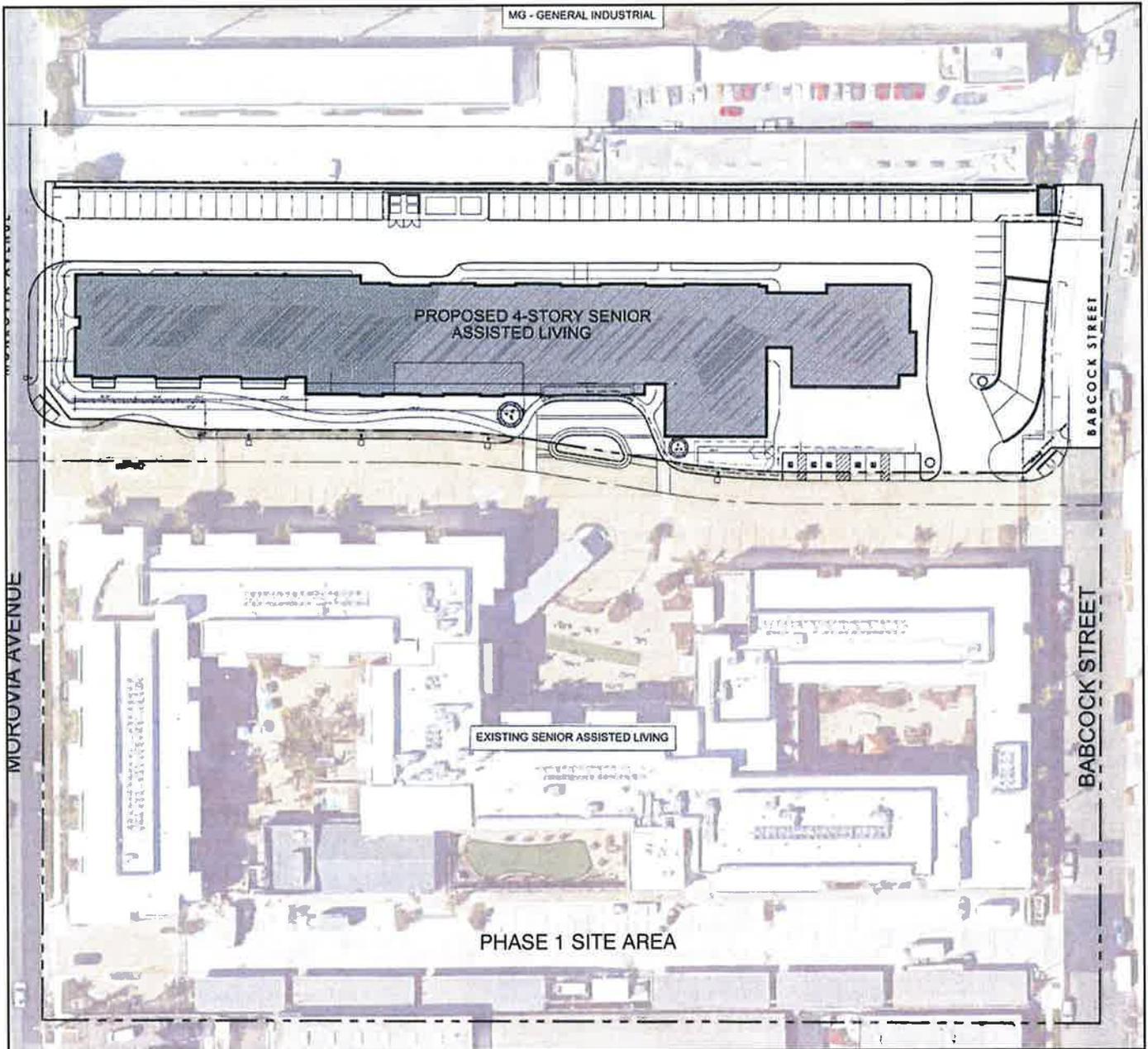
EXH 1
REGIONAL MAP



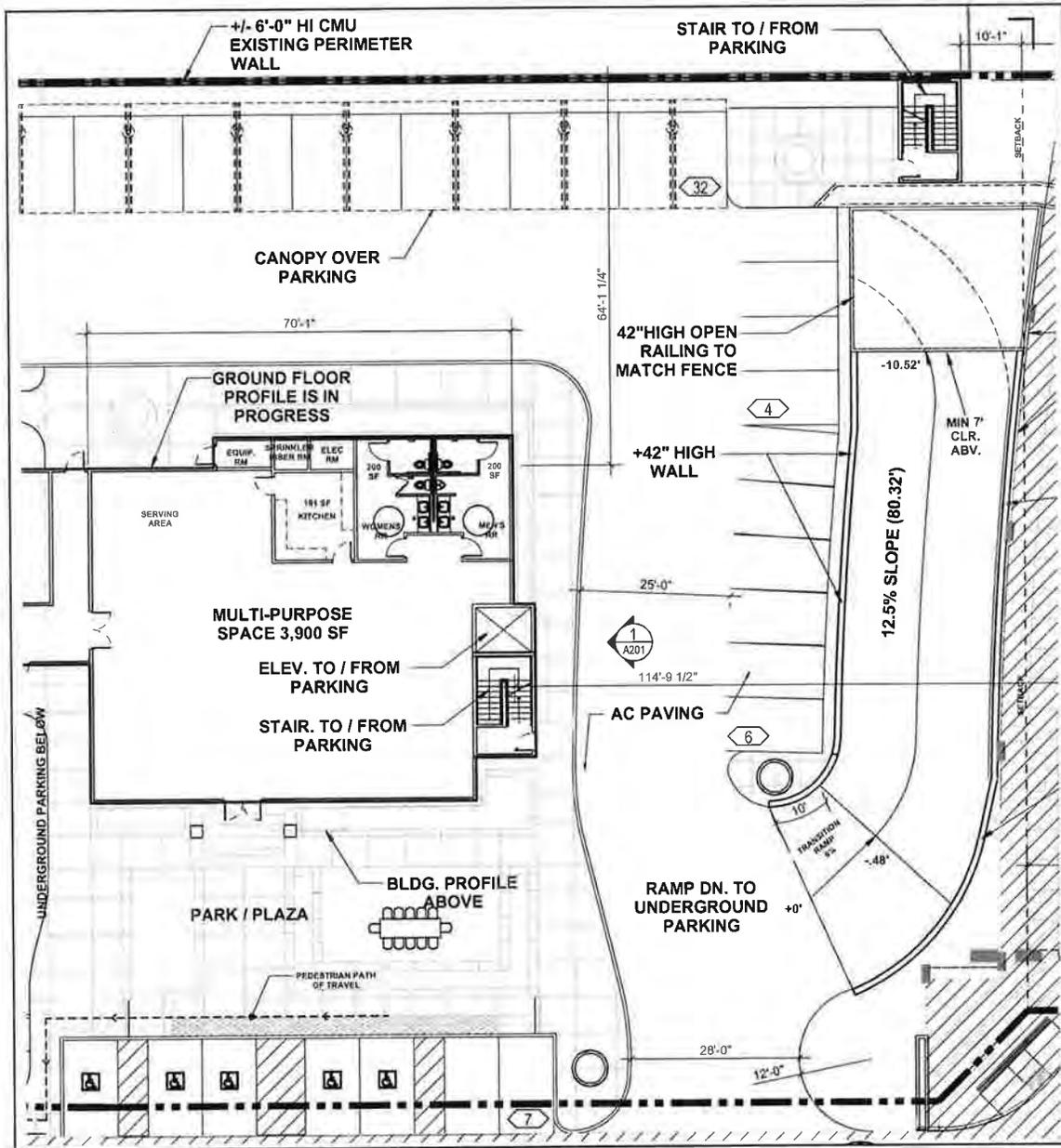
EXISTING SITE ON AERIAL



PROPOSED SITE PLAN ON AERIAL

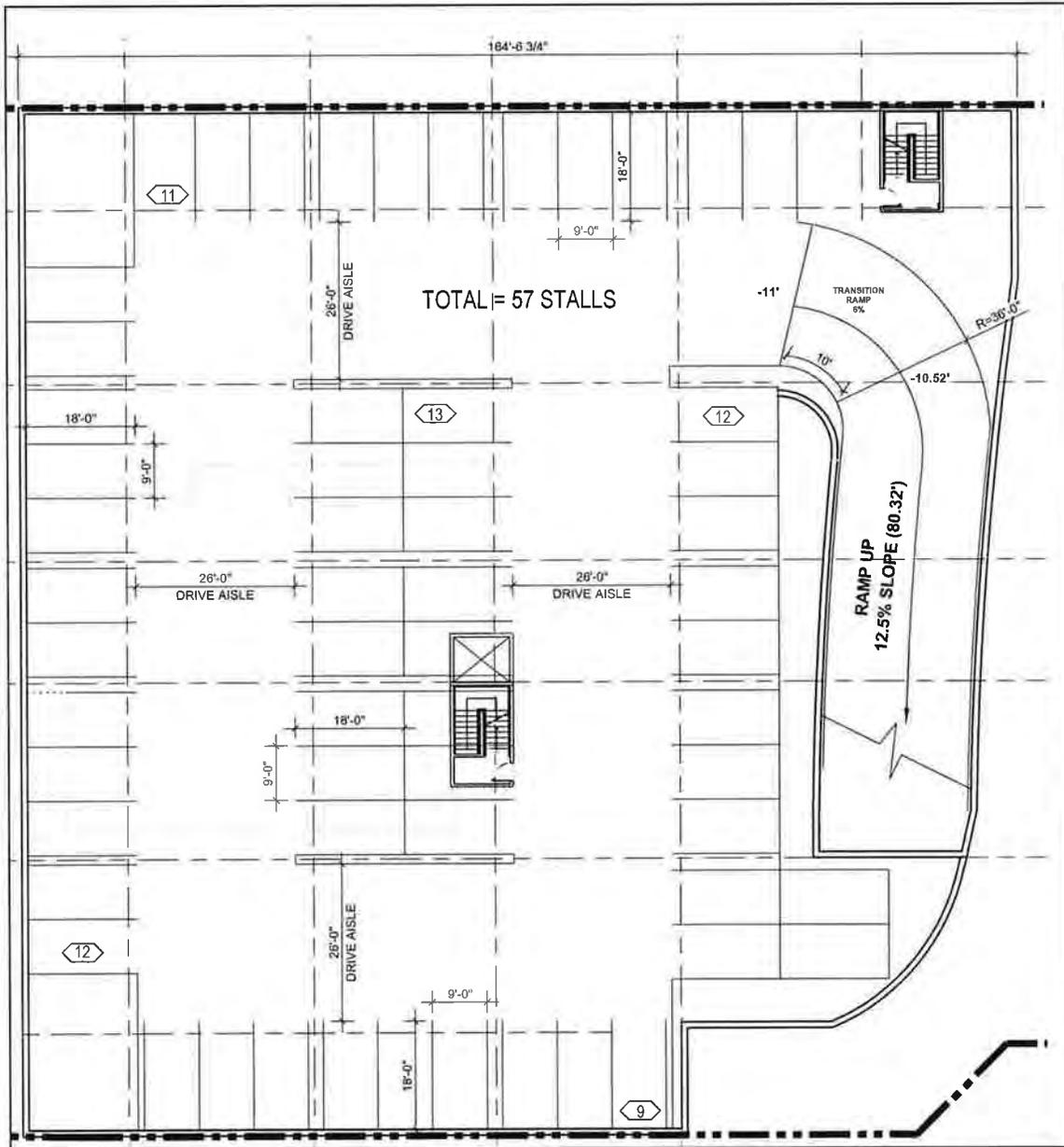


MULTI-PURPOSE ROOM



EXH 7

MULTI-PURPOSE ROOM UNDER GROUND PARKING

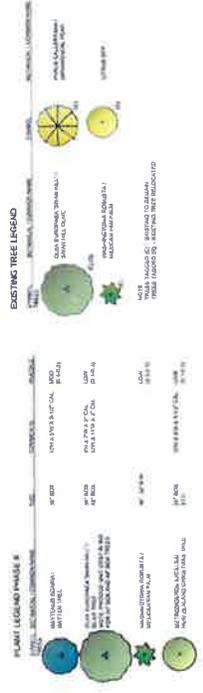


PRELIMINARY PLANTING PLAN

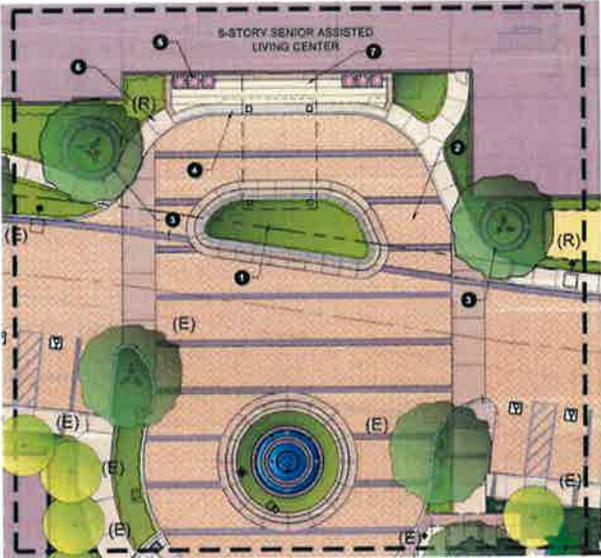


- LEGEND**
- 1 DROP-OFF PLANTER ISLAND WITH CUSTOM CURB TO MATCH EXISTING.
 - 2 PRECAST CONCRETE PAVERS TO MATCH EXISTING.
 - 3 RAISED PLANTERS FOR OLIVE SPECIMEN TREES TO MATCH EXISTING.
 - 4 EXISTING OLIVES TO REMAIN.
 - 5 CONVERT SINGLE LEAF GATE TO SLIDING GATE.
 - 6 PRIVATE PATIOS.
 - 7 SINGLE SLIDING GATE EXIT ONLY.
 - 8 PARKING CANOPY TO MATCH EXISTING.
 - 9 EXISTING VINES TO BE PROTECTED IN PLACE.
 - 10 FAN PALM SKYLINE.
 - 11 PEDESTRIAN ENTRY TO UNDERGROUND PARKING.
 - 12 NEW PERIMETER FENCE WITH PILASTERS TO MATCH EXISTING.
 - 13 VEHICULAR ENTRY TO UNDERGROUND PARKING.
 - 14 PAVILION PLAZA AREA.
 - 15 DOG PARK WITH 4' HIGH ENCLOSURE FENCE.
 - 16 PLANT CONTAINERS AT BUILDING ENTRY.
 - 17 EXISTING WATER FEATURE.
 - 18 PRIVATE PATIO LANDSCAPE SCREEN TO MATCH EXISTING.
 - 19 PLANT CONTAINER ON DECK FOR TREES.

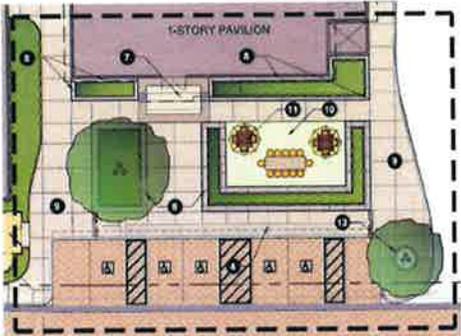
- 10 FAN PALM SKYLINE.
- 11 PEDESTRIAN ENTRY TO UNDERGROUND PARKING.
- 12 NEW PERIMETER FENCE WITH PILASTERS TO MATCH EXISTING.
- 13 VEHICULAR ENTRY TO UNDERGROUND PARKING.
- 14 PAVILION PLAZA AREA.
- 15 DOG PARK WITH 4' HIGH ENCLOSURE FENCE.
- 16 PLANT CONTAINERS AT BUILDING ENTRY.
- 17 EXISTING WATER FEATURE.
- 18 PRIVATE PATIO LANDSCAPE SCREEN TO MATCH EXISTING.
- 19 PLANT CONTAINER ON DECK FOR TREES.



BUILDING ENTRY & PAVILION PLAZA



BUILDING ENTRY ENLARGEMENT



PAVILION PLAZA

LEGEND

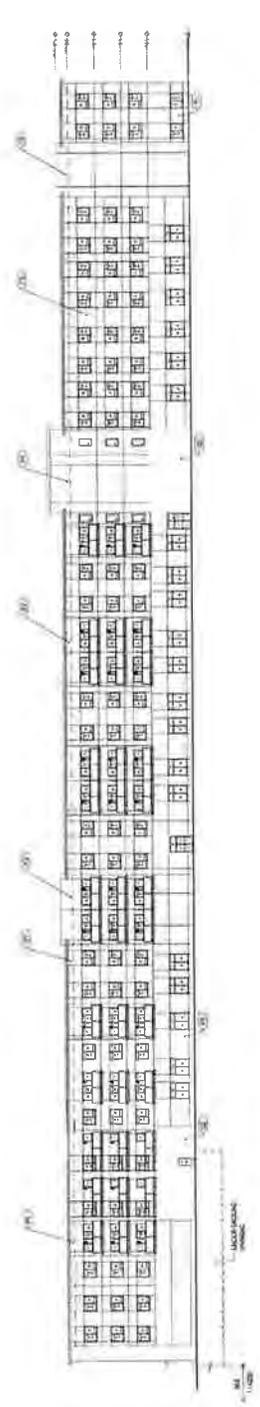
- 1 DROP-OFF PLANTER ISLAND WITH CUSTOM CURB TO MATCH EXISTING.
- 2 PRECAST CONCRETE PAVERS TO MATCH EXISTING.
- 3 RAISED CONCRETE PLANTERS FOR OLIVE SPECIMEN TREES TO MATCH EXISTING.
- 4 TRUNCATED DOME PAVERS.
- 5 PLANT CONTAINERS AT BUILDING ENTRY
- 6 CONCRETE SIDE WALK
- 7 INTEGRAL COLOR CONCRETE PAVING AT BUILDING ENTRY
- 8 RAISED P.I.P. CONCRETE PLANTER
- 9 NATURAL GRAY COLOR CONCRETE PAVING WITH SAW CUT JOINTS.
- 10 SYNTHETIC TURF SURFACING.
- 11 SITE FURNISHINGS: TABLES, CHAIRS, UMBRELLAS AND DINING TABLES.
- 12 PLANT CONTAINER ON DECK FOR TREES.

PLANT LEGEND PHASE II

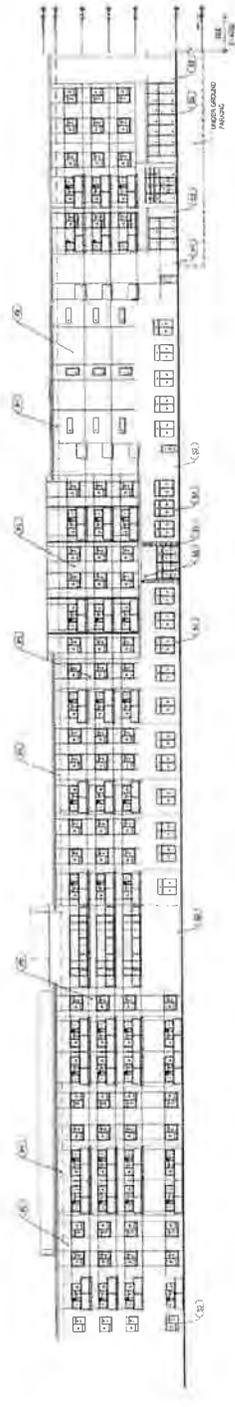
SYMBOL	PLANT/SPERMAL/COMMON NAME	SIZE	COMMENTS	QUANTITY
	WEST PALM BEACH PALM BUTYRACEA	10' 0" DBH	100% 100% 100% 100%	100
	OLIVE SPECIMEN TREE OLIVE	10' 0" DBH	100% 100% 100% 100%	100
	ADDRESS SIGN, METAL ADDRESS SIGN	10' 0" DBH	100% 100% 100% 100%	100
	10' 0" DBH 10' 0" DBH	10' 0" DBH	100% 100% 100% 100%	100



ELEVATIONS NORTH & SOUTH



① North Elevation



② South Elevation

NORTH AND SOUTH ELEVATIONS

Legend Notes

1	Window
2	Door
3	Panel
4	Decorative Element
5	Architectural Detail
6	Material
7	Finish
8	Color
9	Texture
10	Lighting
11	Planting
12	Site Furnishings
13	Other
14	Notes



EXH 11
ELEVATIONS
 EAST & WEST



② West Elevation

Legend Notes

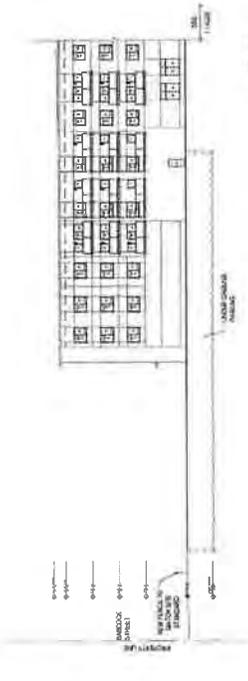
1	INDUSTRIAL AIR
2	OPENING
3	DOOR
4	WALKWAY
5	REAR PORCH
6	REAR PATIO
7	REAR WALKWAY
8	INDUSTRIAL AIR
9	OPENING
10	DOOR
11	WALKWAY
12	REAR PORCH
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14	REAR WALKWAY
15	INDUSTRIAL AIR
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209	REAR PATIO
210	REAR WALKWAY
211	INDUSTRIAL AIR
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213	DOOR
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MULTI-PURPOSE ROOM ELEVATIONS NORTH & SOUTH



② Multi-purpose Room South Elevation

MULTI-PURPOSE ROOM ELEVATIONS



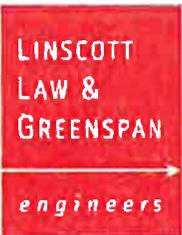
① Multi-purpose Room North Elevation

9

APPENDICES

- A. UPDATED TRAFFIC STUDY
- B. UPDATED PARKING STUDY
- C. UPDATED AIR QUALITY/GREENHOUSE GAS STUDY

A. UPDATED TRAFFIC STUDY



June 20, 2016

Mr. Rob Eres
Nexus Development Corporation
1 MacArthur Place, Suite 300
Santa Ana, CA 92707

LLG Reference: 2.16.3713.2

Subject: **Trip Generation Assessment for the Vivante North Project**
Costa Mesa, California

Dear Mr. Eres:

As requested, Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Trip Generation Assessment in conjunction with the proposed Phase II (also known as Vivante North) of the Vivante senior living community in the City of Costa Mesa, California. The Phase II site is located generally south of 17th Street between and adjoining Monrovia Avenue on the west and Babcock Street on the east. It is addressed at 1650 Monrovia Avenue. This Phase II site is immediately north of the already-constructed 185-unit Vivante community.

This letter addresses the expected variation in the site's traffic generation potential from its original entitlement in 2007-2008, through its modified entitlement in 2010 (that constructed the existing senior living community as a Phase I Project), to your current proposal for the Phase II Project.

Master Plan PA-07-20 (Westside Lofts Mixed Use Development) was approved by the Planning Commission on November 13, 2007. That approval allowed 151 condominium units, 5 custom live/work units, and 42,000 SF of commercial office space. PC Resolution PC-07-79 required all of the residential units and live/work units to be offered as "for sale" units. Zoning Application ZA-08-17 modified that condition to allow the 151 condominium units to be initially offered as rentals, as opposed to "for-sale" units.¹ In combination, these 2007-2008 actions defined the development description used in this study to calculate a trip generation baseline for the overall Vivante (Phase I + Phase II) site.

Master Plan Amendment PA-09-15 replaced the previously entitled, yet unbuilt condominium and live/work components with a 185-unit (equivalent to 225 beds based on the mix of unit types) Assisted Living facility, and maintained the 42,000

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¹ Source: City of Costa Mesa Planning Commission Agenda Report dated June 10, 2008 for meeting of June 23, 2008.

SF of commercial office space.² Only the 185-unit (225-bed) Assisted Living facility has been constructed and occupied as a Phase I of the overall Vivante site. The office portion of the 2007-2008 site plan remains vacant.

The current Project proposal would eliminate the office component of the approved plan and replace it with a mixed-use project consisting of 111-unit Assisted Living facility that also includes a Club Fitness Center and a Community Event Center. The 111 units include a mix of 92 studios or one-bedroom units and 19 two-bedroom units, for a total of 130 proposed beds. The distinction between “units” versus “beds” is important because the trip generation basis for Assisted Living uses “per bed” traffic generation rates. The proposed Assisted Living facility also includes 3,900 SF of multipurpose Community Event Center and 940 SF of Fitness Center space. These spaces are primarily intended for resident use, but will also be available for use by outside groups. Given that possibility, our assessment considers the trip generation potential as well.

Briefly, we conclude:

- The 2007-2008 project description as approved by Planning Commission Actions is estimated to generate 1,369 daily trips, 134 AM peak hour trips, and 145 PM peak hour trips.
- Compared to this baseline forecast, the completed Project as now proposed would generate 259 fewer daily trips, with 75 fewer AM peak hour trips, and 52 fewer PM peak hour trips.
- Compared to the trip generation of the Amended Entitlement (2010) Project description, the Project as now proposed would generate 48 additional daily trips, 39 fewer AM peak hour trips, and 20 fewer PM peak hour trips.
- Echoing the staff report justification for PA-09-15, the overall Project as now proposed will produce fewer peak hour trips than both the 2007-2008 approval and 2010 amended project description. As City staff previously concluded in conjunction with PA-09-15, the proposed Project revision can be expected to maintain acceptable levels of service at major intersections.

PROJECT LOCATION

The Vivante North (Phase II) site is located generally south of 17th Street between and adjoining Monrovia Avenue on the west and Babcock Street on the east. It is

² Source: City of Costa Mesa Planning Commission Agenda Report dated January 25, 2010 for meeting date of February 8, 2010.

addressed at 1650 Monrovia Avenue. The existing Vivante (Phase I) community lies immediately to the south of the proposed expansion site, between Monrovia and Babcock, and is addressed at 1640 Monrovia Avenue. *Figure 1*, located at the rear of this letter report, presents a Vicinity Map, which illustrates the general location of the project and the surrounding street system. *Figure 2* is an existing aerial photograph of the Project site, which illustrates the location of the proposed Vivante North (Phase II) site with respect to the existing Vivante (Phase I) senior living community.

PROJECT DESCRIPTION

Key Project details input to this trip generation assessment are described below.

Original Entitlement (2007-2008)

The original 2007-2008 entitlement³ had a proposed development of 151 condominium units, 5 live/work units, and 42,000 SF of commercial office space.

Amended Entitlement (2010)

A change in the entitlement⁴ occurred in 2010. The amendment eliminated the condominium and live/work components, and replaced them with 185 units of Assisted Living. The amendment did not affect the entitlement for the 42,000 SF of commercial office space. Review of the Assisted Living unit mix indicates 145 studio or one-bedroom units, plus 40 two-bedroom units, for a total of 225 beds. It is important to note that Phase I has been completed and consists of only the 185-unit (225-bed) Assisted Living facility.

Current Proposal

The Proposed Project (Vivante North) would complete the development of the overall Vivante site. This Phase II component replaces the previously entitled 42,000 SF of office space with a mixed-use project consisting of 111-unit (130-bed) Assisted Living facility that also includes a Fitness Center and a Community Center. The unit mix includes 92 studio or one-bedroom, and 19 two-bedroom units. In addition, the Project includes a 3,900 SF multipurpose Community Event Center and a 940 SF Club Fitness Center. Because these spaces may be used by outside groups, this analysis assumes that outside use to be similar to that of a community center and health/fitness club. *Figure 3* presents the proposed site plan.

³ Source: City of Costa Mesa Planning Commission Agenda Report dated June 10, 2008 for meeting of June 23, 2008.

⁴ Source: City of Costa Mesa Planning Commission Agenda Report dated January 25, 2010 for meeting date of February 8, 2010.

PROJECT TRAFFIC GENERATION FORECAST

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are found in the 9th Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 2012].

LLG was not able to obtain and review the Project trip generation forecasts within the traffic study prepared for the 2007-2008 project approvals. Instead, *Table 1* has been prepared to illustrate the trip generation potential and incremental traffic generation variations between the Vivante Project descriptions discussed above.

The upper portion of *Table 1* summarizes the trip generation rates used in documenting the existing full-occupancy trip generating potential of the site, and as a basis of forecasting the future Project-related condition. The rest of the table provides a summary of the site's daily, AM and PM peak hour trip generation characteristics for the Vivante South and North developments based on the Original Entitlement (2007-2008), Amended Entitlement (2010), and Proposed Project conditions.

Subsection A of *Table 1* summarizes the trip generation potential for the Original Entitlement (2007-2008). The trip generation potential totals 1,369 daily trips, with 134 trips (69 inbound, 65 outbound) during the AM peak hour, and 145 trips (66 inbound, 79 outbound) during the PM peak hour.

Subsection B of *Table 1* summarizes the trip generation potential for the Amended Entitlement (2010). The trip generation potential totals 1,062 daily trips, with 98 trips (79 inbound, 19 outbound) during the AM peak hour, and 113 trips (33 inbound, 80 outbound) during the PM peak hour.

Subsection C of *Table 1* summarizes the trip generation potential for the proposed Project and also includes Vivante South as already completed and occupied. The trip generation potential totals 1,110 daily trips, with 59 trips (39 inbound, 20 outbound) during the AM peak hour, and 93 trips (42 inbound, 51 outbound) during the PM peak hour.

Proposed Project Vs Original Entitlement (2008)

A comparison between the trip generation potential for the Original Entitlement (2007-2008) in Subsection A versus the Proposed Project (Subsection C) indicates that the proposed Project would generate significantly less traffic. This includes 259



fewer daily trips, with 75 fewer AM peak hour trips, and 52 fewer PM peak hour trips.

Proposed Project Vs Amended Entitlement (2010)

A comparison between the trip generation potential for the Amended Entitlement (2010) in Subsection B versus the Proposed Project (Subsection C) indicates that the proposed Project would generate 48 additional daily trips, 39 fewer AM peak hour trips, and 20 fewer PM peak hour trips. The slight increase in daily traffic is concluded to be insignificant due to the fact that the proposed Project is expected to yield fewer AM peak hour and PM peak hour trips. The current proposal would result in 259 fewer daily trips than the 2007-2008 Original Entitlement. In addition, the trip generation for the proposed Project (Vivante North) includes a multipurpose Community Event Center and a Club Fitness Center space. However, as a conservative assessment, this letter assumes that the Community Event Center and the Club Fitness Center will function similar to a community center and health/fitness club, respectively when made available to outside groups.

CONCLUSION

Given the results of the *Table 1*, we conclude that the proposed Project trips, at full future site occupancy, are expected to be meaningfully less than the forecasts associated with the Original Entitlement (2007-2008). Therefore, the proposed Project is considered to fit comfortably within the trip generation and level of service impact potential of the original project approvals.

* * * * *

We appreciate the opportunity to prepare this investigation. Should you have any questions regarding this analysis, please call us at (949) 825-6175.

Sincerely,

Linscott, Law & Greenspan, Engineers

A handwritten signature in blue ink, appearing to read "Paul W. Wilkinson", is written over a faint, light blue rectangular stamp.

Paul W. Wilkinson, P.E.
Principal

Cc: Shane S. Green, P.E., LLG

Attachments

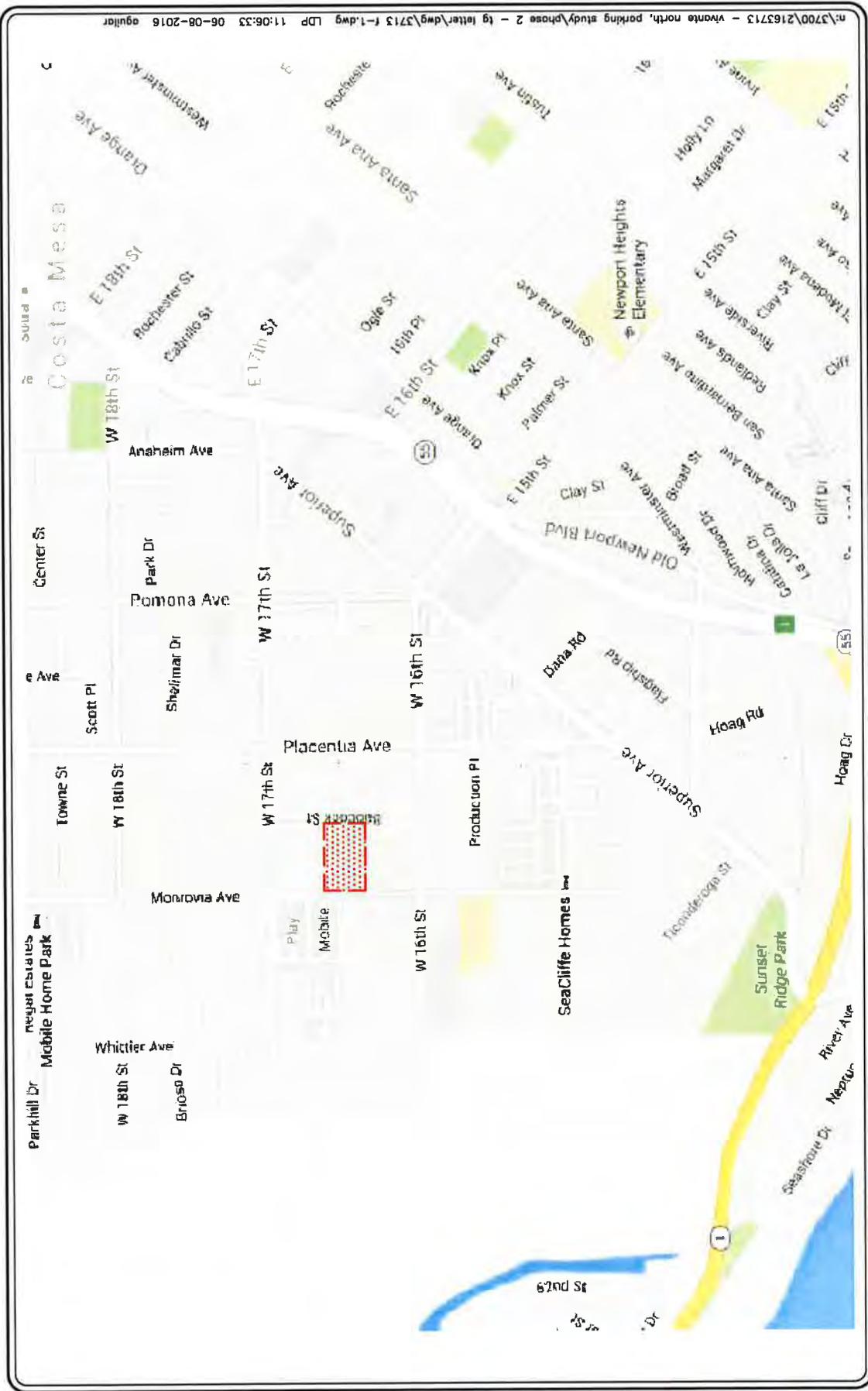
**TABLE 1
PROJECT TRAFFIC GENERATION FORECAST⁵**

ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Rates:							
▪ 230: Residential Condominium/Townhouse (TE/DU)	5.81	17%	83%	0.44	67%	33%	0.52
▪ 254: Assisted Living (TE/Bed)	2.66	65%	35%	0.14	44%	56%	0.22
▪ 492: Health/Fitness Club (TE/1,000 SF)	35.30 ⁶	50%	50%	1.41	57%	43%	3.53
▪ 495: Recreational Community Center (TE/1,000 SF)	33.82	66%	34%	2.05	49%	51%	2.74
▪ 710: General Office (TE/1,000 SF)	11.03	88%	12%	1.56	17%	83%	1.49
<u>A. Original Entitlement (2007-2008):</u>							
<u>Vivante South:</u>							
▪ Residential Condominiums (151 DU)	877	11	55	66	53	26	79
▪ Live/Work ⁷ (5 DU)	29	0	2	2	2	1	3
<u>Vivante North:</u>							
▪ Commercial Office (42,000 SF)	463	58	8	66	11	52	63
A: Subtotal	1,369	69	65	134	66	79	145
<u>B. Amended Entitlement (2010):</u>							
<u>Vivante South:</u>							
▪ Assisted Living (185 Units = 225 Beds)	599	21	11	32	22	28	50
<u>Vivante North:</u>							
▪ Commercial Office (42,000 SF)	463	58	8	66	11	52	63
B: Subtotal	1,062	79	19	98	33	80	113
<u>C. Proposed Project:</u>							
<u>Vivante South:</u>							
▪ Existing Assisted Living (185 Units = 225 Beds)	599	21	11	32	22	28	50
<u>Vivante North:</u>							
▪ Assisted Living (111 Units = 130 Beds)	346	12	6	18	13	16	29
▪ Community Event Center (3,900 SF)	132	5	3	8	5	6	11
▪ Fitness Center (940 SF)	33	1	0	1	2	1	3
C: Subtotal	1,110	39	20	59	42	51	93
Proposed Project Vs Original Entitlement (2007-2008) (C - A)	-259	-30	-45	-75	-24	-28	-52
Proposed Project Vs Amended Entitlement (2010) (C - B)	48	-40	1	-39	9	-29	-20

⁵ Source: *Trip Generation, 9th Edition*, Institute of Transportation Engineers, (ITE) (Washington, D.C. (2012)).

⁶ Daily factors are not available, therefore, the daily trip rate has been assumed to be 10 times the PM rate.

⁷ As a conservative assessment the live/work component of the Project has been assumed to fall under ITE 230: Residential Condominium/Townhome. No trips have been attributed to the "work" component of the units.



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FIGURE 1

VICINITY MAP
VIVANTE NORTH PARKING STUDY, NEWPORT BEACH

SOURCE: GOOGLE

KEY

 = VIVANTE NORTH & SOUTH SITE

LINSCOTT
LAW &
GREENSPAN
engineers

NO SCALE



B. UPDATED PARKING STUDY

June 20, 2016

Mr. Rob Eres
Vice President of Development
Nexus Development Corporation
1 MacArthur Place, Suite 300
Santa Ana, CA 92707

LLG Reference: 2.16.3713.1

Subject: **Parking Needs Study**
Vivante Senior Living Community- Phase II (“Vivante North”)
Costa Mesa, California

Dear Mr. Eres:

As requested, Linscott, Law & Greenspan, Engineers (LLG) is pleased to submit this Parking Needs Study for the proposed Phase II (also known as “Vivante North”) of the Vivante senior living community in the City of Costa Mesa, California. The Phase II site is located generally south of 17th Street between and adjoining Monrovia Avenue on the west and Babcock Street on the east. It is addressed at 1650 Monrovia Avenue.

This Phase II site is immediately north of the already-constructed 185-unit Vivante senior living community, which is addressed as 1640 Monrovia Avenue. For convenience, the existing developed portion of the site is referred as “Vivante South” in this study. It is currently developed with 185 senior living units, and the planned “Vivante North” expansion would add 111 living units, resulting in a community total of 296 units, plus a Community Event Center.

The inputs, basis, field study results and related analyses of our study are discussed below. Briefly, with a future site parking supply totaling 260 spaces, and a “design” level peak residential community demand of 198 spaces, it can be concluded that the overall Vivante parking provisions will comfortably accommodate the parking needs of the fully developed senior living community. Functional parking surpluses of 62 spaces or more could also be used to support the use by outside groups of the

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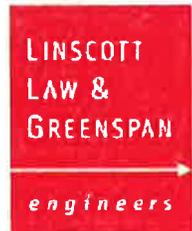
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Community Event Center and/or Fitness Center within the Phase II community. A summary of our conclusions and findings begins on page 8 of this letter report.

PROJECT CONTEXT AND EXISTING SITE DEVELOPMENT

“Vivante South” is an existing senior living facility located at 1640 Monrovia Avenue in the City of Costa Mesa. It currently provides a total of 185 senior units to include a mix of assisted living and memory care living units. Based on its mix of studio, one bedroom and two bedroom units, this 185-unit total translates to the equivalent of 225 bedrooms (where studio units are counted as having one bedroom), or simply, 225 beds. The project site plan was approved with a parking supply of 133 spaces, which is equivalent to 0.72 spaces per unit.

The existing Vivante community was approved as part of Master Plan Amendment PA-09-15. As noted in the related Planning Commission Agenda Report (dated January 25, 2010) for the meeting date of February 8, 2010, the city’s Zoning Code does not specify a required parking ratio for assisted living units. The agenda report cited a sampling of required parking ratios in surrounding cities. It concluded an industry standard within a range of 0.5 to 0.8 spaces per unit (note that the calculation basis is units, and not beds). City staff noted further that these ratios reflect on-site supportive services such as convalescent dining, medical facilities, and administrative functions. While characterized as an “assisted living” facility, LLG’s experience on this and other similar facilities indicates that some residents remain “active” enough to keep a vehicle on-site, and that this component of resident parking demand is accounted for by parking factors near the top of this staff-indicated range of parking ratios.

The site master plan approvals in 2010 anticipated a second phase of development that would construct 42,000 SF of office space on what is now the proposed Phase II (“Vivante North”) site. The PA-09-15 agenda report identified a parking operational strategy where the senior living community would share that office parking on evenings and weekends. As will be illustrated by field study results discussed later in this study, actual “design level” parking needs of the existing community, at full unit occupancy, do balance with the existing Phase I parking supply (inventoried at 132 spaces, or equivalent to 0.71 spaces per unit), such that the need for this shared parking arrangement is not necessary.

The attached *Table 1* summarizes the overall site development living unit count and parking space count for existing, added Phase II expansion, and total future

conditions. The attached *Figure 1* locates the overall Vivante site. *Figure 2* presents an aerial photograph that illustrates existing site development as well as the Vivante North expansion site. *Figure 3* presents the Vivante North site plan.

EXPANSION PROJECT DESCRIPTION

The proposed Vivante expansion would add a total of 111 living units (providing 130 beds) within the Phase II portion of the overall site. Those added units would be made up by 15 studio units, 77 one-bedroom units, and 19 two-bedroom units. The Project expansion would grow the community to a total of 296 units. This unit count translates to a future total of 335 beds. This information is also presented in the attached *Table 1*.

The Phase II Plan includes 3,900 SF of Community Event Center and 940 SF of Fitness Center Space. While these spaces are primarily intended for resident use, they will also be available for use by outside groups. Given that possibility, our assessment also considers the parking implications of the use of the Community Event Center and Fitness Center facilities by outside groups.

The Phase II Project also proposes to construct 69 spaces in a surface lot, plus 59 spaces in an underground parking level, for an added supply of 128 spaces. Given the proposed addition of 111 units, this Phase II-specific parking supply addition translates to an equivalent ratio of 1.15 spaces per unit for Phase II alone, which is considerably greater than the supply ratio in Phase I (0.72 as approved, 0.71 actual existing). *Figure 3* illustrates the surface level plan for this parking, and further illustrates the ramp that will access the underground parking level.

In combination, the Project adjustments described above would increase the overall site parking supply to a total of 260 spaces. This translates to an equivalent ratio of just under 0.88 spaces per unit (0.878 when calculated to the third decimal place), which is considerably greater than the approved supply ratio in Phase I of 0.72 spaces per unit.

PARKING FIELD STUDY OF EXISTING "VIVANTE SOUTH"

As summarized in the preceding section, the original Master Plan approvals for the community now known as Vivante recognized that the city's own Zoning Code did not stipulate a required parking ratio for senior living facilities. Instead, staff review

“floated” to an estimated 100% percent unit occupancy condition, as will be discussed in the next section.

PARKING NEEDS “DESIGN” RATIOS

Vivante Field-Studied Ratios

Table 3 presents the derivation of “design” parking ratios for the Vivante site. Column (1) identifies the survey day/date and identifies the overall characteristic of that day (holiday, typical weekday, or typical Sunday). Column (2) indicates either a midday or evening (8 PM) survey round. Column (3) identifies the peak observed parking demand. Column (4) adjusts this demand value to a full unit occupancy level as footnoted in the table. Column (5) adds a 10% contingency factor to calculate an estimated full occupancy demand, and then divides by 185 units to present the “design” ratio for each characteristic. The bold face value in column (5) identifies the greatest ratio derived for the site. This is also the governing parking ratio for evaluating Vivante peak parking needs. This governing bold face value corresponds to the minimum recommended parking supply ratio at Vivante.

Those LLG field studies at “Vivante South” yielded compelling data for use in evaluating the proposed Project addition to the existing site setting, as follows:

- A Mother’s Day Sunday peak “design” ratio of 0.67 spaces per unit. This and all of the “design” ratios discussed in this section are based on actual field-studied parking demand, expanded to full unit occupancy, and further expanded to include a 10% contingency factor. This is a “blended” ratio for all unit types now on the property, and is concluded to be applicable to the total unit count with the Phase II expansion in place. It is worth noting that this midday peak ratio coincided with a Mother’s Day brunch sponsored by Vivante.
- A weekday “design ratio” of 0.57 spaces per unit.
- A typical Sunday peak design ratio of 0.46 spaces per unit.

With the Mother’s Day characteristic translating to the greatest design value, provision of future site parking at the 0.67 spaces per living unit ratio (or more) would assure a parking balance on a day with similar characteristic, and result in an expected parking surplus for other weekday as well as typical Sunday characteristics. As summarized in the project description section of this report, the proposed Phase II

project at Vivante would increase the overall site parking supply to a total of 260 spaces. This translates to an equivalent ratio of just under 0.88 spaces per unit (0.878 when calculated to the third decimal place). That future supply ratio is considerably greater than the approved supply ratio in Phase I of 0.72 spaces per unit, and also exceeds the governing Mother's Day "design" ratio specific to Vivante of 0.67 spaces per unit.

Benchmark Prior Field Study of Emerald Court (Anaheim)

Referring again to *Table 3*, column (6) adds "design" ratios compiled through extensive (and recurring) field study of a similar senior living facility in Anaheim known as Emerald Court. The methodologies used in both the Vivante and Emerald Court studies were very similar, and thus the Emerald Court values have been added to the table as a reference study to benchmark the Vivante results.

In brief, Emerald Court was a long-established senior community at the time of its field studies. It included 194 independent living units and had many facility/programming elements in common with Vivante, including a central dining facility. Its expansion plans were to add 58 assisted living units, resulting in a community of 252 units. Its Mother's Day peak demand "design" ratio of 0.71 spaces per unit is very similar to that derived for Vivante, and exactly matches the current provision in the Phase I portion of Vivante. Emerald Court ratios for the typical weekday and Sunday were somewhat greater than derived for Vivante, but with the peak Mother's Day ratio governing the provision of Vivante parking supply, the lesser typical weekday and Sunday ratios are less meaningful.

PARKING ANALYSIS

Using the site-specific parking ratios derived above, *Table 4* summarizes the overall assisted living parking requirements for a fully occupied existing Vivante community, the additive needs of the proposed expansion, and the resultant site-wide needs following full occupancy of the expanded facility. As shown, direct application of the peak Sunday "design" ratio of 0.67 spaces per unit results in a total future parking requirement of 198 parking spaces (before consideration of the potential outside use of the Community Event Center or the Fitness Center). With a planned on-site future supply of 260 spaces, a minimum assisted living parking surplus of 62 spaces is indicated. The table further indicates that typical weekday and typical weekend day minimum parking surpluses are forecast at 91 spaces, and 124 spaces, respectively.

These surpluses would offset the parking needs of outside users of the Community Event Center and/or Fitness Center.

LLG's recommended "design" ratio of 0.67 spaces per unit is exceeded by:

- the 0.72 spaces per unit supply ratio approved for Vivante in 2010,
- the existing field-studied on-site supply ratio of 0.71 spaces per unit, and
- a future Phase I + II supply ratio of 0.88 spaces per unit (260 total spaces divided by 296 total units).

With a future site parking supply totaling 260 spaces, it can be concluded that the overall Vivante parking surpluses indicated in *Table 4* will comfortably accommodate the parking needs of a fully developed senior living community. Those surpluses can also be used to support the use by outside groups of the Community Event Center and Fitness Center within the Phase II community. As noted in the table, surpluses are relatively large, and their minimums range from roughly 60, to 90, to 120 spaces.

Working backwards from the smallest surplus, a 60-space (rounded) surplus is roughly the size of the underground parking level in the Phase II expansion area. Its conversion to Community Event Center and/or Fitness Center attendance (by outside groups) possibilities is dependent on the extent of the outside group utilization and average auto occupancy among each group.

Looking to the Community Event Center alone, average occupancy can vary based on function type, and as an illustration of the possibilities, can be framed as follows:

- Business meetings and similar functions where guests typically drive alone; 60 visitors based on 1 person/car.
- Business and social functions such as service clubs, seminars, company events, luncheons, daytime community events, etc. where visitors may travel together, but not to a significant extent: 90 visitors based on an average of 1.5 persons/car.
- Social, special event, entertainment and similar functions where guests commonly arrive as couples or in pairs: 120 visitors based on an average of 2 persons/car.
- Social, wedding, and family event where guests arrive in larger groups: 180 visitors based on an average of 3 persons/car.

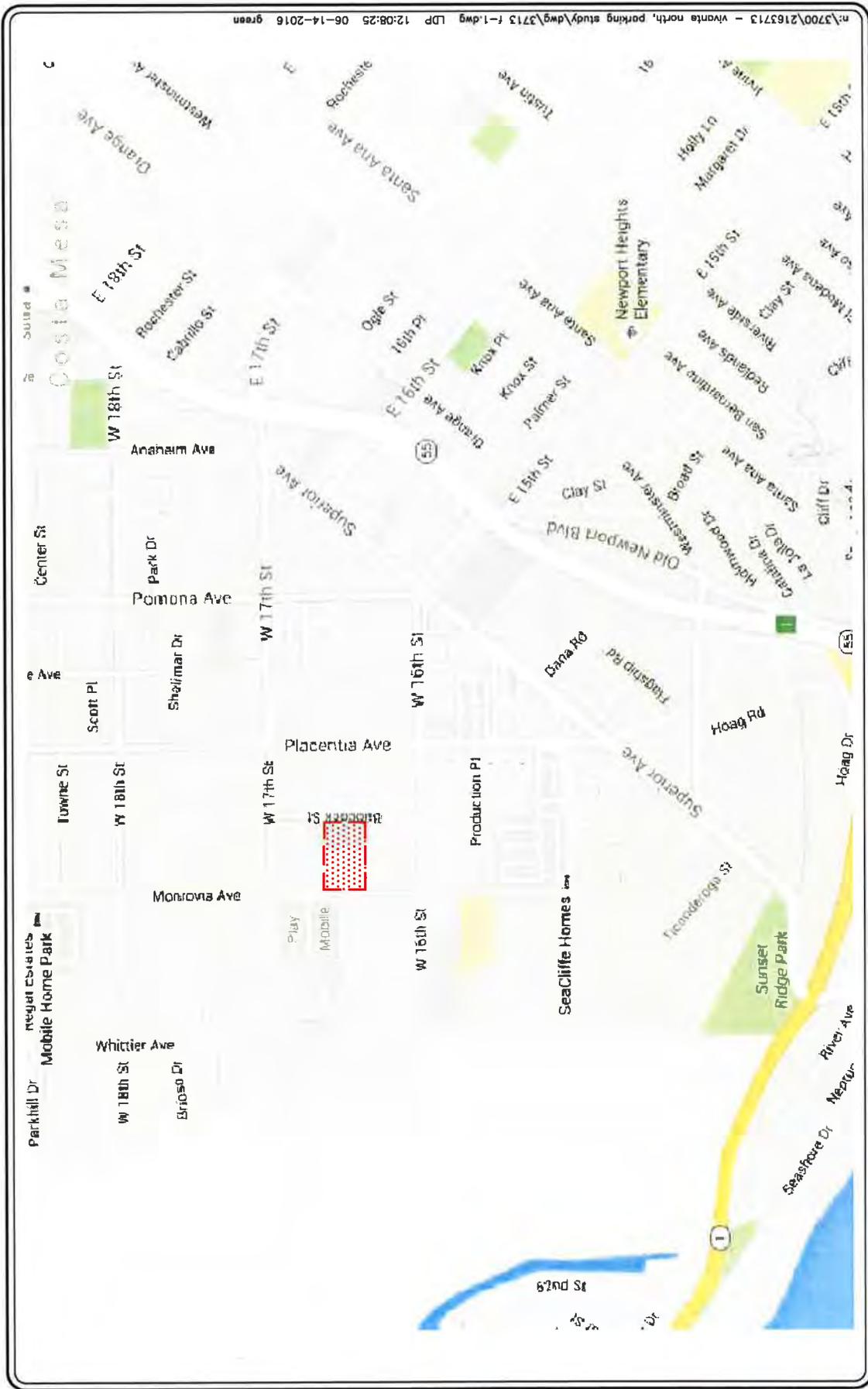
Each of the above scenarios would translate to a community event center need for 60 spaces. Using these 60-space illustrations as "building blocks", the attendance possibilities can be extrapolated to larger groups (i.e., a 90-space surplus can handle

an outside group of 270 persons if they can be expected to arrive at an average of 3 persons/car). In making these event-related parking allocations, it is recommended that the event coordinator at Vivante manage the booking of outside groups to reasonably balance with the on-site spaces that are not otherwise explicitly assigned to residents, staff, or for other needs, and that a parking management plan be prepared to consistently address event needs within the capabilities of the site.

At 940 SF, the Fitness Center is relatively small in size. The City's code requirement for health clubs (as a freestanding public use) is 10 spaces per 1,000 SF, and if applied to this 940 SF, translates to a need for 9 spaces. Recognizing that these 9 spaces are based on the parking needs of health club users and staffing as being all "outsiders", the staffing and resident needs for this element are already recognized within the 0.67 spaces per 1,000 SF "design" ratio for the existing Vivante. In this instance, we expect that the peak needs of this outside Fitness Center use is on the order of only 4 to 5 spaces at peak times, or roughly half of the related code requirement. Even with this outside use at 5 spaces, 55 spaces (of the rounded minimum surplus of 60 spaces, described above) would still be available for Community Event Center functions.

CONCLUSIONS AND FINDINGS

1. The unit count at Vivante now totals 185. The "Vivante North" (Phase II) expansion would increase the community total to 296 units.
2. The city does not have a specific Code parking ratio requirement for this land use type. The existing Vivante community was approved at a supply ratio of 0.72 spaces per unit based on city staff research of adjoining communities, and the expectation that Vivante parkers would share parking spaces within the site's planned office component on weekday evenings and on weekends. Based on the field studies and analysis of this study, such an after-hours sharing is not needed, and does not need to be provided for.
3. The field-verified existing 132-space parking supply at Vivante translates to a supply ratio of 0.71 spaces per unit. The expansion would increase the parking supply to a total of 260 spaces, including 59 spaces in an underground parking level. This 260-space supply translates to a supply ratio of 0.88 spaces per unit. This ratio exceeds that of the original (Phase I) project approvals by approximately 24 percent.



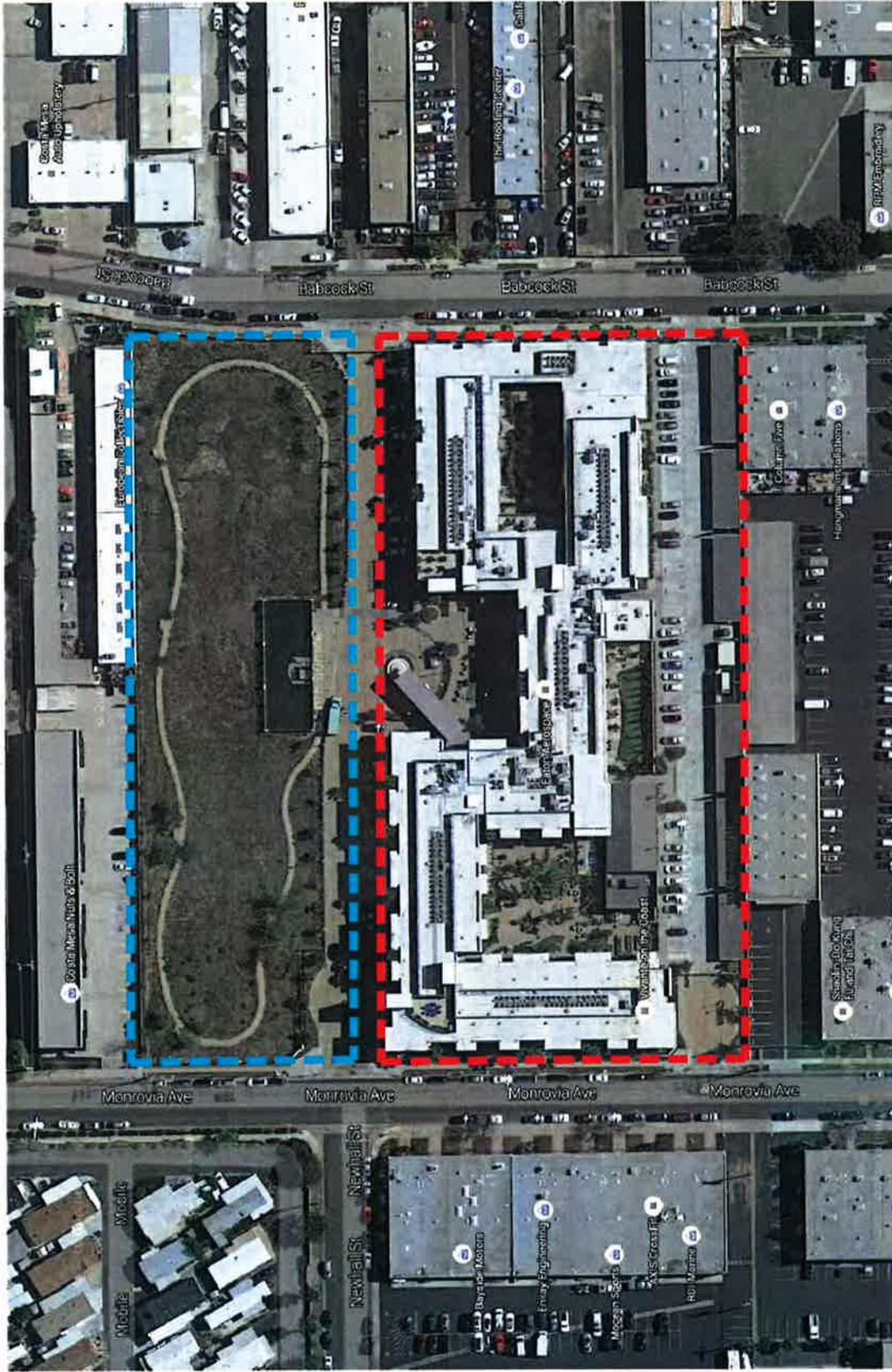


FIGURE 2

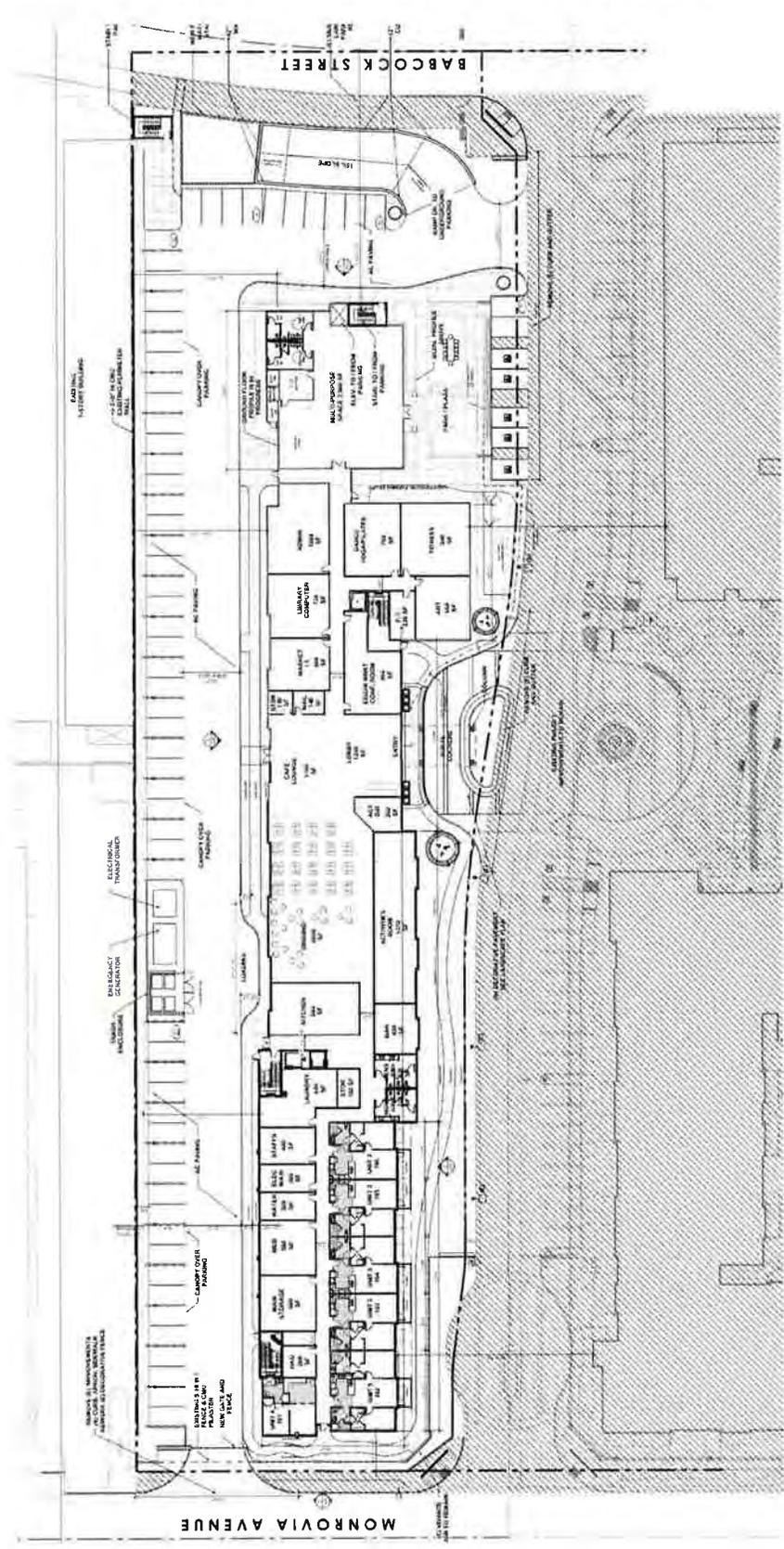
EXISTING SITE AERIAL PHOTOGRAPH
VIVANTE NORTH PARKING STUDY, NEWPORT BEACH

SOURCE: GOOGLE

KEY

-  = VIVANTE SOUTH
-  = VIVANTE NORTH





SOURCE: DLR GROUP

FIGURE 3

VIVANTE NORTH PROPOSED SITE PLAN VIVANTE NORTH PARKING STUDY, NEWPORT BEACH



NO SCALE

LINSCOTT
LAW &
GREENSPAN
engineers

TABLE 1
SITE DEVELOPMENT SUMMARY
VIVANTE, COSTA MESA

Description	Now Existing "Vivante South" (1640 Monrovia Avenue) ¹	Proposed Project "Vivante North" (1650 Monrovia Avenue) ²	Total
<i>Living Units</i>			
▪ Studios	66	+15	81
▪ One Bedroom	79	+77	156
▪ Two Bedrooms	<u>40</u>	<u>+19</u>	<u>59</u>
Total: Units (Beds)	185 (225)	+111 (130)	296 (355)
<i>Parking Supply</i>			
▪ Existing South Parking Area	93 ³	--	93
▪ Existing North Parking Area	39 ³	--	39
▪ Planned Surface Parking	--	+69	69
▪ Planned Underground Parking	=	<u>+59</u>	<u>59</u>
Total	132³	+128	260

¹ Source: Westside Senior Living Site Plan, Hill Partnership, Inc., dated March 19, 2010.

² Source: Nexus Vivante – Phase II Site Plan, DLR Group, dated December 10, 2015.

³ The 2010 site plan indicates a total of 133 on-site spaces, to include 95 spaces in the south parking area and 38 spaces in the north parking area. Field inventory performed as part of this study indicates a slight variation from the plan; the values shown in this table reflect that field inventory.

TABLE 2
ACTUAL PARKING DEMAND SUMMARY
(BASED ON FIELD STUDY)
VIVANTE, COSTA MESA

(1) Date	(2) Time	(3) Parking Demand ⁴ (Spaces)	(4) % Utilization ⁵	(5) Surplus/Deficiency (+/-) (Spaces)
Sunday, May 8, 2016 ⁶	12:00 PM	106	80%	26
	8:00 PM	70	53%	62
Wednesday, May 11, 2016	12:00 PM	90	68%	42
	8:00 PM	73	55%	59
Sunday, May 15, 2016	12:00 PM	72	55%	60
	8:00 PM	69	52%	63

⁴ Parking demand counts were conducted by National Data & Surveying Services in May 2016. Based on information provided by Nexus Development, the unit occupancy of the site was approximately 94% during the course of the parking demand observations.

⁵ Utilization percentage is based on a current total parking supply of 132 spaces.

⁶ Mother's Day fell on Sunday, May 8, 2016.

TABLE 4
"DESIGN" PARKING NEEDS FOR THE VIVANTE SITE (PHASES I & II)
VIVANTE, COSTA MESA

(1) Type of Day	(2) Design Parking Ratio ¹²	Peak Parking Needs (Spaces)			Comparison With Proposed Parking Supply (6 - 5)	
		(3) Existing Phase I (185 units)	(4) Added Project Phase II (111 units)	(5) Future Total (296 units)	(6) Parking Supply (Spaces)	(7) Surplus (+)/ Deficiency (-) (Spaces)
Peak Sunday/Holiday						
12:00 PM	0.67 spaces/unit	124	74	198	260	+62
8:00 PM	0.44 spaces/unit	81	49	130	260	+130
Typical Weekday						
12:00 PM	0.57 spaces/unit	106	63	169	260	+91
8:00 PM	0.46 spaces/unit	85	51	136	260	+124
Typical Sunday/Weekend Day						
12:00 PM	0.46 spaces/unit	85	51	136	260	+124
8:00 PM	0.43 spaces/unit	80	48	128	260	+132

¹² Based on observed demand values (as determined through field study), expanded to full unit occupancy, plus a contingency of 10%. See text and Table 3.

APPENDIX A
PARKING DEMAND FIELD STUDY RESULTS

Table 1
Parking Demand Summary
Vivante, Costa Mesa

Date	Time	Parking Demand [a]	% Utilization [b]	Surplus/ Deficiency (+/-)
Sunday, May 8, 2016 [c]	12:00 PM	106	80%	26
	8:00 PM	70	53%	62
Wednesday, May 11, 2016	12:00 PM	90	68%	42
	8:00 PM	73	55%	59
Sunday, May 15, 2016	12:00 PM	72	55%	60
	8:00 PM	69	52%	63

Notes:

[a] Parking demand counts were conducted by National Data & Surveying Services in May 2016.

[b] Utilization percentage is based on a current total parking supply of 132 spaces.

[c] Mother's Day fell on Sunday, May 8, 2016.

Parking Study

Locations: 1650 Montrovia Ave
City: Costa Mesa

Day: Sunday
Date: 5/8/2016

TIME	Zone A			Zone B			Zone C			Grand Total
	Reg	Reserved	HC	Reg	HC	Visitor	Reserved	HC		
Spaces	13	2	2	16	2	2	90	3	132	
12:00	13	2	2	16	2	2	66	1	106	
20:00	5	1	2	4	2	2	52	1	70	

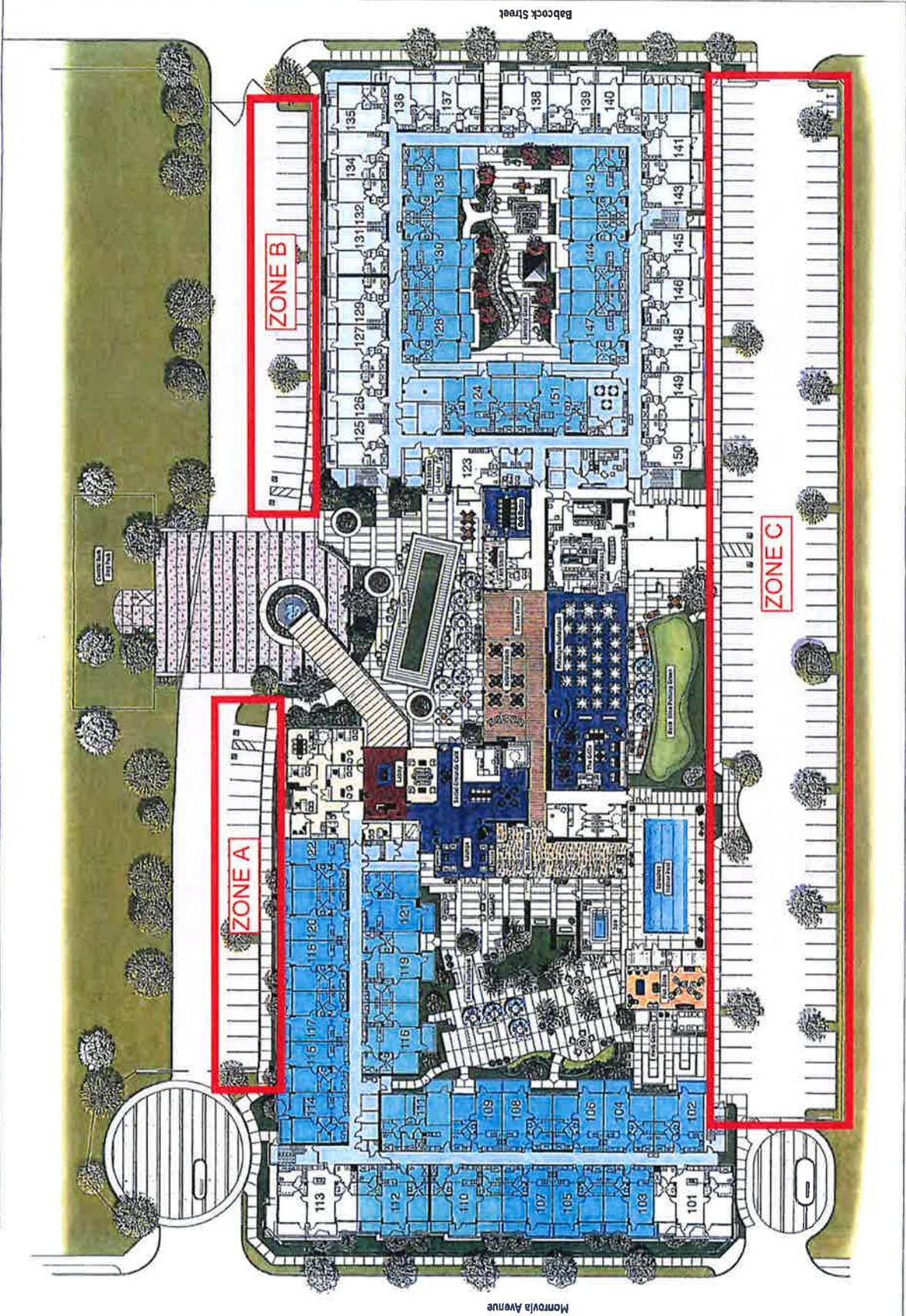
Day: Wednesday
Date: 5/11/2016

TIME	Zone A			Zone B			Zone C			Grand Total
	Reg	Reserved	HC	Reg	HC	Visitor	Reserved	HC		
Spaces	13	2	2	16	2	2	90	3	132	
12:00	11	2	2	12	1	1	59	0	90	
20:00	9	1	2	4	1	1	53	2	73	

Day: Sunday
Date: 5/15/2016

TIME	Zone A			Zone B			Zone C			Grand Total
	Reg	Reserved	HC	Reg	HC	Visitor	Reserved	HC		
Spaces	13	2	2	16	2	2	90	3	132	
12:00	10	1	2	7	1	1	50	0	72	
20:00	7	1	2	5	1	1	51	0	69	

- Plan A
- Plan B
- Plan C
- Plan D
- Plan E
- Plan F



C. UPDATED AIR QUALITY/GREENHOUSE GAS STUDY

AIR QUALITY and GHG IMPACT ANALYSES

VIVANTE NORTH PROJECT

COSTA MESA, CALIFORNIA

Prepared for:

Nexus Development Corporation
Attn: Rob Eres
1 MacArthur Place, Suite 300
Santa Ana, CA 92707

Date:

June 29, 2016

Project No.: P16-047 AQ

METEOROLOGICAL SETTING

The project site's climate, as with all Southern California, is dominated by the strength and position of the semi-permanent high pressure pattern over the Pacific Ocean near Hawaii. It creates cool summers, mild winters, and infrequent rainfall. It drives the cool daytime sea breeze, and it maintains comfortable humidities and ample sunshine after the frequent morning clouds dissipate. Unfortunately, the same atmospheric processes that create the desirable living climate combine to restrict the ability of the atmosphere to disperse the air pollution generated by the large population attracted in part by the desirable climate. Portions of the Los Angeles Basin therefore experience some of the worst air quality in the nation for certain pollutants.

Temperatures in the City of Costa Mesa average 61 degrees annually. Daily and seasonal oscillations of temperature are small because of the moderating effects of the nearby oceanic thermal reservoir. In contrast to the steady temperature regime, rainfall is highly variable. Measurable precipitation occurs mainly from early November to mid-April, but total amounts are generally small. Costa Mesa averages 12 inches of rain annually with January as the wettest month.

Winds in the project vicinity display several characteristic regimes. During the day, especially in summer, winds are from the south in the morning and from the west in the afternoon. Daytime wind speeds are 7 – 9 miles per hour on average. At night, especially in winter, the land becomes cooler than the ocean, and an off-shore wind of 3-5 miles per hour develops. Early morning winds are briefly from the south-east parallel to the coastline before the daytime on-shore flow becomes well established again. One other important wind regime occurs when high pressure occurs over the western United States that creates hot, dry and gusty Santa Ana winds from the north and northeast across Costa Mesa.

The net effect of the wind pattern on air pollution is that any locally generated emissions will be carried offshore at night, and toward inland Orange County by day. Daytime ventilation is much more vigorous. Unless daytime winds rotate far into the north and bring air pollution from developed areas of the air basin into Costa Mesa, warm season air quality is much better in the project vicinity than in inland valleys of the air basin. Both summer and winter air quality in the project area is generally good.

In addition to winds that control the rate and direction of pollution dispersal, Southern California is notorious for strong temperature inversions that limit the vertical depth through which pollution can be mixed. In summer, coastal areas are characterized by a sharp discontinuity between the cool marine air at the surface and the warm, sinking air aloft within the high pressure cell over the ocean to the west. This marine/subsidence inversion allows for good local mixing, but acts like a giant lid over the basin. Air starting onshore at the beach is relatively clean, but becomes progressively more polluted as sources continue to add pollution from below without any dilution from above. Because of Costa Mesa's location relative to the ocean, the incoming marine air during warm season onshore flow contains little air pollution. Local air quality is not substantially affected by the regional subsidence inversions.

A second inversion type forms on clear, winter nights when cold air off the mountains sinks to the surface while the air aloft remains warm. This process forms radiation inversions. These inversions, in conjunction with calm winds, trap pollutants such as automobile exhaust near their source. During the long nocturnal drainage flow from land to sea, the exhaust pollutants continually accumulate within the shallow, cool layer of air near the ground. Some areas of Orange County thus may experience elevated levels of carbon monoxide and nitrogen oxides because of this winter radiation inversion condition. However, the coastal areas of Orange County have not substantially been affected by limited nocturnal mixing effects (no elevated levels of CO) in approximately 10 years. Both types of inversions occur throughout the year to some extent, but the marine inversions are very dominant during the day in summer, and radiation inversions are much stronger on winter nights when nights are long and air is cool. The governing role of these inversions in atmospheric dispersion leads to a substantially different air quality environment in summer in the South Coast Air Basin than in winter.

AIR QUALITY SETTING

AMBIENT AIR QUALITY STANDARDS (AAQS)

In order to gauge the significance of the air quality impacts of the proposed project, those impacts, together with existing background air quality levels, must be compared to the applicable ambient air quality standards. These standards are the levels of air quality considered safe, with an adequate margin of safety, to protect the public health and welfare. They are designed to protect those people most susceptible to further respiratory distress such as asthmatics, the elderly, very young children, people already weakened by other disease or illness, and persons engaged in strenuous work or exercise, called "sensitive receptors." Healthy adults can tolerate occasional exposure to air pollutant concentrations considerably above these minimum standards before adverse effects are observed. Recent research has shown, however, that chronic exposure to ozone (the primary ingredient in photochemical smog) may lead to adverse respiratory health even at concentrations close to the ambient standard.

National AAQS were established in 1971 for six pollution species with states retaining the option to add other pollutants, require more stringent compliance, or to include different exposure periods. The initial attainment deadline of 1977 was extended several times in air quality problem areas like Southern California. In 2003, the Environmental Protection Agency (EPA) adopted a rule, which extended and established a new attainment deadline for ozone for the year 2021. Because the State of California had established AAQS several years before the federal action and because of unique air quality problems introduced by the restrictive dispersion meteorology, there is considerable difference between state and national clean air standards. Those standards currently in effect in California are shown in Table 1. Sources and health effects of various pollutants are shown in Table 2.

The Federal Clean Air Act Amendments (CAAA) of 1990 required that the U.S. Environmental Protection Agency (EPA) review all national AAQS in light of currently known health effects. EPA was charged with modifying existing standards or promulgating new ones where appropriate. EPA subsequently developed standards for chronic ozone exposure (8+ hours per day) and for very small diameter particulate matter (called "PM-2.5"). New national AAQS were adopted in 1997 for these pollutants.

Planning and enforcement of the federal standards for PM-2.5 and for ozone (8-hour) were challenged by trucking and manufacturing organizations. In a unanimous decision, the U.S. Supreme Court ruled that EPA did not require specific congressional authorization to adopt national clean air standards. The Court also ruled that health-based standards did not require preparation of a cost-benefit analysis. The Court did find, however, that there was some inconsistency between existing and "new" standards in their required attainment schedules. Such attainment-planning schedule inconsistencies centered mainly on the 8-hour ozone standard. EPA subsequently agreed to downgrade the attainment designation for a large number of communities to "non-attainment" for the 8-hour ozone standard.

Table 1

Ambient Air Quality Standards						
Pollutant	Averaging Time	California Standards ¹		National Standards ²		
		Concentration ³	Method ⁴	Primary ^{3,5}	Secondary ^{3,6}	Method ⁷
Ozone (O ₃) ⁸	1 Hour	0.09 ppm (180 µg/m ³)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8 Hour	0.070 ppm (137 µg/m ³)		0.070 ppm (137 µg/m ³)		
Respirable Particulate Matter (PM ₁₀) ⁹	24 Hour	50 µg/m ³	Gravimetric or Beta Attenuation	150 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m ³		—		
Fine Particulate Matter (PM _{2.5}) ⁹	24 Hour	—	—	35 µg/m ³	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m ³	Gravimetric or Beta Attenuation	12.0 µg/m ³	15 µg/m ³	
Carbon Monoxide (CO) ⁷	1 Hour	20 ppm (23 mg/m ³)	Non-Dispersive Infrared Photometry (NDIR)	35 ppm (40 mg/m ³)	—	Non-Dispersive Infrared Photometry (NDIR)
	8 Hour	9.0 ppm (10 mg/m ³)		9 ppm (10 mg/m ³)	—	
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m ³)		—	—	
Nitrogen Dioxide (NO ₂) ¹⁰	1 Hour	0.18 ppm (339 µg/m ³)	Gas Phase Chemiluminescence	100 ppb (188 µg/m ³)	—	Gas Phase Chemiluminescence
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)		0.053 ppm (100 µg/m ³)	Same as Primary Standard	
Sulfur Dioxide (SO ₂) ¹¹	1 Hour	0.25 ppm (655 µg/m ³)	Ultraviolet Fluorescence	75 ppb (196 µg/m ³)	—	Ultraviolet Fluorescence, Spectrophotometry (Pararosaniline Method)
	3 Hour	—		—	0.5 ppm (1300 µg/m ³)	
	24 Hour	0.04 ppm (105 µg/m ³)		0.14 ppm (for certain areas) ¹²	—	
	Annual Arithmetic Mean	—		0.030 ppm (for certain areas) ¹³	—	
Lead ^{12,13}	30 Day Average	1.5 µg/m ³	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m ³ (for certain areas) ¹²	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m ³		
Visibility Reducing Particles ¹⁴	8 Hour	See footnote 13	Beta Attenuation and Transmittance through Filter Tape	No National Standards		
Sulfates	24 Hour	25 µg/m ³	Ion Chromatography			
Hydrogen Sulfide	1 Hour	0.03 ppm (42 µg/m ³)	Ultraviolet Fluorescence			
Vinyl Chloride ¹²	24 Hour	0.01 ppm (26 µg/m ³)	Gas Chromatography			

See footnotes on next page ...

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (10/1/15)

Table 1 (continued)

1. California standards for ozone, carbon monoxide (except 8-hour Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, and particulate matter (PM₁₀, PM_{2.5}, and visibility-reducing particles), are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.
2. National standards (other than ozone, particulate matter, and those based on annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration measured at each site in a year, averaged over three years, is equal to or less than the standard. For PM₁₀, the 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m³ is equal to or less than one. For PM_{2.5}, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact the U.S. EPA for further clarification and current national policies.
3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. Any equivalent measurement method which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.
5. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.
6. National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.
7. Reference method as described by the U.S. EPA. An "equivalent method" of measurement may be used but must have a "consistent relationship to the reference method" and must be approved by the U.S. EPA.
8. On October 1, 2015, the national 8-hour ozone primary and secondary standards were lowered from 0.075 to 0.070 ppm.
9. On December 14, 2012, the national annual PM_{2.5} primary standard was lowered from 15 µg/m³ to 12.0 µg/m³. The existing national 24-hour PM_{2.5} standards (primary and secondary) were retained at 35 µg/m³, as was the annual secondary standard of 15 µg/m³. The existing 24-hour PM₁₀ standards (primary and secondary) of 150 µg/m³ also were retained. The form of the annual primary and secondary standards is the annual mean, averaged over 3 years.
10. To attain the 1-hour national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 ppb. Note that the national 1-hour standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the national 1-hour standard to the California standards the units can be converted from ppb to ppm. In this case, the national standard of 100 ppb is identical to 0.100 ppm.
11. On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.
Note that the 1-hour national standard is in units of parts per billion (ppb). California standards are in units of parts per million (ppm). To directly compare the 1-hour national standard to the California standard the units can be converted to ppm. In this case, the national standard of 75 ppb is identical to 0.075 ppm.
12. The ARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.
13. The national standard for lead was revised on October 15, 2008 to a rolling 3-month average. The 1978 lead standard (1.5 µg/m³ as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978 standard, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.
14. In 1989, the ARB converted both the general statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the statewide and Lake Tahoe Air Basin standards, respectively.

For more information please call ARB-PIO at (916) 322-2990

California Air Resources Board (10/1/15)

**Table 2
Health Effects of Major Criteria Pollutants**

Pollutants	Sources	Primary Effects
Carbon Monoxide (CO)	<ul style="list-style-type: none"> • Incomplete combustion of fuels and other carbon-containing substances, such as motor exhaust. • Natural events, such as decomposition of organic matter. 	<ul style="list-style-type: none"> • Reduced tolerance for exercise. • Impairment of mental function. • Impairment of fetal development. • Death at high levels of exposure. • Aggravation of some heart diseases (angina).
Nitrogen Dioxide (NO ₂)	<ul style="list-style-type: none"> • Motor vehicle exhaust. • High temperature stationary combustion. • Atmospheric reactions. 	<ul style="list-style-type: none"> • Aggravation of respiratory illness. • Reduced visibility. • Reduced plant growth. • Formation of acid rain.
Ozone (O ₃)	<ul style="list-style-type: none"> • Atmospheric reaction of organic gases with nitrogen oxides in sunlight. 	<ul style="list-style-type: none"> • Aggravation of respiratory and cardiovascular diseases. • Irritation of eyes. • Impairment of cardiopulmonary function. • Plant leaf injury.
Lead (Pb)	<ul style="list-style-type: none"> • Contaminated soil. 	<ul style="list-style-type: none"> • Impairment of blood function and nerve construction. • Behavioral and hearing problems in children.
Fine Particulate Matter (PM-10)	<ul style="list-style-type: none"> • Stationary combustion of solid fuels. • Construction activities. • Industrial processes. • Atmospheric chemical reactions. 	<ul style="list-style-type: none"> • Reduced lung function. • Aggravation of the effects of gaseous pollutants. • Aggravation of respiratory and cardio respiratory diseases. • Increased cough and chest discomfort. • Soiling. • Reduced visibility.
Fine Particulate Matter (PM-2.5)	<ul style="list-style-type: none"> • Fuel combustion in motor vehicles, equipment, and industrial sources. • Residential and agricultural burning. • Industrial processes. • Also, formed from photochemical reactions of other pollutants, including NO_x, sulfur oxides, and organics. 	<ul style="list-style-type: none"> • Increases respiratory disease. • Lung damage. • Cancer and premature death. • Reduces visibility and results in surface soiling.
Sulfur Dioxide (SO ₂)	<ul style="list-style-type: none"> • Combustion of sulfur-containing fossil fuels. • Smelting of sulfur-bearing metal ores. • Industrial processes. 	<ul style="list-style-type: none"> • Aggravation of respiratory diseases (asthma, emphysema). • Reduced lung function. • Irritation of eyes. • Reduced visibility. • Plant injury. • Deterioration of metals, textiles, leather, finishes, coatings, etc.

Source: California Air Resources Board, 2002.

Evaluation of the most current data on the health effects of inhalation of fine particulate matter prompted the California Air Resources Board (ARB) to recommend adoption of the statewide PM-2.5 standard that is more stringent than the federal standard. This standard was adopted in 2002. The State PM-2.5 standard is more of a goal in that it does not have specific attainment planning requirements like a federal clean air standard, but only requires continued progress towards attainment.

Similarly, the ARB extensively evaluated health effects of ozone exposure. A new state standard for an 8-hour ozone exposure was adopted in 2005, which aligned with the exposure period for the federal 8-hour standard. The California 8-hour ozone standard of 0.07 ppm is more stringent than the federal 8-hour standard of 0.075 ppm. The state standard, however, does not have a specific attainment deadline. California air quality jurisdictions are required to make steady progress towards attaining state standards, but there are no hard deadlines or any consequences of non-attainment. During the same re-evaluation process, the ARB adopted an annual state standard for nitrogen dioxide (NO₂) that is more stringent than the corresponding federal standard, and strengthened the state one-hour NO₂ standard.

As part of EPA's 2002 consent decree on clean air standards, a further review of airborne particulate matter (PM) and human health was initiated. A substantial modification of federal clean air standards for PM was promulgated in 2006. Standards for PM-2.5 were strengthened, a new class of PM in the 2.5 to 10 micron size was created, some PM-10 standards were revoked, and a distinction between rural and urban air quality was adopted. In December, 2012, the federal annual standard for PM-2.5 was reduced from 15 µg/m³ to 12 µg/m³ which matches the California AAQS. The severity of the basin's non-attainment status for PM-2.5 may be increased by this action and thus require accelerated planning for future PM-2.5 attainment.

In response to continuing evidence that ozone exposure at levels just meeting federal clean air standards is demonstrably unhealthful, EPA had proposed a further strengthening of the 8-hour standard. A new 8-hour ozone standard was adopted in 2015 after extensive analysis and public input. The adopted national 8-hour ozone standard is 0.07 ppm which matches the current California standard. It will require three years of ambient data collection, then 2 years of non-attainment findings and planning protocol adoption, then several years of plan development and approval. Final air quality plans for the new standard are likely to be adopted around 2022. Ultimate attainment of the new standard in ozone problem areas such as Southern California might be after 2030.

In 2010 a new federal one-hour primary standard for nitrogen dioxide (NO₂) was adopted. This standard is more stringent than the existing state standard. Based upon air quality monitoring data in the South Coast Air Basin, the California Air Resources Board has requested the EPA to designate the basin as being in attainment for this standard. The federal standard for sulfur dioxide (SO₂) was also recently revised. However, with minimal combustion of coal and mandatory use of low sulfur fuels in California, SO₂ is typically not a problem pollutant.

BASELINE AIR QUALITY

Existing and probable future levels of air quality in Costa Mesa can be best inferred from ambient air quality measurements conducted by the South Coast Air Quality Management District (SCAQMD) at its Costa Mesa and Anaheim monitoring stations. These stations measure both regional pollution levels such as dust (particulates) and smog, as well as levels of primary vehicular pollutants such as carbon monoxide.

Table 3 summarizes the last five years of the published data from a composite of gaseous species monitored at Costa Mesa and particulates at Anaheim (there are no particulate data available from Costa Mesa). The following conclusions can be drawn from these data:

- a. Photochemical smog (ozone) levels infrequently exceed standards. All state and federal ozone standards have been exceeded an average of 1 percent or less of all days in the past five years. Measurements from more recent years demonstrate progressively improved ozone levels in the area. While ozone levels are still occasionally high, they are much lower than 10 to 20 years ago.
- b. Respirable dust (PM-10) levels occasionally exceed the state standard on approximately two percent of measured days. The less stringent federal PM-10 standard has not been exceeded in the last five years. These conclusions are based upon Central Orange County (Anaheim) measurements. Particulate levels in Costa Mesa are likely even lower.
- c. The federal ultra-fine particulate (PM-2.5) standard of $35 \mu\text{g}/\text{m}^3$ has been exceeded on less than one percent of measurement days in the last six years.
- d. More localized pollutants such as carbon monoxide, nitrogen oxides, etc. are very low near the project site. There is substantial excess dispersive capacity to accommodate localized vehicular air pollutants such as NO_x or CO without any threat of violating applicable AAQS.

Although complete attainment of every clean air standard is not yet imminent, extrapolation of the steady improvement trend suggests that such attainment could occur within the reasonably near future.

Table 3
Air Quality Monitoring Summary (2010-2014)
(Number of Days Standards Were Exceeded, and
Maximum Levels During Such Violations)
(Entries shown as ratios = samples exceeding standard/samples taken)

Pollutant/Standard	2010	2011	2012	2013	2014
Ozone					
1-Hour > 0.09 ppm (S)	1	0	0	1	1
8-Hour > 0.07 ppm (S)	2	2	1	2	6
8- Hour > 0.075 ppm (F)	1	0	1	1	4
Max. 1-Hour Conc. (ppm)	0.097	0.093	0.090	0.095	0.096
Max. 8-Hour Conc. (ppm)	0.086	0.077	0.076	0.083	0.079
Carbon Monoxide					
8- Hour > 9. ppm (S,F)	0	0	0	0	0
Max 8-hour Conc. (ppm)	2.1	2.2	1.7	2.0	2.1
Nitrogen Dioxide					
1-Hour > 0.18 ppm (S)	0	0	0	0	0
Max. 1-Hour Conc. (ppm)	0.070	0.061	0.074	0.076	0.061
Inhalable Particulates (PM-10)					
24-hour > 50 µg/m ³ (S)	0/57	2/57	0/61	1/59	2/61
24-hour > 150 µg/m ³ (F)	0/57	0/57	0/61	0/59	0/61
Max. 24-Hr. Conc. (µg/m ³)	43.	53.	48.	77.	85.
Ultra-Fine Particulates (PM-2.5)					
24-Hour > 35 µg/m ³ (F)	0/331	2/352	4/347	1/331	6/344
Max. 24-Hr. Conc. (µg/m ³)	31.7	39.2	50.1	37.8	56.2

Source: South Coast AQMD Air Monitoring Station Data Summary
Costa Mesa (3195) for Ozone, CO, NO₂
Anaheim Station (3176) for PM-10 and PM-2.5

AIR QUALITY PLANNING

The Federal Clean Air Act (1977 Amendments) required that designated agencies in any area of the nation not meeting national clean air standards must prepare a plan demonstrating the steps that would bring the area into compliance with all national standards. The SCAB could not meet the deadlines for ozone, nitrogen dioxide, carbon monoxide, or PM-10. In the SCAB, the agencies designated by the governor to develop regional air quality plans are the SCAQMD and the Southern California Association of Governments (SCAG). The two agencies first adopted an Air Quality Management Plan (AQMP) in 1979 and revised it several times as earlier attainment forecasts were shown to be overly optimistic.

The 1990 Federal Clean Air Act Amendment (CAAA) required that all states with air-sheds with “serious” or worse ozone problems submit a revision to the State Implementation Plan (SIP). Amendments to the SIP have been proposed, revised and approved over the past decade. The most current regional attainment emissions forecast for ozone precursors (ROG and NO_x) and for carbon monoxide (CO) and for particulate matter are shown in Table 4. Substantial reductions in emissions of ROG, NO_x and CO are forecast to continue throughout the next several decades. Unless new particulate control programs are implemented, PM-10 and PM-2.5 are forecast to slightly increase.

The Air Quality Management District (AQMD) adopted an updated clean air “blueprint” in August 2003. The 2003 Air Quality Management Plan (AQMP) was approved by the EPA in 2004. The AQMP outlined the air pollution measures needed to meet federal health-based standards for ozone by 2010 and for particulates (PM-10) by 2006. The 2003 AQMP was based upon the federal one-hour ozone standard which was revoked late in 2005 and replaced by an 8-hour federal standard. Because of the revocation of the hourly standard, a new air quality planning cycle was initiated.

With re-designation of the air basin as non-attainment for the 8-hour ozone standard, a new attainment plan was developed. This plan shifted most of the one-hour ozone standard attainment strategies to the 8-hour standard. As previously noted, the attainment date was to “slip” from 2010 to 2021. The updated attainment plan also includes strategies for ultimately meeting the federal PM-2.5 standard.

Because projected attainment by 2021 requires control technologies that do not exist yet, the SCAQMD requested a voluntary “bump-up” from a “severe non-attainment” area to an “extreme non-attainment” designation for ozone. The extreme designation will allow a longer time period for these technologies to develop. If attainment cannot be demonstrated within the specified deadline without relying on “black-box” measures, EPA would have been required to impose sanctions on the region had the bump-up request not been approved. In April 2010, the EPA approved the change in the non-attainment designation from “severe-17” to “extreme.” This reclassification sets a later attainment deadline (2024), but also requires the air basin to adopt even more stringent emissions controls.

Table 4

South Coast Air Basin Emissions Forecasts (Emissions in tons/day)

Pollutant	2012^a	2015^b	2020^b	2025^b	2030
NOx	512	451	357	289	266
VOC	466	429	400	393	393
PM-10	154	155	161	165	170
PM-2.5	68	67	67	68	170

^a2012 Base Year.

^bWith current emissions reduction programs and adopted growth forecasts.

Source: California Air Resources Board, 2013 Almanac of CEPAM

In other air quality attainment plan reviews, EPA has disapproved part of the SCAB PM-2.5 attainment plan included in the AQMP. EPA has stated that the current attainment plan relies on PM-2.5 control regulations that have not yet been approved or implemented. It is expected that a number of rules that are pending approval will remove the identified deficiencies. If these issues are not resolved within the next several years, federal funding sanctions for transportation projects could result. The 2012 AQMP included in the ARB submittal to EPA as part of the California State Implementation Plan (SIP) is expected to remedy identified PM-2.5 planning deficiencies.

The federal Clean Air Act requires that non-attainment air basins have EPA approved attainment plans in place. This requirement includes the federal one-hour ozone standard even though that standard was revoked almost ten years ago. There was no approved attainment plan for the one-hour federal standard at the time of revocation. Through a legal quirk, the SCAQMD is now required to develop an AQMP for the long since revoked one-hour federal ozone standard. Because the 2012 AQMP contains a number of control measures for the 8-hour ozone standard that are equally effective for one-hour levels, the 2012 AQMP is believed to satisfy hourly attainment planning requirements.

AQMPs are required to be updated every three years. The 2012 AQMP was adopted in early 2013. An updated AQMP must therefore be adopted in 2016. Planning for the 2016 AQMP is currently on-going. The current attainment deadlines for all federal non-attainment pollutants are now as follows:

8-hour ozone (70 ppb)	2032
Annual PM-2.5 (12 µg/m ³)	2025
8-hour ozone (75 ppb)	2024 (old standard)
1-hour ozone (120 ppb)	2023 (rescinded standard)

24-hour PM-2.5 (35 µg/m³) 2019

The key challenge is that NO_x emission levels, as a critical ozone precursor pollutant, are forecast to continue to exceed the levels that would allow the above deadlines to be met. Unless additional NO_x control measures are adopted and implemented, attainment goals may not be met.

The proposed project does not directly relate to the AQMP in that there are no specific air quality programs or regulations governing assisted living projects. Conformity with adopted plans, forecasts and programs relative to population, housing, employment and land use is the primary yardstick by which impact significance of planned growth is determined. The SCAQMD, however, while acknowledging that the AQMP is a growth-accommodating document, does not favor designating regional impacts as less-than-significant just because the proposed development is consistent with regional growth projections. Air quality impact significance for the proposed project has therefore been analyzed on a project-specific basis.

AIR QUALITY IMPACT

STANDARDS OF SIGNIFICANCE

Air quality impacts are considered “significant” if they cause clean air standards to be violated where they are currently met, or if they “substantially” contribute to an existing violation of standards. Any substantial emissions of air contaminants for which there is no safe exposure, or nuisance emissions such as dust or odors, would also be considered a significant impact.

Appendix G of the California CEQA Guidelines offers the following five tests of air quality impact significance. A project would have a potentially significant impact if it:

- a. Conflicts with or obstructs implementation of the applicable air quality plan.
- b. Violates any air quality standard or contributes substantially to an existing or projected air quality violation.
- c. Results in a cumulatively considerable net increase of any criteria pollutants for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- d. Exposes sensitive receptors to substantial pollutant concentrations.
- e. Creates objectionable odors affecting a substantial number of people.

Primary Pollutants

Air quality impacts generally occur on two scales of motion. Near an individual source of emissions or a collection of sources such as a crowded intersection or parking lot, levels of those pollutants that are emitted in their already unhealthful form will be highest. Carbon monoxide (CO) is an example of such a pollutant. Primary pollutant impacts can generally be evaluated directly in comparison to appropriate clean air standards. Violations of these standards where they are currently met, or a measurable worsening of an existing or future violation, would be considered a significant impact. Many particulates, especially fugitive dust emissions, are also primary pollutants. Because of the non-attainment status of the South Coast Air Basin (SCAB) for PM-10, an aggressive dust control program is required to control fugitive dust during project construction.

Secondary Pollutants

Many pollutants, however, require time to transform from a more benign form to a more unhealthful contaminant. Their impact occurs regionally far from the source. Their incremental regional impact is minute on an individual basis and cannot be quantified except through complex photochemical computer models. Analysis of significance of such emissions is based

upon a specified amount of emissions (pounds, tons, etc.) even though there is no way to translate those emissions directly into a corresponding ambient air quality impact.

Because of the chemical complexity of primary versus secondary pollutants, the SCAQMD has designated significant emissions levels as surrogates for evaluating regional air quality impact significance independent of chemical transformation processes. Projects with daily emissions that exceed any of the following emission thresholds are recommended by the SCAQMD to be considered significant under CEQA guidelines.

Table 5
Daily Emissions Thresholds

Pollutant	Construction	Operations
ROG	75	55
NOx	100	55
CO	550	550
PM-10	150	150
PM-2.5	55	55
SOx	150	150
Lead	3	3

Source: SCAQMD CEQA Air Quality Handbook, November, 1993 Rev.

Additional Indicators

In its CEQA Handbook, the SCAQMD also states that additional indicators should be used as screening criteria to determine the need for further analysis with respect to air quality. The additional indicators are as follows:

- Project could interfere with the attainment of the federal or state ambient air quality standards by either violating or contributing to an existing or projected air quality violation
- Project could result in population increases within the regional statistical area which would be in excess of that projected in the AQMP and in other than planned locations for the project's build-out year.
- Project could generate vehicle trips that cause a CO hot spot.

CONSTRUCTION ACTIVITY IMPACTS

CalEEMod was developed by the SCAQMD to provide a model by which to calculate both construction emissions and operational emissions from a variety of land use projects. It calculates both the daily maximum and annual average emissions for criteria pollutants as well as total or annual greenhouse gas (GHG) emissions.

Although exhaust emissions will result from on and off-site equipment, the exact types and numbers of equipment will vary among contractors such that such emissions cannot be quantified with certainty. Estimated construction emissions were modeled using CalEEMod2013.2.2 to identify maximum daily emissions for each pollutant during project construction.

The proposed project entails construction of a 111 unit (225 bed) assisted living facility, a community event center and a fitness center. Construction was modeled in CalEEMod2013.2.2 using default construction equipment and schedule for a project of this size as shown in Table 6.

Table 6

Construction Activity Equipment Fleet

Phase Name and Duration	Equipment
Grading (6 days)	1 Grader
	1 Dozer
	2 Loader/Backhoes
Construction (220 days)	1 Crane
	2 Loader/Backhoes
	1 Generator Set
	3 Welders
	2 Forklifts
Paving (10 days)	1 Paver
	1 Paving Equipment
	2 Loader/Backhoes
	1 Roller

Utilizing this indicated equipment fleet and durations shown in Table 6 the following worst case daily construction emissions are calculated by CalEEMod and are listed in Table 7.

Table 7
Construction Activity Emissions
Maximum Daily Emissions (pounds/day)

Maximal Construction Emissions	ROG	NO_x	CO	SO₂	PM-10	PM-2.5
2017						
Unmitigated	65.7	28.2	22.3	0.0	8.2	4.8
Mitigated	65.7	28.2	22.3	0.0	4.2	2.8
2018						
Unmitigated	65.7	2.1	2.7	0.0	0.3	0.2
Mitigated	65.7	2.1	2.7	0.0	0.3	0.2
SCAQMD Thresholds	75	100	550	150	150	55

Peak daily construction activity emissions are estimated to be below SCAQMD CEQA thresholds without the need for added mitigation. The only model-based mitigation measure applied for this project was:

- Water exposed dirt surfaces three times per day to minimize the generation of fugitive dust generation during grading activities

Construction equipment exhaust contains carcinogenic compounds within the diesel exhaust particulates. The toxicity of diesel exhaust is evaluated relative to a 24-hour per day, 365 days per year, 70-year lifetime exposure. The SCAQMD does not generally require the analysis of construction-related diesel emissions relative to health risk due to the short period for which the majority of diesel exhaust would occur. Health risk analyses are typically assessed over a 9-, 30-, or 70-year timeframe and not over a relatively brief construction period due to the lack of health risk associated with such a brief exposure.

LOCALIZED SIGNIFICANCE THRESHOLDS

The SCAQMD has developed analysis parameters to evaluate ambient air quality on a local level in addition to the more regional emissions-based thresholds of significance. These analysis elements are called Localized Significance Thresholds (LSTs). LSTs were developed in response to Governing Board's Environmental Justice Enhancement Initiative 1-4 and the LST methodology was provisionally adopted in October 2003 and formally approved by SCAQMD's Mobile Source Committee in February 2005.

Use of an LST analysis for a project is optional. For the proposed project, the primary source of possible LST impact would be during construction. LSTs are applicable for a sensitive receptor where it is possible that an individual could remain for 24 hours such as a residence, hospital or convalescent facility.

LSTs are only applicable to the following criteria pollutants: oxides of nitrogen (NO_x), carbon monoxide (CO), and particulate matter (PM-10 and PM-2.5). LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard, and are developed based

on the ambient concentrations of that pollutant for each source receptor area and distance to the nearest sensitive receptor.

LST screening tables are available for 25, 50, 100, 200 and 500 meter source-receptor distances. For this project the nearest sensitive receptors are the residential uses adjacent to the project site such that the most conservative 25 meter distance was modeled.

The SCAQMD has issued guidance on applying CalEEMod to LSTs. LST pollutant screening level concentration data is currently published for 1, 2 and 5 acre sites for varying distances. For this project, the most stringent thresholds for a 1 acre site were applied.

The following thresholds and emissions in Table 8 are therefore determined (pounds per day):

Table 8
LST and Project Emissions (pounds/day)

LST 1 acre/25 meters North Coastal OC	CO	NOx	PM-10	PM-2.5
LST Thresholds	647	92	4	3
Max On-Site Emissions				
Unmitigated	22	28	8	5
Mitigated	22	28	4	3

CalEEMod Output in Appendix

LSTs were compared to the maximum daily construction activities. As seen above, emissions will meet the LST for construction thresholds with the application of the following mitigation measure:

- Exposed surfaces will be watered three times per day during grading activities

LST impacts are less-than-significant with the application dust suppression measures (watering 3 times per day) pursuant to SCAQMD Rule 403. No additional mitigation measures are necessary.

OPERATIONAL IMPACTS

Operational emissions for the proposed project were calculated using CalEEMod2013.2.2 for an assumed project build-out year of 2018 as a target for full occupancy. The project would generate 511 daily trips using default trip generation data in CalEEMod. In addition to mobile sources from vehicles, general development causes smaller amounts of “area source” air pollution to be generated from on-site energy consumption (primarily landscaping) and from off-site electrical generation (lighting). These sources represent a minimal percentage of the total project NOx and CO burdens, and a few percent other pollutants. The inclusion of such emissions adds negligibly to the total significant project-related emissions. As shown in Table 9,

operational emissions will not exceed applicable SCAQMD operational emissions CEQA thresholds of significance.

**Table 9
Proposed Project
Daily Operational Impacts**

Source	Operational Emissions (lbs/day)					
	ROG	NOx	CO	SO ₂	PM-10	PM-2.5
Area	31.9	0.8	65.0	0.1	8.5	8.5
Energy	0.0	0.3	0.1	0.0	0.0	0.0
Mobile	1.6	4.5	18.3	0.0	3.4	1.0
Total	33.6	5.6	83.4	0.1	11.9	9.5
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod2013.2.2 Output in Appendix

Operational emissions were also calculated for approved site uses. Approved uses include 42,000 square feet of office space and would generate 463 trips per day. The emissions for approved uses are provided below in Table 10. The net difference is shown in Table 11. Project impacts are met with an even greater margin of safety when credit is applied to account for previously approved office use.

**Table 10
Approved Project
Daily Operational Impacts**

Source	Operational Emissions (lbs/day)					
	ROG	NOx	CO	SO ₂	PM-10	PM-2.5
Area	1.1	0.0	0.0	0.0	0.0	0.0
Energy	0.0	0.1	0.1	0.0	0.0	0.0
Mobile	1.7	5.0	20.9	0.0	3.4	1.0
Total	2.9	5.2	21.0	0.0	3.4	1.0
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	No	No	No	No	No	No

Source: CalEEMod2013.2.2 Output in Appendix

**Table 11
Daily Operational Emissions
Proposed Uses - Approved Uses**

Source	Operational Emissions (lbs/day)					
	ROG	NOx	CO	SO ₂	PM-10	PM-2.5
Area	30.8	0.8	65.0	0.1	8.5	8.5
Energy	0.0	0.2	0.0	0.0	0.0	0.0

Mobile	-0.1	-0.5	-2.6	0.0	0.0	0.0
Total	30.7	0.4	62.4	0.1	8.5	8.5
SCAQMD Threshold	55	55	550	150	150	55

CONSTRUCTION EMISSIONS MINIMIZATION

Construction activities are not anticipated to cause dust emissions to exceed SCAQMD CEQA thresholds. Nevertheless, emissions minimization through enhanced dust control measures is recommended for use because of the non-attainment status of the air basin and proximity to existing residential uses. Recommended measures include:

Fugitive Dust Control

- Apply soil stabilizers or moisten inactive areas.
- Water exposed surfaces as needed to avoid visible dust leaving the construction site (typically 2-3 times/day).
- Cover all stock piles with tarps at the end of each day or as needed.
- Provide water spray during loading and unloading of earthen materials.
- Minimize in-out traffic from construction zone
- Cover all trucks hauling dirt, sand, or loose material and require all trucks to maintain at least two feet of freeboard
- Sweep streets daily if visible soil material is carried out from the construction site

Similarly, ozone precursor emissions (ROG and NOx) are calculated to be below SCAQMD CEQA thresholds. However, because of the regional non-attainment for photochemical smog, the use of reasonably available control measures for diesel exhaust is recommended. Combustion emissions control options include:

Exhaust Emissions Control

- Utilize well-tuned off-road construction equipment.
- Establish a preference for contractors using Tier 3 or better heavy equipment.
- Enforce 5-minute idling limits for both on-road trucks and off-road equipment.

GREENHOUSE GAS EMISSIONS

“Greenhouse gases” (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as “global warming.” These greenhouse gases contribute to an increase in the temperature of the earth’s atmosphere by transparency to short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation in some parts of the infrared spectrum. The principal greenhouse gases (GHGs) are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. For purposes of planning and regulation, Section 15364.5 of the California Code of Regulations defines GHGs to include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions.

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. GHG statutes and executive orders (EO) include AB 32, SB 1368, EO S-03-05, EO S-20-06 and EO S-01-07.

AB 32 is one of the most significant pieces of environmental legislation that California has adopted. Among other things, it is designed to maintain California’s reputation as a “national and international leader on energy conservation and environmental stewardship.” It will have wide-ranging effects on California businesses and lifestyles as well as far reaching effects on other states and countries. A unique aspect of AB 32, beyond its broad and wide-ranging mandatory provisions and dramatic GHG reductions are the short time frames within which it must be implemented. Major components of the AB 32 include:

- Require the monitoring and reporting of GHG emissions beginning with sources or categories of sources that contribute the most to statewide emissions.
- Requires immediate “early action” control programs on the most readily controlled GHG sources.
- Mandates that by 2020, California’s GHG emissions be reduced to 1990 levels.
- Forces an overall reduction of GHG gases in California by 25-40%, from business as usual, to be achieved by 2020.
- Must complement efforts to achieve and maintain federal and state ambient air quality standards and to reduce toxic air contaminants.

Statewide, the framework for developing the implementing regulations for AB 32 is under way. Maximum GHG reductions are expected to derive from increased vehicle fuel efficiency, from greater use of renewable energy and from increased structural energy efficiency. Additionally, through the California Climate Action Registry (CCAR now called the Climate Action Reserve), general and industry-specific protocols for assessing and reporting GHG emissions have been

developed. GHG sources are categorized into direct sources (i.e. company owned) and indirect sources (i.e. not company owned). Direct sources include combustion emissions from on-and off-road mobile sources, and fugitive emissions. Indirect sources include off-site electricity generation and non-company owned mobile sources.

THRESHOLDS OF SIGNIFICANCE

In response to the requirements of SB97, the State Resources Agency developed guidelines for the treatment of GHG emissions under CEQA. These new guidelines became state laws as part of Title 14 of the California Code of Regulations in March, 2010. The CEQA Appendix G guidelines were modified to include GHG as a required analysis element. A project would have a potentially significant impact if it:

- Generates GHG emissions, directly or indirectly, that may have a significant impact on the environment, or,
- Conflicts with an applicable plan, policy or regulation adopted to reduce GHG emissions.

Section 15064.4 of the Code specifies how significance of GHG emissions is to be evaluated. The process is broken down into quantification of project-related GHG emissions, making a determination of significance, and specification of any appropriate mitigation if impacts are found to be potentially significant. At each of these steps, the new GHG guidelines afford the lead agency with substantial flexibility.

Emissions identification may be quantitative, qualitative or based on performance standards. CEQA guidelines allow the lead agency to “select the model or methodology it considers most appropriate.” The most common practice for transportation/combustion GHG emissions quantification is to use a computer model such as CalEEMod, as was used in the ensuing analysis.

The significance of those emissions then must be evaluated; the selection of a threshold of significance must take into consideration what level of GHG emissions would be cumulatively considerable. The guidelines are clear that they do not support a zero net emissions threshold. If the lead agency does not have sufficient expertise in evaluating GHG impacts, it may rely on thresholds adopted by an agency with greater expertise.

On December 5, 2008 the SCAQMD Governing Board adopted an Interim quantitative GHG Significance Threshold for industrial projects where the SCAQMD is the lead agency (e.g., stationary source permit projects, rules, plans, etc.) of 10,000 Metric Tons (MT) CO₂ equivalent/year. In September 2010, the SCAQMD CEQA Significance Thresholds GHG Working Group released revisions which recommended a threshold of 3,000 MT CO₂e for all land use projects. This 3,000 MT/year recommendation has been used as a guideline for this analysis. In the absence of an adopted numerical threshold of significance, project related GHG emissions in excess of the guideline level are presumed to trigger a requirement for enhanced GHG reduction at the project level.

PROJECT RELATED GHG EMISSIONS GENERATION

Construction Activity GHG Emissions

The project is assumed to require slightly more than one year for construction. During project construction, the CalEEMod2013.2.2 computer model predicts that the construction activities will generate the annual CO₂e emissions identified in Table 12.

Table 12
Construction Emissions (Metric Tons CO₂e)

	CO ₂ e
Year 2017	366.2
Year 2018	2.9
Total	369.1
Amortized	12.3

CalEEMod Output provided in appendix

SCAQMD GHG emissions policy from construction activities is to amortize emissions over a 30-year lifetime. The amortized level is also provided. GHG impacts from construction are considered individually less-than-significant.

Project Operational GHG Emissions

The input assumptions for operational GHG emissions calculations, and the GHG conversion from consumption to annual regional CO₂e emissions are summarized in the CalEEMod2013.2.2 output files found in the appendix of this report.

The total operational and annualized construction emissions for the proposed project and approved project are identified in Table 13.

Table 13
Proposed Uses Operational Emissions

Consumption Source	MT CO ₂ e		
	Proposed	Approved	Net Difference (Proposed-Approved)
Area Sources	37.3	0.0	37.3
Energy Utilization	180.7	234.1	-53.4
Mobile Source	654.7	690.1	-35.4
Solid Waste Generation	58.6	17.8	40.8
Water Consumption	52.6	51.8	0.8
Construction	12.3	-	12.3
Total	996.2	993.7	14.8
Guideline Threshold	3,000	3,000	3,000
Exceeds Threshold?	No	No	No

Total project GHG emissions are well below the proposed annual significance threshold of 3,000 MT even without taking any credit for the approved uses. When examining net difference the proposed project is estimated to create 15 MT CO₂e per year more than the approved project. GHG emissions are less than significant.

CONSISTENCY WITH GHG PLANS, PROGRAMS AND POLICIES

The City of Costa Mesa has not yet developed a Greenhouse Gas Reduction Plan. The applicable GHG planning document is AB-32. As discussed above, the project is not expected to result in a significant increase in GHG emissions. As a result, the project results in GHG emissions below the recommended SCAQMD 3,000 ton threshold. Therefore, the project would not conflict with any applicable plan, policy, or regulation to reduce GHG emissions.

CALEEMOD2013.2.2 COMPUTER MODEL OUTPUT

PROPOSED PROJECT CONSTRUCTION AND OPERATIONAL EMISSIONS

- **Daily Emissions**
- **Annual Emissions**

APPROVED PROJECT OPERATIONAL EMISSIONS

- **Daily Emissions**
- **Annual Emissions**

EXHIBIT A

FINDINGS (APPROVAL)

- A. Pursuant to Section 13-29(g)(5) of the Municipal Code, Master Plan Amendment PA-09-15 A1 meets the broader goals of the 2000 General Plan and Mesa West Bluffs Urban Plan by exhibiting excellence in design, site planning, integration of uses and structures, and protection of the integrity of neighboring development.

The amended project meets the purpose and intent of the mixed-use overlay district, and the stated policies of the Mesa West Bluffs Urban Plan. The new building will feature architecture that will complement the surrounding industrial uses. The proposed project would meet the Assisted Living Facility, senior resident's health, and gathering needs of the community at a level no greater than which can be supported by planned infrastructure improvements. Master Plan Amendment PA-09-15 A1 is consistent with the goals, policies, objectives, and/or regulations of the General Plan, Zoning Code, and Mesa West Bluffs Urban Plan.

- B. The proposed Master Plan Amendment PA-09-15 A1 complies with Title 13, Section 13-83.52, Mixed-Use Overlay District, of the Municipal Code because the Master Plan is found to exhibit excellence in design, site planning, integration of uses and structures and protection of the integrity of neighboring development. The proposed project, as amended, complies with the Urban Plan to provide additional amenities or innovation in exchange for flexible development standards. Overall the proposed master plan, as amended, represents a desirable product type in conformance with the City's policy and regulatory documents. The expansion of the State Licensed Assisted Living Facility meets the overall need for senior housing. The addition of the civic and cultural amenities such as the Club Fitness Center and Community Event Center will provide access to additional sites available for physical and social health for our community.

- (1) The strict interpretation and application of the mixed-use overlay district's development standards would result in practical difficulty inconsistent with the purpose and intent of the General Plan and Urban Plan, while the deviation to the regulation allows for a development that better achieves the purposes and intent of the General Plan and Urban Plan. This project requires the deviation to maximize parking spaces below to meet the parking demand for the mixed uses on site which make is a mixed-use development.
- (2) The granting of a deviation results in a mixed-use development which exhibits excellence in design, site planning, integration of uses and structures and compatibility standards for residential development. This project uses quality materials and design in site planning and architecture. The project has also been conditioned to provide additional vertical landscaping to minimize the impact of the lack of ground cover. The structures which encroach into the setback have minimal visual impact.
- (3) The granting of a deviation will not be detrimental to the public health, safety, or welfare, or materially injurious to properties or improvements in the vicinity. The vehicular ramp which encroaches into the setback is surrounded by a wrought iron and pilaster fence to ensure the safety to Vivante's residents as well as the public.

- C. The amended project complies with Title 13, Section 13-29(e), of the Municipal Code because:
- a) The proposed development and use is compatible and harmonious with uses both onsite as well as those on surrounding properties. Specifically, interior and exterior noise attenuation for the Assisted Living Facility is required. On-site hazardous materials remediation is also required prior to issuance of building permits.
 - b) Safety and compatibility of the design of the buildings, parking areas, landscaping, luminaries, and other site features including functional aspects of the site development such as automobile and pedestrian circulation have been considered. The project shall provide a standard commercial drive approach from Babcock Street and Monrovia Avenue. The Assisted Living Facility expansion shall be fully-sprinklered. The lighting plan shall minimize light/glare to the surrounding neighbors and new residents to the fullest extent possible.
 - c) The planning application is for a project-specific case and does not establish a precedent for future development in the overlay zone.
 - d) The cumulative effects of Planning Application PA-07-20, as amended by Master Plan Amendment PA-09-15, as amended by Master Plan PA-09-15 A1 have been considered.
- D. The discharge of sewage from this subdivision into the public sewer system will not violate the requirements of the California Regional Water Quality Control Board pursuant to Division 7 (commencing with Section 13000 of the Water Code).
- E. The amended project has been reviewed for compliance with the California Environmental Quality Act (CEQA), the CEQA Guidelines, and the City's environmental procedures. The Westside Lofts Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the final master plan, pursuant to the California Environmental Quality Act. An Addendum to the Westside Lofts Initial Study/Mitigated Negative Declaration (IS/MND) and although the project has been amended, the environmental conclusions have not changed. Although the amended project could have a significant effect on the environment, mitigation measures have been included as conditions of approval that reduce impacts to the fullest extent reasonable and practicable. All significant impacts are reduced to a below a level of significance with implementation of conditions and mitigation measures.
- F. Mitigation Measures from the Westside Lofts IS/MND and the Addendum to the IS/MND have been included as conditions of approval. If any of these conditions are removed, the City Council must make a finding that the project will not result in significant environmental impacts, that the condition(s) are within the

responsibility and jurisdiction of another public agency, or that specific economic, social, or other considerations make the mitigation measures infeasible.

- G. The evidence presented in the record as a whole indicates that the project will not individually or cumulatively have an adverse effect on wildlife resources or habitat. The project site consists of ornamental, non-native vegetation and does not contain, nor is it in proximity to, any sensitive habitat areas.
- H. The amended project, as conditioned, is consistent with Chapter XII, Article 3, Transportation System Management of Title 13 of the Municipal Code in that the project's traffic impacts will be mitigated at all affected intersections and by the payment of traffic impact fees.
- I. The amended project has been reviewed for conformity with the Orange County Congestion Management Program (CMP) requirements and the additional traffic generated by the project does not cause the CMP highway system to exceed LOS "E".
- J. The revised site-specific 1.02 FAR for the Westside Lofts mixed-use development includes the building square footage of all proposed structures. The proposed scale, density, and intensity are considered suitable for the project site because the project is below the 1.25 FAR standard established in the Mesa West Bluffs Urban Plan when a project exemplifies overall design quality, site planning, seamless integration of Phase II next to the existing Vivante Phase I, and the overall project is within the development capacity of the General Plan.
- K. The proposed buildings are an excessive distance from the street necessitating fire apparatus access and provisions of an on-site fire hydrant(s) as required by the Costa Mesa Fire Department. The City's Fire Department has required the installation of an automatic fire sprinkler system pursuant to NFPA 13 requirements.
- L. The project meets the objectives of the Urban Plan by including public benefits such as: (a) Hazardous waste remediation of the site pursuant to the State Department of Toxic Substances Control (DTSC) requirements was completed in Phase I; (b) Undergrounding of Southern California Edison distribution lines along Monrovia frontage in the public right-of-way; (c) Incorporation of green building design, such as energy efficient windows, appliances, irrigation system, and building materials;