GARDEN GROVE

A G E N D A

GARDEN GROVE PLANNING COMMISSION

JULY 18, 2024 - 7:00 PM

COMMUNITY MEETING CENTER
11300 STANFORD AVENUE

Meeting Assistance: Any person requiring auxiliary aids and services, due to a disability, to address the Planning Commission, should contact the Community Development Department at (714) 741-5312 or email planning@ggcity.org 72 hours prior to the meeting to arrange for special accommodations. (Government Code §5494.3.2).

Agenda Item Descriptions: Are intended to give a brief, general description of the item. The Planning Commission may take legislative action deemed appropriate with respect to the item and is not limited to the recommended action indicated in staff reports or the agenda.

Documents/Writings: Any revised or additional documents/writings related to an item on the agenda distributed to all or a majority of the Planning Commission within 72 hours of a meeting, are made available for public inspection at the same time (1) in the Planning Services Division Office at 11222 Acacia Parkway, Garden Grove, CA 92840, during normal business hours; and (1) at the Community Meeting Center at the time of the meeting.

Public Comments: Members of the public who attend the meeting in-person and would like to address the Planning Commission are requested to complete a yellow speaker card indicating their name and address, and identifying the subject matter they wish to address. This card should be given to the Recording Secretary before the meeting begins. General comments are made during "Oral Communications" and are limited to three (3) minutes and to matters the Planning Commission has jurisdiction over. Persons wishing to address the Planning Commission regarding a Public Hearing matter will be called to the podium at the time the matter is being considered. Members of the public who wish to comment on matters before the Commission, in lieu of doing so in person, may submit comments by emailing public-comment@ggcity.org no later than 3:00 p.m. the day of the meeting. The comments will be provided to the Commission as part of the meeting record.

PLEASE SILENCE YOUR CELL PHONES DURING THE MEETING.

REGULAR MEETING AGENDA

ROLL CALL: CHAIR LINDSAY, VICE CHAIR RAMIREZ
COMMISSIONERS BEARD, CUEVA, CUNNINGHAM, LARICCHIA, PAREDES

PLEDGE OF ALLEGIANCE TO THE FLAG OF THE UNITED STATES OF AMERICA

A. ORAL COMMUNICATIONS - PUBLIC

B. APPROVAL OF MINUTES – June 20, 2024

C. PUBLIC HEARING(S) (Authorization for the Chair to execute Resolution shall be included in the motion.)

C.1. SITE PLAN NO. SP-138-2024
TENTATIVE TRACT MAP NO. TT-19314

APPLICANT: ASHTON 3

LOCATION: WEST SIDE OF BUARO STREET, BETWEEN LAMPSON AVENUE AND HARBOR BOULEARD, AT 12701 BUARO STREET

REQUEST: A request for Site Plan approval to construct thirty-five (35) three-story, "for-sale" residential condominium units and associated site improvements on an approximately 1.4-acre lot. The proposal includes two (2) affordable housing units for "very-low income" households. Inclusion of the two (2) "very low-income" units qualifies the project for a density bonus, concessions, waivers, and reduced parking pursuant to the State Density Bonus Law. Also, a Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium. The site is in the R-2 (Limited Multiple-Family Residential) zone. In conjunction with the requests, the Planning Commission will consider a determination that the project is categorically exempt from the California Environmental Quality Act (CEQA).

STAFF RECOMMENDATION: Approval of Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314, pursuant to the recommended Conditions of Approval.

D. MATTERS FROM COMMISSIONERS

E. MATTERS FROM STAFF

F. ADJOURNMENT

GARDEN GROVE PLANNING COMMISSION
Community Meeting Center
11300 Stanford Avenue, Garden Grove, CA 92840

Meeting Minutes
Thursday, June 20, 2024

CALL TO ORDER: 7:00 p.m.

ROLL CALL:

Commissioner Cueva
Commissioner Cunningham
Commissioner Laricchia
Commissioner Lindsay
Commissioner Paredes
Commissioner Ramirez

Absent: None

PLEDGE OF ALLEGIANCE: Led by Commissioner Paredes

Chair Lindsay opened the meeting in honor of Commissioner Randy Arbgast.

ORAL COMMUNICATIONS – PUBLIC – None

April 18, 2024 MINUTES:

Action: Received and filed.

Motion: Laricchia Second: Ramirez

Ayes: (6) Cueva, Cunningham, Laricchia, Lindsay, Paredes, Ramirez
Noes: (0) None

PUBLIC HEARING – SITE PLAN NO. SP-137-2024 AND CONDITIONAL USE PERMIT NO. CUP-261-2024 FOR PROPERTY LOCATED ON THE SOUTH SIDE OF GARDEN GROVE BOULEVARD, BETWEEN TAFT STREET AND EUCLID STREET, AT 11000 AND 11100 GARDEN GROVE BOULEVARD.

Applicant: BARGHAUSEN CONSULTING ENGINEERS, INC. (CHARLES MOSELEY)
Date: June 20, 2024

Request: A request for Site Plan and Conditional Use Permit approval to allow the construction and operation of a new fueling station, including a new 11,800 square foot fueling canopy with fifteen dispensing units, each with two pumps, and related site improvements. The project includes the

relocation and demolition of the existing Costco Warehouse fueling station, and the demolition of an existing commercial building, currently occupied by Office Depot, to accommodate the new fueling station. The site is in the CC-3 (Civic Center Core) zone. In conjunction with the request, the Planning Commission will also consider a determination that the project is categorically exempt from the California Environmental Quality Act (CEQA).

Action: Resolution No. 6089-24 was approved with amendments to the Conditions of Approval. Condition No. 82 was deleted and Condition Nos. 83 and 85 were revised and re-numbered as shown below. Six people spoke on the project.

82. All lighting structures shall be placed so as to confine direct rays to the subject property. All exterior lights shall be reviewed, approved and shall be subject to verification by the Planning Services Division. Lighting adjacent to residential properties shall be restricted to low, decorative type, wall-mounted lights, or ground lighting system. Lighting in the common and parking areas shall be directed, positioned or shielded in such manner so as not to unreasonably illuminate the window area of nearby residences. Parking area lighting shall be provided during the hours of darkness the establishment is open at a minimum of two-foot candles of light, and one-foot candle of light during all other hours of darkness.

84-j. The applicant shall install evergreen landscaping on the south and east portion of the subject site adjacent to the residential lots for screening. The size, type and amount of landscaping shall be subject to approval by the Community Development Department, Planning Services Division.

Motion: Lindsay Second: Ramirez

Ayes: (6) Cueva, Cunningham, Laricchia, Lindsay, Paredes, Ramirez
Noes: (0) None

PUBLIC HEARING –AMENDMENT NO. A-039-2024 and CONDITIONAL USE PERMIT NO. CUP-284-09 (REV. 2024) FOR PROPERTY LOCATED ON THE WEST SIDE OF MAIN STREET, BETWEEN ACACIA PARKWAY AND GARDEN GROVE BOULEVARD, AT 12941 MAIN STREET.

Applicant: HTB, INC.
Date: June 20, 2024

Request: A request for approval of a Zoning Text Amendment to Title 9 (Land Use) of the Garden Grove Municipal Code pertaining to billiard parlors and pool halls. The proposed Zoning Text Amendment would update portions of Chapters 9.04 and 9.18 of Title 9 of the City of Garden Grove Municipal Code to update definitions, permitted uses, and special operating standards for billiard parlors and pool halls, including amending the CC-2 (Civic Center Main Street) zone to allow billiard parlors and pool halls as an incidental use to "full-service dine-in eating establishment/restaurant", subject to a conditional use permit. Also, a request to modify Conditional Use Permit No. CUP-284-09 (REV. 2023) to permit an existing restaurant, located at 12941 Main Street in the CC-2 (Civic Center Main Street) zone, to operate a billiard parlor with eight (8) pool tables as an incidental use, contingent upon the adoption and effectiveness of the proposed Zoning Text Amendment. Upon approval and exercise of the subject request, the Conditional Use Permit previously governing the tenant space, CUP-284-09 (REV. 2023), would be revoked and become null and void, and replaced by the modified Conditional Use Permit.

The Planning Commission will also consider a recommendation that the City Council determine that the proposed Project is exempt from review under the California Environmental Quality Act.

Action: Resolution Nos. 6090-24 (A) and 6091-24 (CUP) were approved. One letter of concern in regard to extended operating hours was submitted by Eron Kaylor (Heatherwood Apartments), however, the hours were not modified.

Motion: Laricchia Second: Cueva

Ayes: (6) Cueva, Cunningham, Laricchia, Lindsay, Paredes, Ramirez
Noes: (0) None

Commissioner Paredes recused himself from the following item due to conflict of interest as he lives next to the subject property.

<u>PUBLIC HEARING – SITE PLAN NO. SP-111-2022(TE1) AND TENTATIVE PARCEL MAP NO. PM-2021-190(TE1) FOR PROPERTY LOCATED ON THE NORTHEAST CORNER OF GARDEN GROVE BOULEVARD AND BROOKHURST STREET AT 10201 AND 10231 GARDEN GROVE BOULEVARD.</u>

Applicant: MICHAEL DAO
Date: June 20, 2024

Request: A request for approval of a one-year time extension for the approved entitlements under Site Plan No. SP-111-2022 and Tentative Parcel Map

No. PM-2021-190, as modified by Minor Modification No. 1, which allows the consolidation of two (2) existing parcels into a single 1.86-acre parcel, and the construction of a five-story mixed-use development on the 1.86-acre site consisting of 5,312 square feet of retail space, 3,548 square feet for an art gallery use, 10,745 square feet of medical space, and 52 apartment units. A California Environmental Quality Act (CEQA) determination is not required as the project was previously exempted.

Action: Resolution No. 6092-24 was approved. One person spoke, and one letter of opposition was submitted by Steve Trivoli noting the high-density project would increase traffic and safety concerns.

Motion: Ramirez Second: Lindsay

Ayes:	(5)	Cueva, Cunningham, Laricchia, Lindsay, Ramirez
Noes:	(0)	None
Absent:	(1)	Paredes

Commissioner Paredes rejoined the meeting.

MATTERS FROM COMMISSIONERS: Commissioner Laricchia asked about the status of stalled construction on two residential lots on Lampson Avenue/9th Street and College Avenue/9th Street. Staff responded construction delays were likely due to waiting on power from Southern California Edison as permits could not be issued without power.

Chair Lindsay asked how Main Street could be regularly maintained in regard to clean-up, replacing lightbulbs on tree lights, and fixing electrical outlets. Staff would contact the Main Street Commission to implement a discussion on possible solutions for keeping Main Street clean. Also, the Police Department would look into the Narcan refuse found in and around the Main Street area.

MATTERS FROM STAFF: Planning Staff introduced two new Planning Aides, Zachary Hernandez and Adrian Andujo, and distributed lapel pins for the three-month long 'Plan, Build, Beautify Campaign'. Staff also noted the July 4th meeting would be cancelled and the next meeting would be held on July 18th.

ADJOURNMENT: At 8:40 p.m.

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Judith Moore
Recording Secretary

COMMUNITY DEVELOPMENT DEPARTMENT PLANNING STAFF REPORT

AGENDA ITEM NO.: C.1.	**SITE LOCATION:** West side of Buaro Street, Between Lampson Avenue and Harbor Boulevard, at 12701 Buaro Street
HEARING DATE: July 18, 2024	**GENERAL PLAN:** LMR (Low Medium Density Residential)
CASE NO.: Site Plan No. SP-138-2024 & Tentative Tract Map No. TT-19314	**ZONE:** R-2 (Limited Multiple Residential)
APPLICANT: Ashton3 (Matt Ashton)	**APN:** 231-383-48
PROPERTY OWNER: RAJO Investments	**CEQA DETERMINATION:** Exempt - Section 15332 "In-Fill Development Projects"

REQUEST:

The applicant is requesting approval of: (1) a Site Plan to construct thirty-five (35) three-story residential condominium units and associated site improvements on an approximately 1.4-acre lot, and (2) Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium. The proposal includes two (2) affordable housing units for "very-low income" households, qualifying the project for a 25% density bonus, incentives or concessions, waivers or reductions of development standards, and reduced parking ratios, pursuant to the State Density Bonus Law and Garden Grove Municipal Code (GGMC) Section 9.60.040 (collectively, the "Density Bonus Law" or "DBL"). The project has been designed to incorporate certain incentives / concessions and waivers and reductions of development standards pursuant to the DBL.

BACKGROUND:

The project site is an approximately 61,294 square-foot (1.4 acres) flag lot, located on the west side of Buaro Street, between Lampson Avenue and Harbor Boulevard, at 12701 Buaro Street. The subject site has a General Plan Land Use designation of LMR (Low Medium Density Residential) and is zoned R-2 (Limited Multiple Residential).

The property abuts R-1 (Single Family Residential) zoned properties to the west and south. To the north, the property is adjacent to the Village Bible Church, also located in the R-1 zone. To the east and south, the property is adjacent to multiple-family residential uses in the R-2 zone. Further to the east, across Buaro Street, the property is adjacent to residential properties within Planned Unit Development No. PUD-121-98, which is implemented by the R-3 standards of the Land Use Code. Surrounding uses include single-family and multiple-family residential developments,

a religious facility, and commercial uses at the intersection of Buaro Street and Harbor Boulevard.

The subject site is currently improved with an unoccupied two-story single-family residence that was originally constructed in 1921. The existing structure has not been identified as a part of any historical record. Due to numerous break-ins and squatting activity on the property, the building has most recently been "red-tagged" by the City's Building and Safety Division. As of this writing, a permit for the demolition of the building has been applied for. Consequently, all existing site improvements would be demolished to accommodate the proposed project.

The applicant is proposing thirty-five (35) attached townhouse-style condominium units, across six (6) buildings. Other site features, including drive aisles, walkways, and recreation areas, would be shared amongst the entire development.

The subject sites' General Plan Land Use designation of LMR is intended to allow smaller scale multi-family housing, and is a transition between the detached single-family areas and the higher-density multiple-family areas. The LMR is implemented, in part, by the R-2 zone, which allows residential developments with densities of up to 21 units per acre. The proposed project, as designed, is consistent with numerous goals and policies of the General Plan Land Use Element and Housing Element, including the following:

1. Policy LU-1.3: Support the production of housing citywide that is affordable to lower- and moderate-income households consistent with the policies and targets set forth in the Housing Element.
2. Goal LU-2: Stable, well-maintained residential neighborhoods in Garden Grove.
3. Policy LU-2.4: Assure that the type and intensity of land use shall be consistent with that of the immediate neighborhood.
4. Policy LU-3.2: Support development of multi-family housing that provides a diversity of densities, types, and prices that meet the needs of all household income levels.
5. Policy LU-3.3: Encourage developers to build housing projects at or above maximum allowable densities.
6. Goal LU-4: Uses compatible with one another.
7. Policy LU-4.1: Locate higher-density residential uses within proximity of commercial uses to encourage pedestrian traffic, and to provide a consumer base for commercial uses.
8. Policy H-2.1: Preserve and expand the City's supply of affordable rental and ownership housing for lower-income households.
9. Policy H-2.3: Provide density bonuses and other financial and regulatory incentives to facilitate the development of affordable housing.
10. Policy H-3.7: Encourage infill housing development that is compatible in character with established residential neighborhoods.

With the inclusion of two (2) affordable housing units for "very-low income" households, pursuant the DBL, the project qualifies for a density bonus of up to 25% over the base density, reduced parking ratios, and the following one (1) incentive/concession and ten (10) waivers/reductions of development standards set forth in the Garden Grove Municipal Code (GGMC):

1. An incentive/concession to reduce the stepback at the second and third floors adjacent to R-1 properties from the required twenty feet (20'-0") and forty feet (40'-0"), respectively, to ten feet (10'-0") at the rear and side property lines (GGMC Sections 9.12.040.020.A and 9.12.040.050.A.3);
2. A reduction of the required minimum front setback requirements for the first, second, and third floors, to maintain a minimum ten-foot (10'-0") setback for all floors (Section 9.12.040.020.A);
3. A reduction of the required minimum separation distance between vehicular accessways and residential units from five feet (5'-0") to a minimum one-foot nine inches (1'-9") (Section 9.12.040.050.A.2.e);
4. A reduction of the required additional two-foot (2'-0") separation between buildings that feature a shared walkway, within the separation area, to four inches (0'-4") (Section 9.12.040.050.A.2.i);
5. A waiver/reduction of the required minimum depth for unit covered entry from three feet (3'-0") to a one-foot (1'-0") deep "eyebrow" awning (Section 9.12.040.050.G.1);
6. A reduction of the required minimum width for an active recreation area from thirty feet (30'-0") to twenty-five feet (25'-0") wide (Section 9.12.040.050.J.7.b);
7. A reduction of the minimum active recreation area required for a property of this size from 2,500 square feet to 920 square feet (Section 9.12.040.050.J.7.c);
8. A waiver to deviate from the minimum amenity requirements for Active Common Open Space/Recreation areas (Section 9.12.040.050.J.7.d);
9. A reduction of the required minimum combined usable private and common open space per unit from 300 square feet to 163 square feet (Section 9.12.040.050.J.2);
10. A waiver to deviate from the minimum amenity requirements for Passive Common Open Space areas (Section 9.12.040.050.J.11); and
11. A waiver to deviate from the requirement to provide shared trash enclosures for developments with more than five (5) units to instead allow three (3) trash carts per individual unit (Section 9.12.040.260.B.2).

An Affordable Housing Regulatory Agreement consistent with the DBL and Section 9.60.050 of the Garden Grove Municipal Code would be recorded to ensure affordability of the very-low income units for the initial occupant of said units.

On July 1, 2024, a neighborhood meeting was held at the Village Bible Church, located at 12671 Buaro Street, to invite and inform property owners located within a 300-foot radius of the project site about the proposed project. At the meeting, nine (9) residents were present and raised concerns generally related to current on-street

parking and traffic issues in the area. They were concerned that the project would not provide enough off-street parking within the development, resulting in impacts to the availability of on-street parking in the neighboring area. The applicant informed the residents that the number of parking spaces provided by the project would exceed the minimum parking requirements under the DBL. In addition, the applicant expressed interest in partnering with the neighborhood to help communicate their concerns to City Staff.

PROJECT STATISTICS:

Standard	Provided	Code Requirement[1]	Meets Code
Lot Size	61,294 square feet	7,200 square feet	Yes
Density	35 units (25 units per acre)	30[2] units maximum (21 units per acre)	**Density Bonus**
Lot coverage	37.1%	50%	Yes
Total Parking	67 spaces	51 spaces[3]	Yes
Recreation Area Total	5,710 square feet	10,500 square feet (35 units x 300 square feet)	**DBL Waiver**
Private Area	0 square feet		
Common Area - Active	920 square feet		
Common Area - Passive[4]	4,790 square feet		
Recreation Area and Dimensions	920 square feet, 25' in any direction	900 square feet, 30' in any direction	**DBL Waiver**
Building Separation[5]	Min. 10'-4"	10'-0" + 2'-0"	**DBL Waiver**
Building Height	35'-0"	35 feet maximum	Yes
Stories – Maximum	3 stories	3 stories	Yes
Building Setbacks			
1st & 2nd floors East (Front)	10'-0"	20 feet	**DBL Waiver**
3rd floor East (Front)	10'-0"	25 feet	**DBL Waiver**
1st floor West (Rear)	10'-0"	10 feet	Yes
1st floor North (Side)	10'-0"	10 feet	Yes
1st floor South (Side)	10'-0"	10 feet	Yes
Building Stepbacks (if adjacent to R-1)			
2nd floor West (Rear), North (Side), South (Side)	10'-0"	20 feet	**DBL Incentive / Concession**
3rd floor West (Rear), North (Side), South (Side)	10'-0"	40 feet	**DBL Incentive / Concession**
Unit Size			
1-bedroom unit	972 square feet	750 square feet	Yes
2-bedroom unit	1,231 square feet	900 square feet	Yes
3-bedroom unit	1,562 square feet	1,050 square feet	Yes

[1] All Code Requirements are listed as minimums, unless otherwise specified.

[2] The DBL requires all fractional units for affordable housing projects to be rounded up to the next whole number. In this case, the base density is calculated at 29.4 units; thus, it would be rounded up to 30 units per State law.

[3] Parking ratios are proposed as required in the DBL.

[4] Up to a maximum 50% of the total required common open space areas may count as passive open spaces.

[5] In instances where a walkway/pathway is provided within a separation area, the separation area is to be increased in width by an additional two feet (2'-0").

DISCUSSION:

DENSITY BONUS LAW:

The State Density Bonus Law (Government Code Section 65915 et seq.) and GGMC Section 9.60.040 (Residential Density Bonus) (collectively, "Density Bonus Law" or "DBL") entitles applicants to a density bonus, incentives or concessions, waivers or reductions of development standards, and reduced parking ratios to encourage the construction of affordable housing units. The project qualifies for one incentive / concession and unlimited waivers or reductions of development standards by providing two (2) very-low income units.

Density Bonus

A maximum base density of 21 units per acre is allowed in both the LMR General Plan Land Use Designation and in the R-2 zone pursuant to Section 9.12.040.020.A of the Garden Grove Municipal Code, which yields thirty (30) units for the 1.4-acre lot. With the inclusion of two (2) affordable units for "very-low income" households, the project is providing 7% of its base density for affordable housing. Thus, pursuant to the Density Bonus Law, the applicant is entitled to a Density Bonus of up to 25%. The applicant is proposing a 17% Density Bonus, resulting in five (5) additional units above the maximum base density permitted in the R-2 zone, for a total of thirty-five (35) units. Thus, the proposed project is within the maximum residential density allowed under the DBL.

Reduced Parking Ratio

As an affordable housing project, the project is entitled to the reduced parking ratios set forth in the DBL. The DBL requires a minimum of one (1) parking space for each zero- to one-bedroom unit, and one-and-a-half (1.5) parking spaces for each unit with two to three bedrooms. Based on the proposed plan, the project is required to provide a minimum of 51 spaces, as shown in Table A below.

Minimum Parking Spaces Required per Unit (Per DBL)			
Type of unit	**Number of units**	**Parking ratio**	**Required parking**
One-bedroom	4 units	1 space per unit	4
Two to three bedrooms	31 units	1.5 spaces per unit	47
Total	35 units	**Total**	51 spaces

The project has been designed to comply with the parking requirements of the DBL. The project proposes thirty-one (31) two-car garages, four (4) one-car garages, and one accessible guest parking space, for a total of sixty-seven (67) parking spaces. Thus, the project exceeds the minimum required parking under the DBL by sixteen (16) spaces.

Concessions and Waivers

The applicant has requested one (1) incentive/concession and ten (10) waivers/reductions of development standards pursuant to the DBL to facilitate the proposed development.

Concessions

A "concession or incentive" includes a reduction in site development standards or a modification of zoning code requirements or architectural design requirements, approval of mixed use zoning in conjunction with a housing project, and other regulatory incentives or concessions that result in a reduction in affordable housing costs. The DBL provides that a city must grant a requested concession or incentive unless it makes a written finding, based upon substantial evidence, that the concession or incentive: (1) does not result in identifiable and actual cost reductions to provide for affordable housing costs for the targeted units; (2) would have a specific, adverse impact upon public health and safety or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households; or (3) would be contrary to state or federal law.

The DBL provides that an applicant is entitled to one (1) "concession or incentive" if it offers to restrict 5% of the housing units for very-low income households. The project would provide two (2) very-low income units, or 7% of the base density, making the project eligible for one (1) concession. The following concession is requested for the project:

Incentive/Concession 1:

The subject property shares a property line with R-1 zoned properties to the north (side), west (rear), and south (side). GGMC Sections 9.12.040.020.A and 9.12.040.050.A.3 provide that on any R-2 zoned property adjacent to an R-1 zoned property, the second floor shall be stepped back a minimum of twenty feet (20'-0") from the property line, and any third-floor area shall be stepped back a minimum of forty feet (40'-0") from the property line. Utilizing the incentive/concession provided for under the DBL, the proposed project would not provide an additional stepback at the second or third floors. A minimum ten-foot (10'-0") setback would be provided at all floors adjacent to all property lines, including property lines adjacent to R-1 zoned properties.

The applicant contends this incentive/concession is needed to reduce construction costs in order to provide the two affordable units.

Waivers or Reductions in Development Standards

The DBL provides that, in addition to a density bonus and concessions or incentives, an applicant may propose waivers or reductions of development standards that will have the effect of physically precluding the construction of the proposed development, with the required density bonus and concessions or incentives permitted by the SBDL. Similar to a concession or incentive, a city must waive or reduce a development standard that would physically preclude construction of the proposed development unless the waiver or reduction: (1) would have a specific, adverse impact upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact; (2) would have an adverse impact on any real property that is listed in the California Register of Historical Resources; or (3) would be contrary to state or federal law.

The proposed project incorporates the following ten (10) waivers or reductions of development standards, which the applicant contends would physically preclude construction of the project as proposed:

Waiver/Reduction 1:

GGMC Section 9.12.040.020 generally requires residential projects in the R-2 zone to provide a minimum twenty-foot (20'-0") front setback for the first and second floor, and a minimum twenty-five foot (25'-0") front setback for the third floor.

Given the flag shape of the lot, the twenty-foot (20'-0") and twenty-five foot (25'-0") front setbacks are applied from the eastern property line of the main portion of the lot, and not from thirty-foot (30'-0") wide portion of the eastern property line fronting Buaro Street. The applicant contends that application of these setback requirements would make it infeasible to construct the proposed project at the desired density.

The project proposes to reduce the minimum side and rear setback requirements for the third floor and the minimum front setback requirement for all three floors and, instead, provides a ten-foot (10'-0") setback to all floors, on all sides, to all property lines.

Waiver/Reduction 2:

GGMC Section 9.12.040.050.A.2.e generally requires a minimum five-foot (5'-0") separation distance between vehicular accessways and habitable portions of residential units in multiple-family residential developments. The applicant contends it is not possible to achieve the full 5'-0" separation distance for all units given the density, and lot size and configuration. The curvature of the proposed street corners narrows the separation between the unit and the vehicle accessways. The project proposes to reduce the separation requirement for some of the units to less than five feet (5'-0"). Units 12, 20, and 27 all do not meet the minimum five-foot (5'-0") separation. At the narrowest point between Unit 20 and the main drive aisle, there

would be a one-foot nine-inch (1’-9”) separation. Separations throughout the rest of the proposed development would vary between one-foot nine-inch (1’-9”) and five-feet four inches (5’-4”).

Waiver/Reduction 3:

GGMC Section 9.12.040.050.A.2.i generally provides that for any multiple-family residential development, no pedestrian walkways/pathways shall be provided within the required 10’-0” separation area between buildings unless that separation area is increased in width by a minimum of two feet. Units 13 and 19 would be separated by a distance of ten feet and four inches (10’-4”), which meets the minimum ten-foot (10’-0”) separation required by Section 9.12.040.050.A.1. A shared walkway is provided between the units, which triggers the requirement for an additional two feet (2’-0”) of separation per Section 9.12.040.050.A.2.i, for a total of twelve feet (12’-0”) required. The separation provided between the units would be increased by an additional four inches (0’-4”), to a total of ten feet and four inches (10’-4”). Between the two units is an ADA accessible path, and landscape planters of approximately three feet (3’-0”) in width. Additionally, the location of the main entry doors between Units 13 and 19 are more than fifteen feet (15’-0”) apart, and do not directly face one another.

Waiver/Reduction 4:

GGMC Section 9.12.040.050.G.1 generally requires each individual dwelling unit in a multiple-family residential building to have a main entry that is clearly defined by use of a stoop, framed doorway, or covered doorway that is recessed from the building façade a minimum depth of three feet (3’-0”). The applicant contends that application of this standard would negatively affect the feasibility of the proposed project and that if the entrance of each unit were to be recessed three feet, it would affect the uses of all the floors, require density to be reduced, and preclude providing an ADA accessible bathroom. Therefore, the project proposes to waive this requirement, and instead provide a covered entry for each unit in the form of an “eyebrow” awning, with a one-foot (1’-0”) overhang, extending beyond the wall of the unit.

Waiver/Reduction 5:

GGMC Section 9.12.040.050.J.7.b requires a minimum thirty-foot (30’-0”) width in any direction for an active recreation area. The applicant contends that it is infeasible to meet this standard on the proposed site at the proposed density. Therefore, the project proposes to reduce the active recreation area to approximately twenty-five foot (25’-0”) in one direction, and thirty-seven feet (37’-0”) in the other direction.

Waiver/Reduction 6:

GGMC Section 9.12.040.050.J.7.c requires a minimum 2,500 square feet of active recreation area for a multiple-family property between 50,000 square feet and

69,999 square feet. The applicant contends that it is infeasible to meet this standard on the proposed site at the proposed density. Therefore, the project proposes a single active recreation area of approximately 920 square feet, located along the southern property line.

Waiver/Reduction 7:

GGMC Section 9.12.040.050.J.7.d establishes the minimum amenity requirements for Active Common Open Space/Recreation areas. Based on the number of units provided in the proposed project, this section would require the following amenities:

- A minimum of four (4) barbecues with table seating,
- A minimum 70 square feet of community garden area,
- A minimum of 1,750 square feet of outdoor active use area, and
- A minimum of two (2) of the following: a business center with a minimum of five (5) work stations, a minimum 250 square-foot gym, or a minimum 400 square-foot clubhouse with a kitchen

The applicant contends that it is infeasible to meet this standard on the proposed site at the proposed density. Therefore, a waiver from having to provide most of the above amenities is proposed. As proposed, the project would reduce the outdoor active recreation area to 920 square feet. Included within the active recreation area is one (1) barbecue, and two (2) outdoor dining tables.

Waiver/Reduction 8:

GGMC Section 9.12.040.050.J.2 generally requires a minimum 300 square feet of combined usable private and common open space per unit for multiple-family residential projects, which would equate to 10,500 square feet for a 35-unit project. The applicant contends that this standard cannot be met without reducing the density of the project. Therefore, the proposed project provides 163 square feet of open space per unit. The open space is provided as common open space, both as active recreation area and passive recreation areas. There are no private open spaces provided.

Waiver/Reduction 9:

GGMC Section 9.12.040.050.J.11 sets forth minimum amenity requirements for Passive Common Open Space areas. Pursuant to this provision, Passive Common Open Spaces generally must have a dimension of no less than ten feet (10’-0”), and include at least three (3) of the following amenities:

- Pathways
- Benches/Tables
- Raised landscaped beds
- Gazebo or similar shade structure
- Community garden

- Outdoor game feature
- Water fountains or other water features

The proposed development would include a perimeter passive open space area, improved with a walking trail. Areas with a minimum ten-foot (10'-0") width would count as passive recreation area. Included with the subject open space would be pathways, and a seating area. The requirement to provide a third amenity is proposed to be waived.

Waiver/Reduction 10:

GGMC Section 9.12.040.260.B.2 generally requires the use of three cubic-yard refuse and recyclable bins and shared storage enclosures for multiple-family developments with more than five (5) units. The project instead proposes three (3) individual carts per unit: trash, recycling, and organic waste. These carts are to be stored in the individual garages. Storage areas for the carts will not encroach into the required interior clearances for garage parking. Trash collection would occur with trash collection vehicles driving onto the site to pick-up waste. Republic Services has reviewed the proposed project, and the proposed trash truck access, and has expressed its support.

Concessions and Waivers Justification

The applicant's justification for the proposed incentives and concessions and waivers and reductions of development standards incorporated into the proposed project is that application of all of the Municipal Code standards for multiple-family developments, in combination, would likely require the development to provide a shared parking structure to accommodate thirty-five (35) units, and would thus preclude the proposed internal circulation system and individual garages per unit. The construction of a shared parking garage or structure, or an increase in overall building height would have a significant negative financial impact on the project, resulting in infeasibility to achieve maximum density allowed under the Density Bonus Law. Furthermore, given the layout of the existing property as a "flag-lot," the property essentially loses 0.21 acres of developable area when accounting for the driveway area. Conceding and/or waiving certain development standards can help account for this loss of developable land. A copy of the Density Bonus Application for the project is attached as Attachment 3, and includes the applicant's justification for granting the concessions and waivers to facilitate the development of the project.

SITE PLAN:

Site Design and Circulation

The property is a "flag lot," with thirty feet (30'-0") of frontage along Buaro Street, an approximately 307' long driveway, and an approximately 1.19-acre core of the property at the end of the driveway to the west. The driveway is currently shared between the subject property, and the existing Golden Gate Apartments directly to

the south. A new Reciprocal Easement Agreement was recorded between both property owners in January 2024. Improvements to the driveway would include new paving, a four-foot (4'-0") sidewalk, a twenty-one foot (21'-0") wide drive aisle, and landscaping along the north and south perimeter property lines.

Within the core of the lot, the proposed design would consist of thirty-five (35) attached residential condominium units across six (6) buildings. Units 1 through 6 would be located along the northern property line, within Building 1. Building 2, across the drive aisle to the south from Building 1, would contain Units 7 through 13. Building 3, across a shared landscaped courtyard area, would feature Units 14 through 20. Units 21 through 26 would be located within Building 4, located along the southern property line. Along the eastern property line would be Units 27 through 33, within Building 5. Building 6 would be located in the southeastern-most corner of the property, containing Units 34 and 35.

A twenty-five foot (25'-0") wide private street system would provide vehicular access from the aforementioned shared entrance driveway from Buaro Street, to the respective private enclosed garages of each unit. Each private garage has been designed to maintain a minimum thirty-foot (30'-0") vehicular back-up distance. The proposed internal circulation system has been reviewed and approved by the City's Engineering Division, Orange County Fire Authority (OCFA) and Republic Services.

A four-foot (4'-0") wide sidewalk trail system would provide access to the front door of each unit. The sidewalk trail would wrap around the north, west, south, and east property lines, within the building setbacks. The trail system would also connect to the sidewalk along the main entry driveway, ultimately connecting to Buaro Street to the east. Throughout the trail system, landscaping is proposed. In areas where the trail area is at least ten feet (10'-0") wide, it would count as passive recreation areas. A "reading nook" next to Unit 6 along the north property line would be considered part of the passive recreation area.

A common recreation area improved with lounge seating, a barbecue station, and landscaping would be located between Buildings 4 and 6, along the southern property line. This recreation area would be connected to the rest of the site via the walking trail system. One (1) open ADA guest parking space would be provided adjacent to the proposed common recreation space.

Parking

The project provides a total of sixty-seven (67) parking spaces, which exceeds the minimum parking requirements under the DBL by sixteen (16) spaces. The project proposes thirty-one (31) two-car garages, four (4) one-car garages, and one accessible guest parking space. Each of the garages would be private to an individual unit, while the one (1) guest parking space would be located between Building 4 and Building 6, off of the main drive aisle.

Unit Design

The proposed project would provide four (4) one-bedroom units, four (4) two-bedroom units, and twenty-seven (27) three-bedroom units, for a total of thirty-five (35) units.

The units would range in size from 972 square feet to 1,562 square feet, and feature the same general floor plan design concept: a ground-level garage, a second-floor with a kitchen and living room, and a third-floor bedroom area. The larger two- and three-bedroom units would also feature a ground-floor powder room, accessible from the entry foyer. Additionally, the three-bedroom unit types would have an optional "den" on the ground-floor, which would replace the ground-level powder room.

Unit Types				
Unit Plan	**Bedrooms/Bathrooms**	**Living Area**	**Garage Parking**	**Total Number of Units**
1	1 bedroom and 2 bathroom	972 s.f.	1-car	4 units
2	2 bedrooms and 3 bathrooms	1,231 s.f.	2-car	4 units
3	3 bedrooms and 3+ bathrooms	1,562 s.f.	2-car	27 units

Open Space and Recreational Area

Section 9.12.040.050.J of the Municipal Code requires the proposed development to provide a minimum of 10,500 square feet of open space (300 square feet per unit). All provided open space areas would be common and shared amongst all of the proposed units. Common open space and active recreation areas would be provided in two forms, as a "pocket park" active recreation area, and a perimeter walkway trail with passive open space areas.

A common recreation area improved with lounge seating, a barbecue station, and landscaping would be located between Buildings 4 and 6, along the southern property line. This "pocket park" space would amount to approximately 920 square feet, with a minimum dimension of twenty-five feet (25'-0") in any one direction. A waiver has been proposed to account for the reduction in width. This recreation area would be connected to the rest of the site via the perimeter walkway trail system.

Up to a maximum 50% of the total required common open space areas may count as passive open spaces. Based on the Municipal Code requirement of 300 square feet of open space is required per unit, for a total of 10,500 square feet. Discounting the 920 square feet of active recreation space provided, the maximum 50% of passive recreation space that may be provided is 4,790 square feet. Whilst there is additional passive open space provided on-site, only that maximum of 4,790 square feet can be counted toward the overall total of open space provided.

Amenities

In addition to the minimum size and dimension requirements, the Municipal Code Section 9.12.040.050.J.7.d. requires multiple-family residential developments to

provide specific amenities within the required active open space. The required amenities are additive based on the number of units. The proposed design includes a variety of amenities that will be distributed evenly across the site.

As proposed, and as described previously, the project does not meet the amenity requirements, and the applicant has proposed a waiver from the applicable amenity standards. The common recreation space area, the "pocket park," between Buildings 4 and 6 would provide a barbecue, and permanent seating. The entrance to the perimeter trail system, adjacent to Building 1, as part of the proposed passive recreation areas, would provide a "reading nook" seating area, and pet waste stations.

Site Landscaping

GGMC Section 9.12.040.090 (Landscaping Requirements) requires all areas that are not designated for walkways, parking spaces, drive aisles, and private recreation areas, to be fully landscaped and automatically irrigated. The project proposes landscaping in all required setbacks, with the exception of areas designated for drive aisles or walkways, using a variety of plant materials. Areas along the shared entry driveway would also receive landscaping along the perimeter block walls. Pockets of landscaping are proposed between the garage doors, along the drive aisle. Along the southern property line, a more densely planted row of trees is proposed to help screen the view from the upper floors to the adjacent R-1 zoned properties.

All of the landscaped areas would be fitted with automatic irrigation systems, and a planting palate that complies with the City's Water Efficiency Guidelines.

Building Architecture

The proposed multi-family apartment building would be three (3) stories, and thirty-five feet (35'-0") in height. The proposed architecture generally features a contemporary design, with breaks in façades, a hipped roof with multiple planes, and a variety of colors to provide intrigue. The upper floors would cantilever approximately two feet (2'-0") beyond the ground-level garages.

Along the western property line, Buildings 1, 2, 3, and 4 have been designed in a manner such that no large, egress windows on the second and third floors would directly face toward the adjacent single-family homes on abutting properties. Along the southern property line, Buildings 4 and 6 have been designed in a manner that limits the number of egress windows on the second and third floors to only those windows necessary by the Building Code. In addition, the windows that are required by the Building Code would be sized to the minimum size allowable, would feature opaque glass, and would have a dense row of screening trees planted along the southern property lines in an effort to limit views from the upper floors.

Along the front property line to the east, the property is adjacent to multiple-family developments in the R-2 (Limited Multiple Residential) zone. Views from the upper

floors of the proposed project would largely be limited to landscape setback areas, parking, carports, and rooftops. Therefore, specific privacy provisions are not proposed for Buildings 5 and 6 along said property line.

The building design would include stucco exteriors, concrete tile roofs, and wood fascia boards. Unit entries would feature an "eyebrow" awning above each door, with a one-foot (1'-0") deep projection beyond the walls of the unit. Unit entry doors would be of a decorative variety, with glass door lite inserts. The proposed color scheme exhibits earthy red, brown, and off-white hues, which would be complimentary to the immediate neighborhood.

TENTATIVE TRACT MAP:

In accordance with the State Subdivision Map Act, the applicant is requesting approval of Tentative Tract Map No. TT-19314 to create a one-lot subdivision for the purpose of selling each unit as a condominium. As proposed in the Tentative Tract, the project will consist of thirty-five (35) dwelling units, and one (1) lot will consist of the common recreation and vehicular drive aisle areas. The proposed Tentative Tract Map is in conformance with the proposed Municipal Code requirements for the site, as well as the State Subdivision Map Act.

California Environmental Quality Act (CEQA):

CEQA's Class 32 exemption applies to in-fill development projects (CEQA Guidelines §15332). A project can qualify for a Class 32 exemption if the proposed project: (1) is consistent with applicable General Plan designation and all general plan policies, as well as with applicable zoning designation and regulations; (2) the proposed development occurs within City limits on a project site of no more than five (5) acres substantially surrounded by urban uses; (3) the project site has no value as habitat for endangered, rare, or threatened species; (4) the approval of the project would not result in any significant effects relating to traffic, noise, air quality, or water quality; and (5) the site can be adequately served by all required utilities and public services (CEQA Guidelines §15332).

The project is consistent with General Plan policies and regulations. The subject site is located fully within an urbanized area in the City, on a 1.4-acre site. The subject site was surveyed, and does not have any known habitat for endangered, threatened, or rare species of wildlife. Traffic, noise, air quality, and water quality studies have been prepared by licensed firms to study the impact of the proposed development, and no significant impacts have been identified. The traffic, noise, air quality, and water quality studies are appended to the Staff Report. Lastly, the Public Works Department has reviewed the proposed development, and found that it can be adequately served by all required utilities and public services. Consequently, it can be determined that the project can be exempted from further CEQA action under the Class 32 exemption.

No Net Loss:

The subject parcel is on the City's Housing Element Sites Inventory List with a realistic capacity for twenty-seven (27) above-moderate income units. The project proposes two (2) very-low income units, and thirty-three (33) above-moderate income units. The proposed number of above-moderate income units and very-low income units exceeds the number of above-moderate income units contemplated in the Housing Element for the site. Therefore, the City is not required to make "No Net Loss" findings pursuant to Government Code Section 65863 and Garden Grove Municipal Code Section 9.60.030 in order to approve the proposed project.

Replacement Housing and Tenant Protections:

Pursuant to Government Code §66300.6(a), the City may not approve a housing development project that will require the demolition of residential dwelling units unless the project will create at least as many residential dwelling units as will be demolished. This proposed project satisfies this requirement because it will replace one (1) existing unit with thirty-five (35) new dwellings.

In order to prevent new development projects from displacing existing lower income rental households, Government Code §66300.6(b) also imposes several requirements that the City must require a developer to comply with when a proposed development project will require the demolition of occupied or vacant "protected units". "Protected units" include residential dwelling units that are or were occupied by lower or very-low income rental households within the past five (5) years. In the instances where tenant information is not readily available, the units are presumed to be rented at income levels proportional to the Citywide rental income levels. Any lower income unit demolished shall be replaced by a unit of equal or lower income level.

In this case, the income of the previous tenant(s) was not readily available. Therefore, it is presumed, based on the income levels proportional to the Citywide rental income levels that the previous tenant(s) was of lower income. The proposed project proposes two (2) very-low income units, units of equal or lower income level, satisfying the replacement requirements of State law.

RECOMMENDATION:

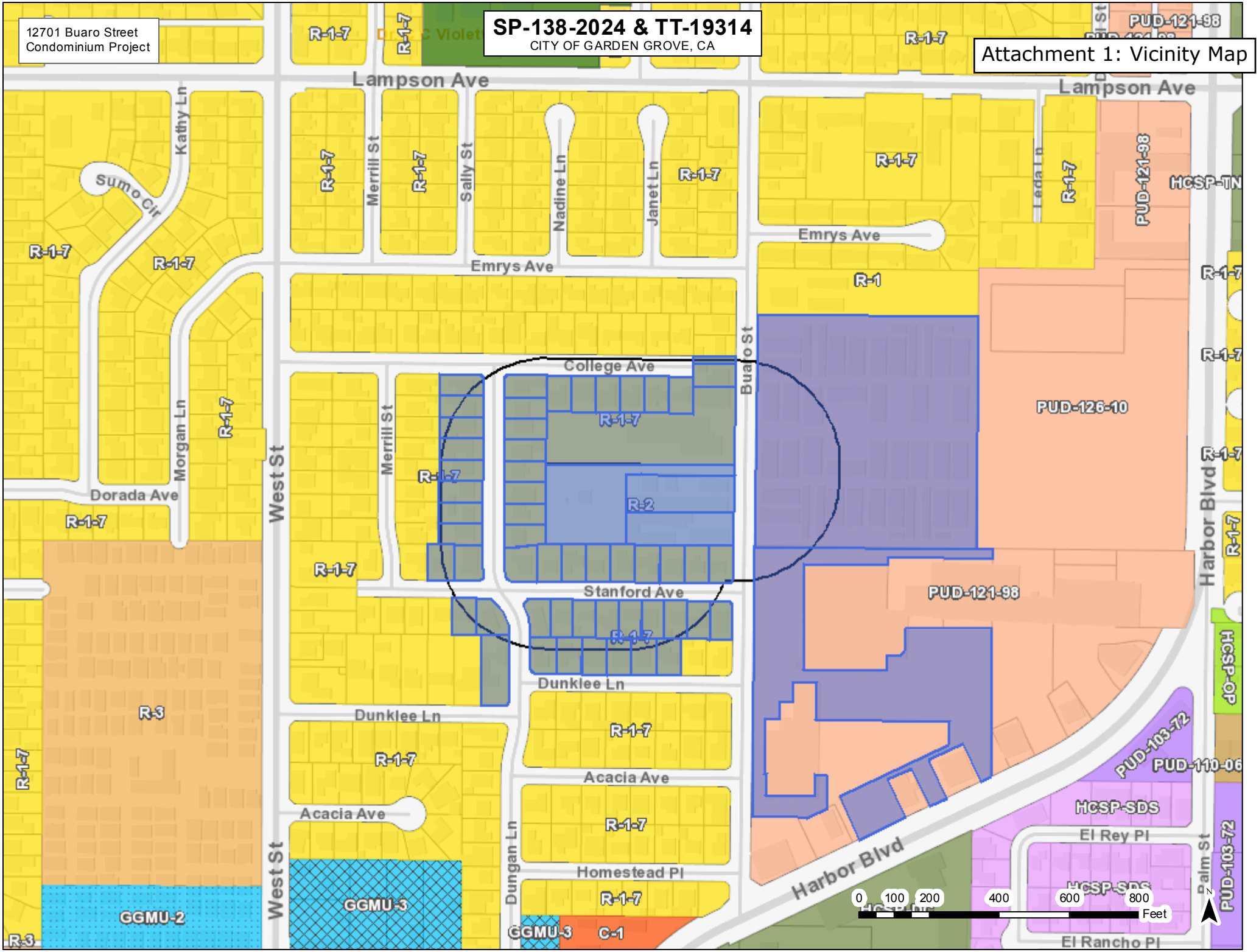
Staff recommends that the Planning Commission take the following action:

1. Adopt Resolution No. 6093-24 approving Site Plan No. SP-138-2024, and Tentative Tract Map No. TT-19314, subject to the recommended Conditions of Approval.

Maria Parra
Planning Services Manager

By: Priit Kaskla, AICP
Associate Planner

Attachment 1: Vicinity Map
Attachment 2: Plans
Attachment 3: Density Bonus Application
Attachment 4: Trip Generation and VMT Screening
Attachment 5: Air Quality and Greenhouse Gas Analysis
Attachment 6: Noise Impact Study
Attachment 7: Water Quality Impacts Analysis
Attachment 8: Resolution No. 6093-24 with Exhibit "A"- Conditions of Approval


12701 Buaro Street
Condominium Project
SP-138-2024 & TT-19314
CITY OF GARDEN GROVE, CA
Attachment 1: Vicinity Map
Lampson Ave
Emrys Ave
College Ave
Stanford Ave
Dunklee Ln
Acacia Ave
Homestead Pl
Dorada Ave
Harbor Blvd
West St
Merrill St
Buaro St
Kathy Ln
Sumo Cir
Morgan Ln
Sally St
Nadine Ln
Janet Ln
Lada Ln
Dungan Ln
El Rey Pl
El Rancho Pl
Palm St
R-1-7
R-1
R-2
R-3
PUD-121-98
PUD-126-10
PUD-103-72
PUD-110-06
HCSP-TN
HCSP-OP
HCSP-SDS
GGMU-2
GGMU-3
C-1
0
100
200
400
600
800
Feet
N

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949.770.8530 | www.studio-PAD.com

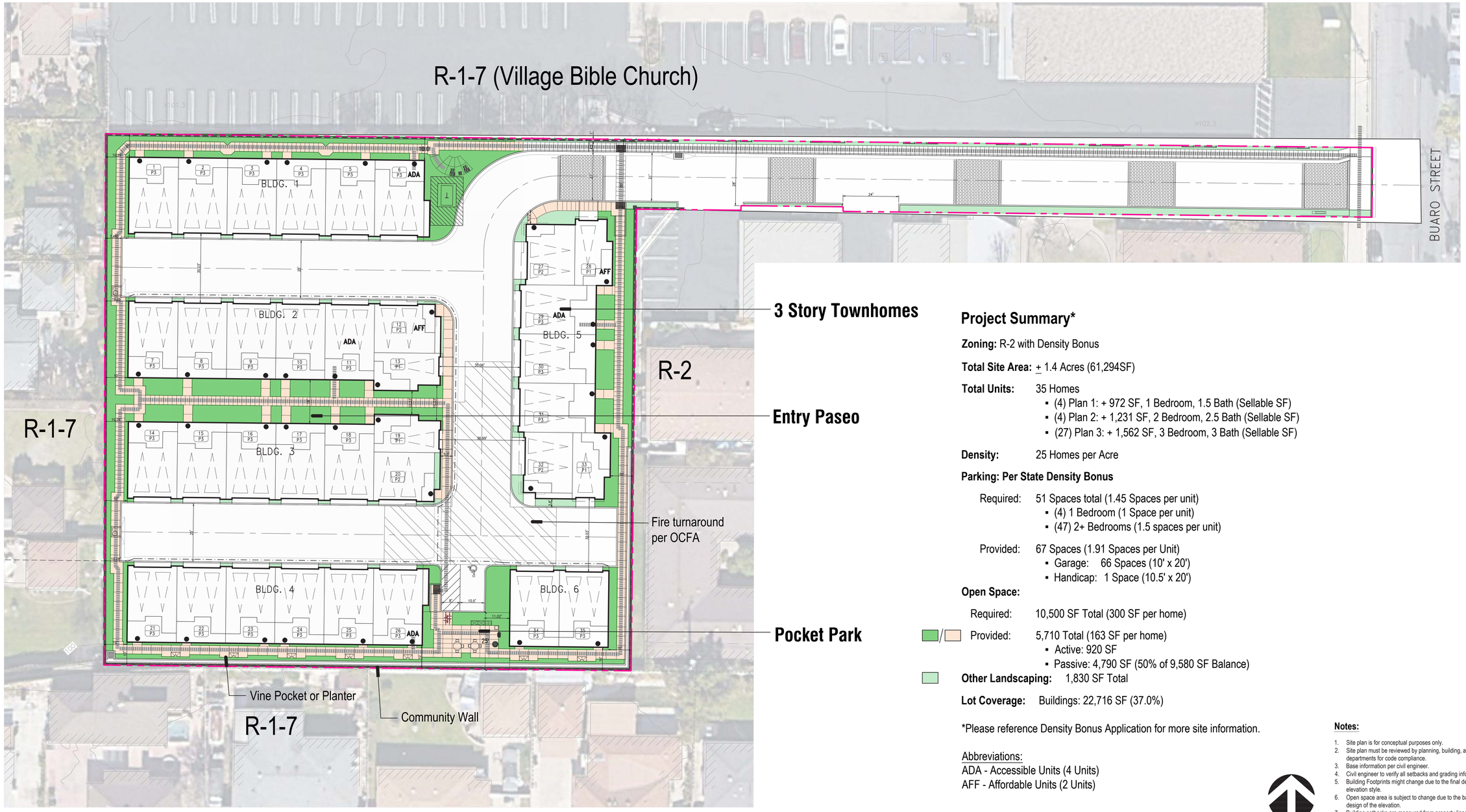
SHEET INDEX:

A3 ASHTON3

12701 BUARO STREET

GARDEN GROVE, CA

PRELIMINARY PLAN REVIEW



Project Summary*

Zoning: R-2 with Density Bonus

Total Site Area: ± 1.4 Acres (61,294SF)

Total Units: 35 Homes
- (4) Plan 1: + 972 SF, 1 Bedroom, 1.5 Bath (Sellable SF)
- (4) Plan 2: + 1,231 SF, 2 Bedroom, 2.5 Bath (Sellable SF)
- (27) Plan 3: + 1,562 SF, 3 Bedroom, 3 Bath (Sellable SF)

Density: 25 Homes per Acre

Parking: Per State Density Bonus

Required: 51 Spaces total (1.45 Spaces per unit)
- (4) 1 Bedroom (1 Space per unit)
- (47) 2+ Bedrooms (1.5 spaces per unit)

Provided: 67 Spaces (1.91 Spaces per Unit)
- Garage: 66 Spaces (10' x 20')
- Handicap: 1 Space (10.5' x 20')

Open Space:

Required: 10,500 SF Total (300 SF per home)

Provided: 5,710 Total (163 SF per home)
- Active: 920 SF
- Passive: 4,790 SF (50% of 9,580 SF Balance)

Other Landscaping: 1,830 SF Total

Lot Coverage: Buildings: 22,716 SF (37.0%)

*Please reference Density Bonus Application for more site information.

Abbreviations:
ADA - Accessible Units (4 Units)
AFF - Affordable Units (2 Units)

Notes:

1. Site plan is for conceptual purposes only.
2. Site plan must be reviewed by planning, building, and fire departments for code compliance.
3. Base information per civil engineer.
4. Civil engineer to verify all setbacks and grading information
5. Building Footprints might change due to the final design elevation style.
6. Open space area is subject to change due to the balcony design of the elevation.
7. Building setbacks are measured from property lines to building foundation lines.

CONCEPTUAL SITE PLAN

12701 BUARO STREET

GARDEN GROVE, CA

S-1

0 10 20 40

PRELIMINARY PLAN REVIEW

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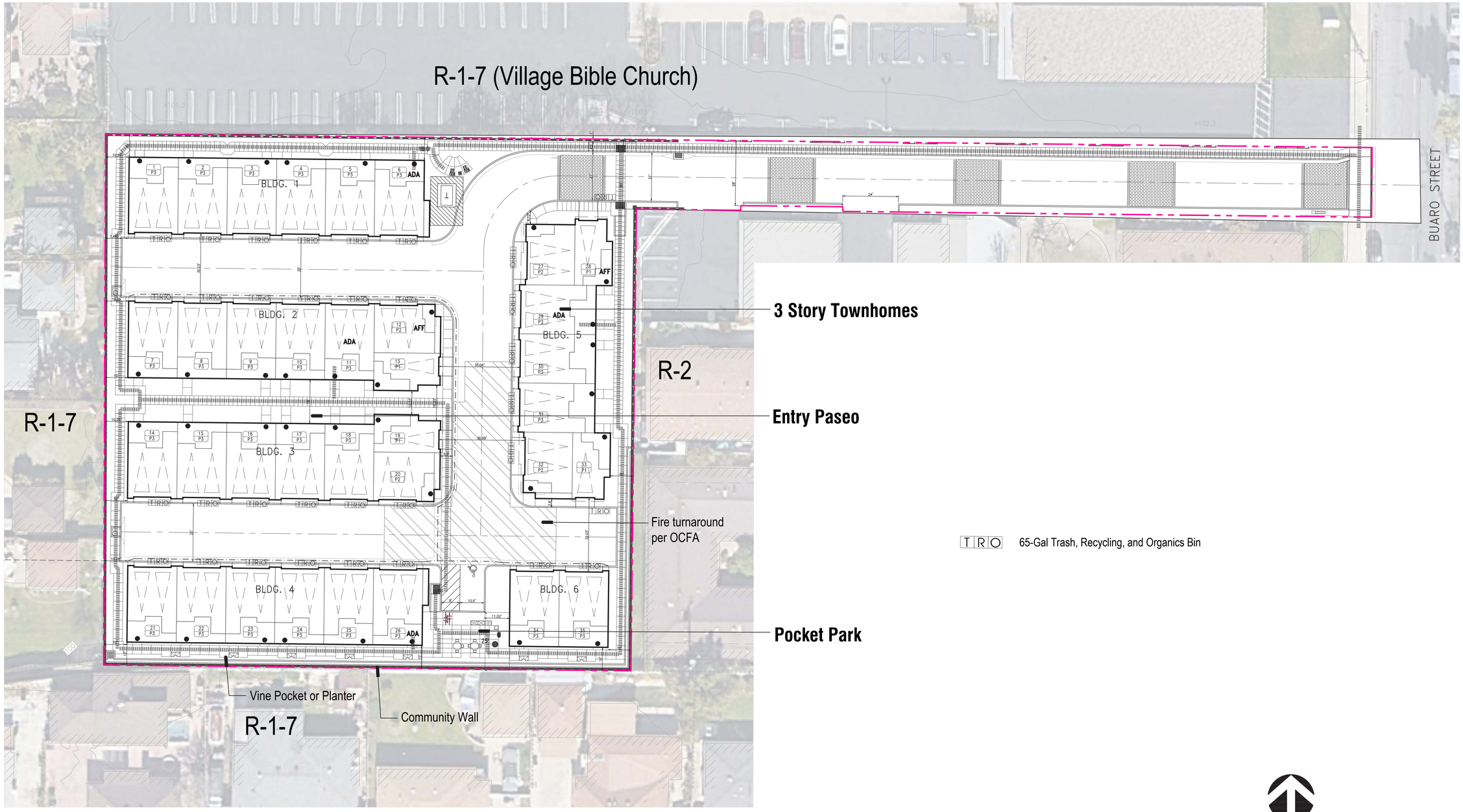

TRO 65-Gal Trash, Recycling, and Organics Bin

TRASH AND RECYCLING BIN LOCATIONS

12701 BUARO STREET

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S-2

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Building Type 100 (Building 6)

Building Type 200 (Building 1)

Building Type 200 (Building 4)

Building Type 300 (Building 2 &3)

3 STORY TOWNHOMES | Front Elevations

12701 BUARO STREET

GARDEN GROVE, CA

A-1

0 4 8 16

PRELIMINARY PLAN REVIEW

Note: Artist's Conception; Colors, Materials and Application May Vary.

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Right

Rear

Left

(Building 5)

Front

MATERIALS:

Roof:	Concrete 'S' Tile
Fascia:	2X Wood Fascia
Exterior:	Stucco
Entry Door:	Decorative Front Entry Door with Glass Lites
Garage Door:	Decorative Metal Roll-Up Garage Door

BUILDING TYPE 400 - 3 STORY TOWNHOMES | Exterior Elevations

12701 BUARO STREET

GARDEN GROVE, CA

A-2

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PRELIMINARY PLAN REVIEW

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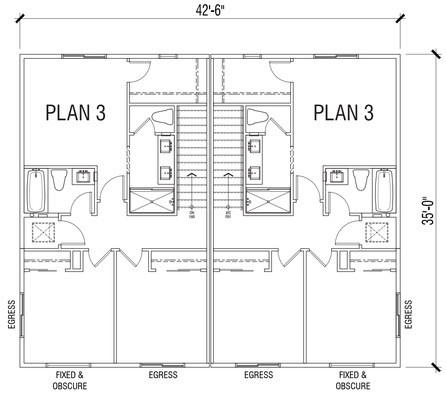
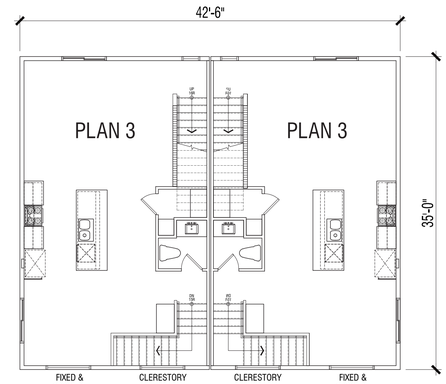
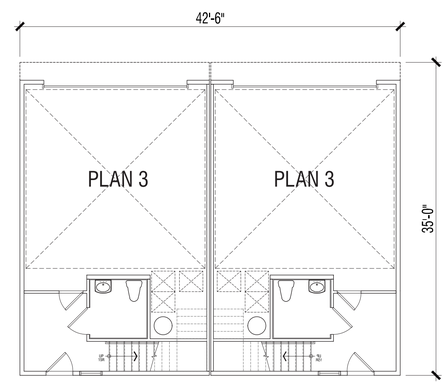


Third Level



Second Level



First Level

PLAN 3 PLAN 3

BUILDING 100 - 3 STORY TOWNHOMES | Composite Floor Plans

12701 BUARO STREET

GARDEN GROVE, CA

A-3

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PRELIMINARY PLAN REVIEW

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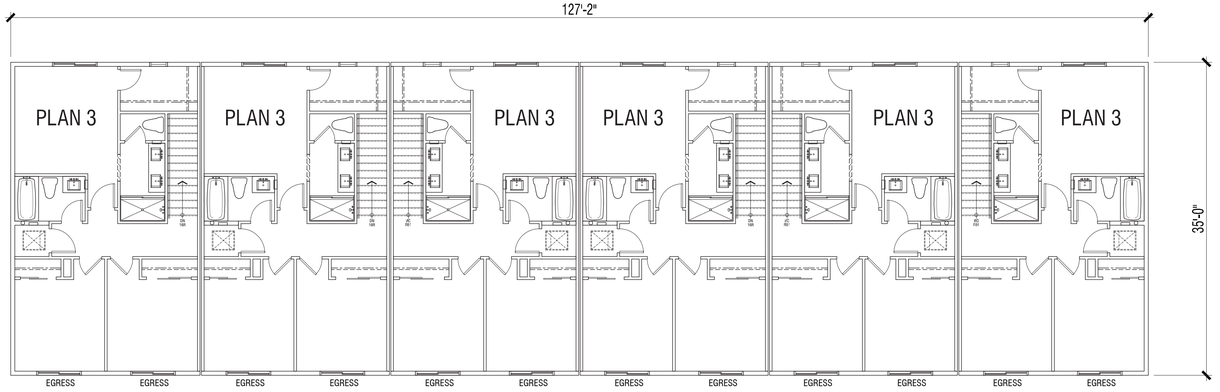

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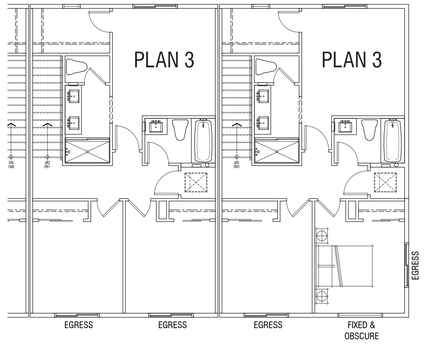
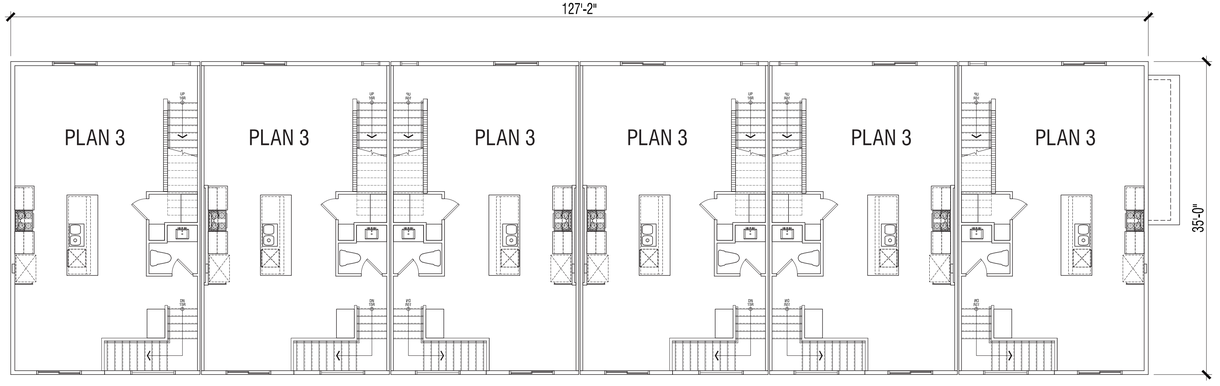


Alt. Third Level
Building 4



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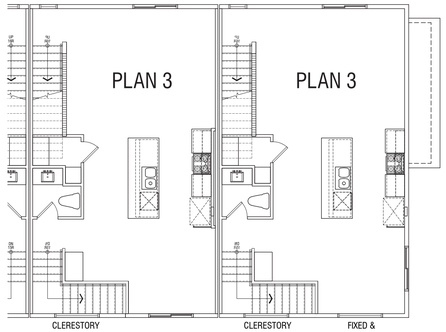
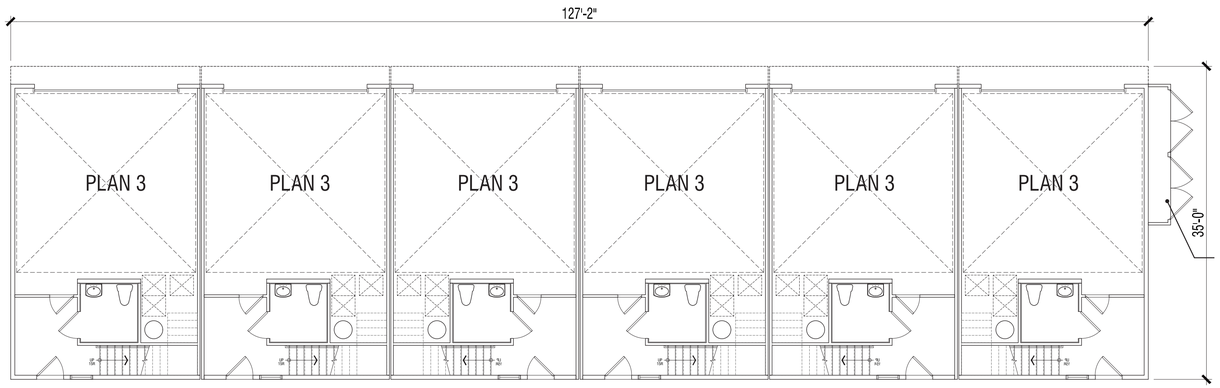


Alt. Second Level
Building 4



First Level

PLAN 3 PLAN 3 PLAN 3 PLAN 3 PLAN 3 PLAN 3

BUILDING 200 - 3 STORY TOWNHOMES | Composite Floor Plans

12701 BUARO STREET

GARDEN GROVE, CA

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PRELIMINARY PLAN REVIEW

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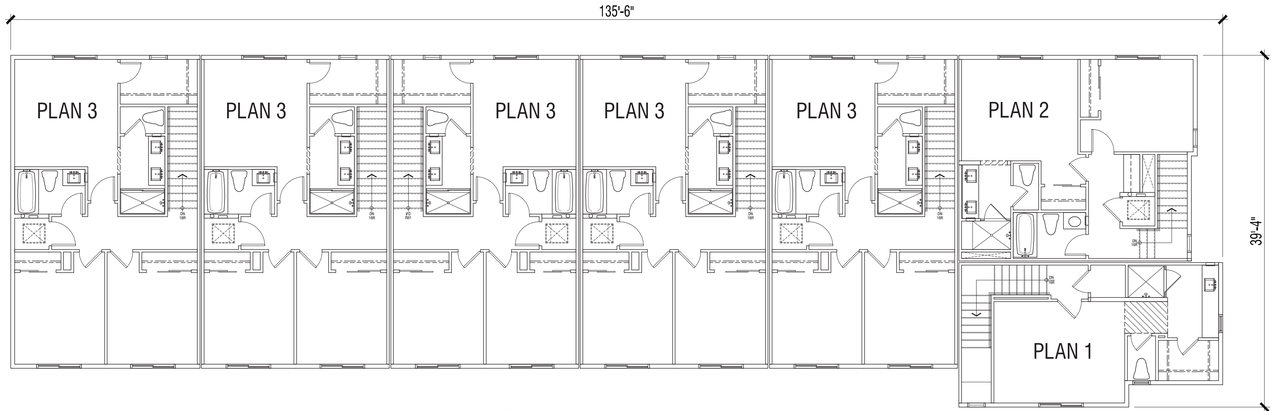
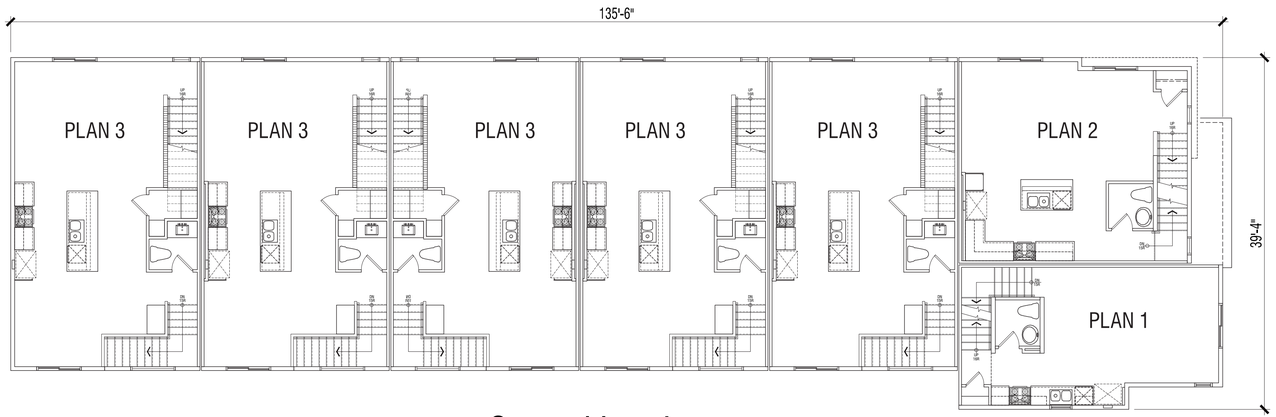
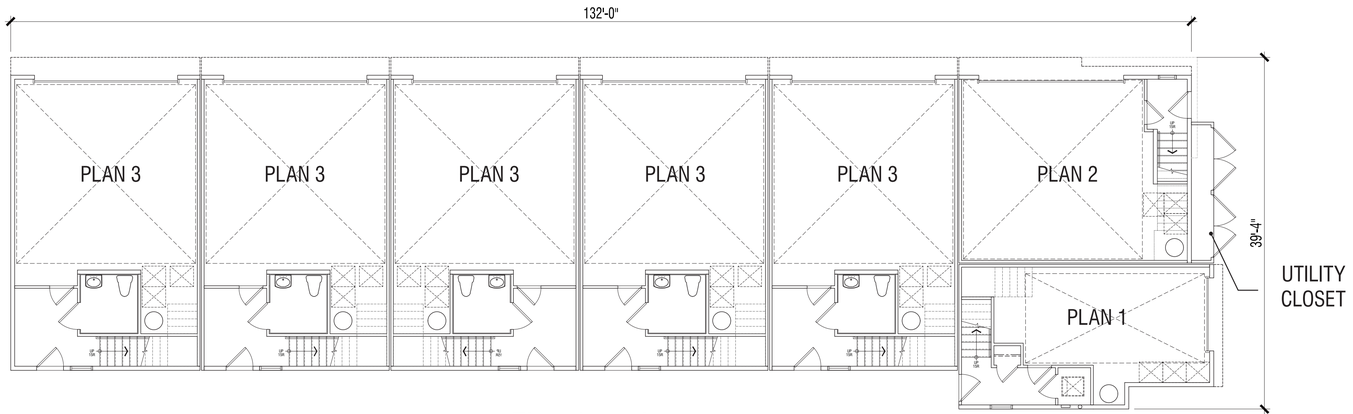


Third Level



Second Level

PLAN 2



First Level

PLAN 3 PLAN 3 PLAN 3 PLAN 3 PLAN 3 PLAN 1

BUILDING 300 - 3 STORY TOWNHOMES | Composite Floor Plans

12701 BUARO STREET

GARDEN GROVE, CA

A-5

0 4 8 16

PRELIMINARY PLAN REVIEW

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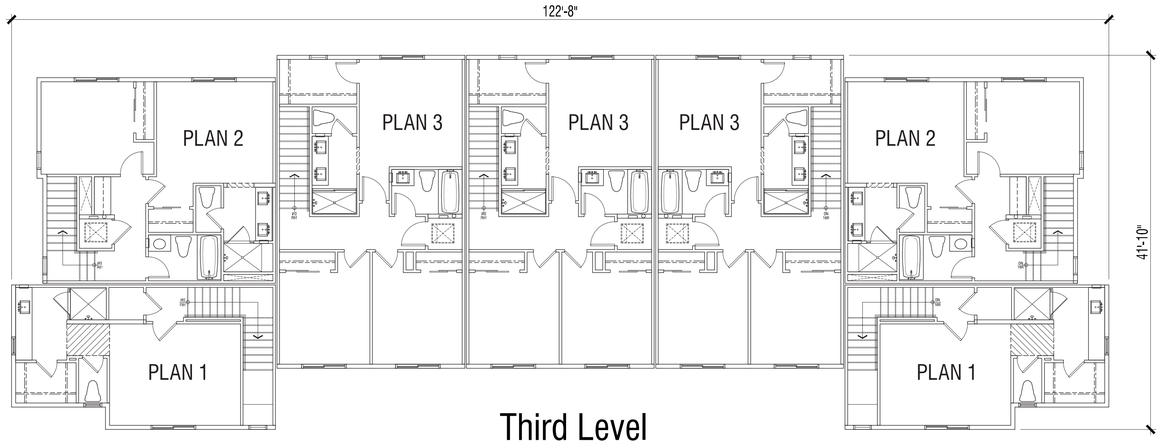
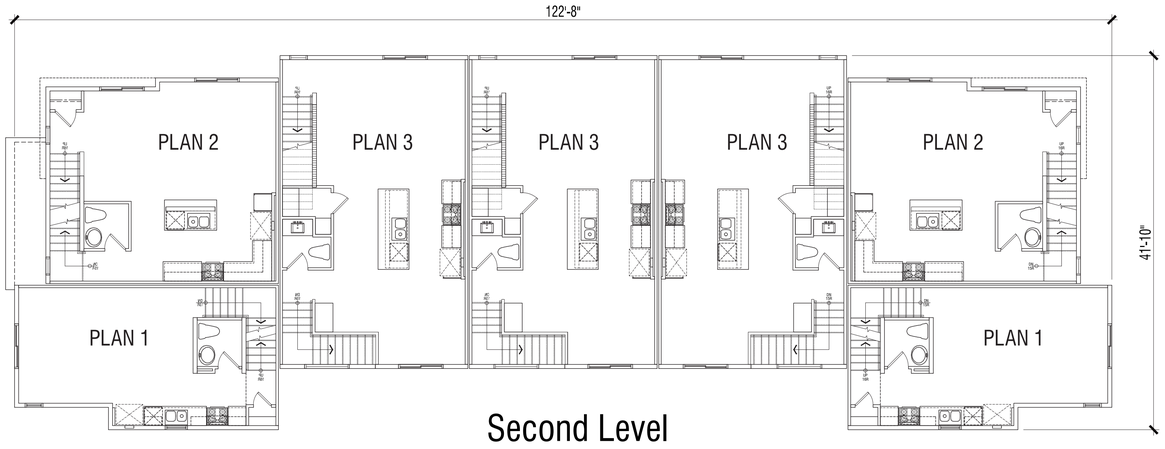
WHA.

ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

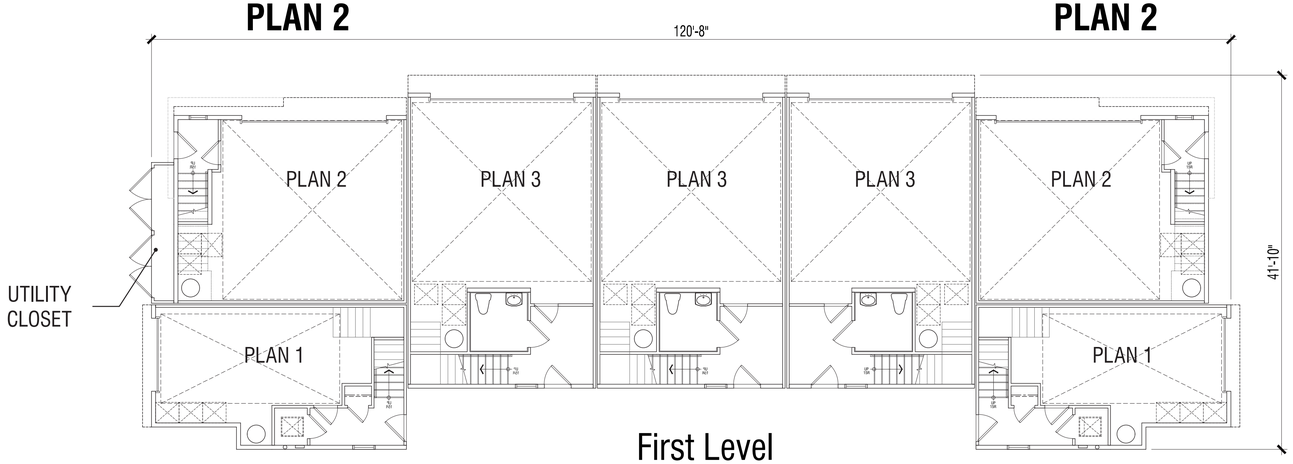


Third Level



Second Level

PLAN 2 **PLAN 2**



First Level

PLAN 1 **PLAN 3** **PLAN 3** **PLAN 3** **PLAN 1**

BUILDING 400 - 3 STORY TOWNHOMES | Composite Floor Plans

12701 BUARO STREET

GARDEN GROVE, CA

A-6

0 4 8 16

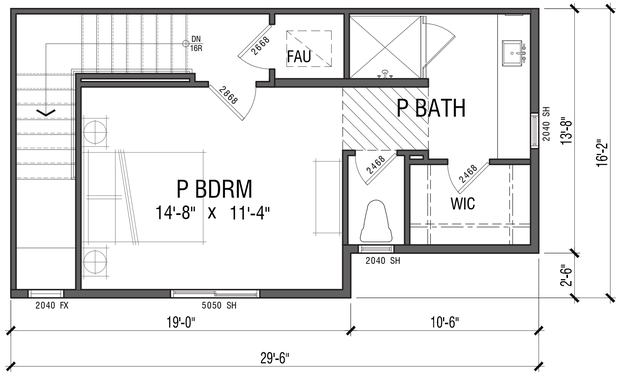
PRELIMINARY PLAN REVIEW

A3 ASHTON3

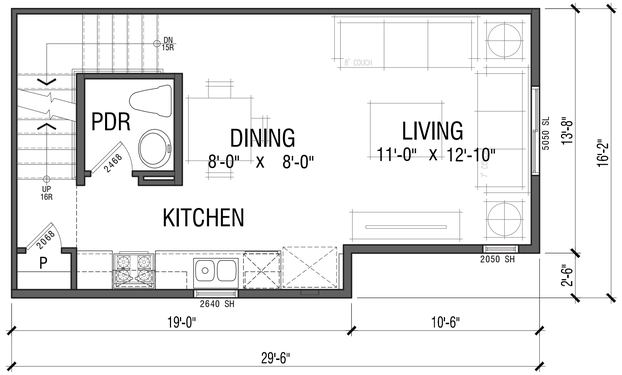
ARCHITECTS . PLANNERS . DESIGNERS

WHA.

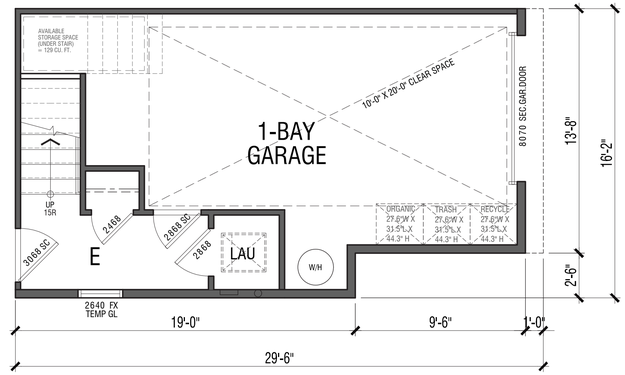
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



Third Floor



Second Floor



First Floor

PLAN 1
972 SF
1 BEDROOM / 1.5 BATHROOM
1-BAY
8'-1" / 8'-7" / 8'-7" PLATE

PLAN 1 | UNIT FLOOR PLANS

12701 BUARO STREET

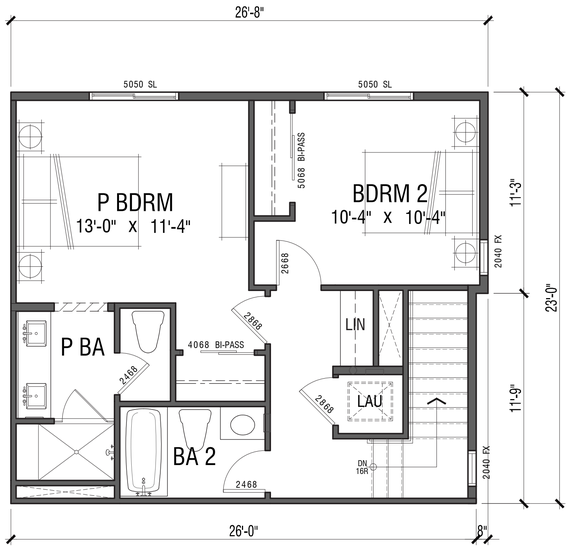
GARDEN GROVE, CA

0 2 4 8

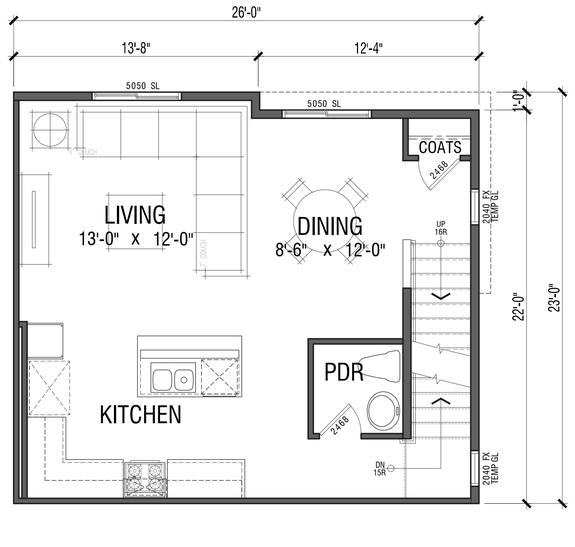
PRELIMINARY PLAN REVIEW

A3 ASHTON 3

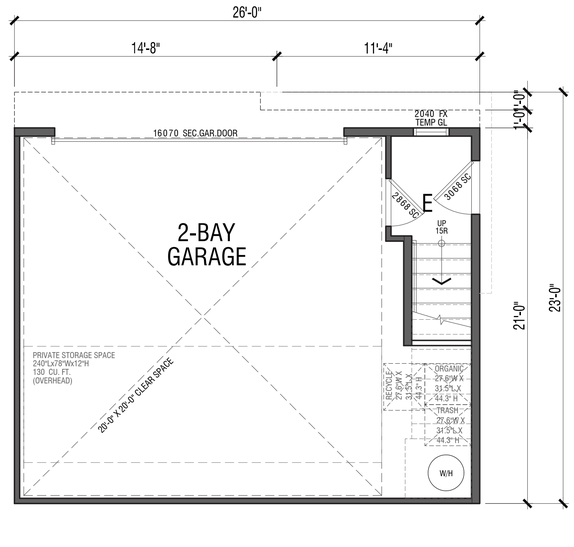
ARCHITECTS . PLANNERS . DESIGNERS
WHA.
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



Third Floor



Second Floor



First Floor

PLAN 2
1,231 SF
2 BEDROOM / 2.5 BATHROOM
2-BAY
8'-1" / 8'-7" / 8'-7" PLATE

PLAN 2 | UNIT FLOOR PLANS

12701 BUARO STREET

GARDEN GROVE, CA

A3 ASHTON3

A-8

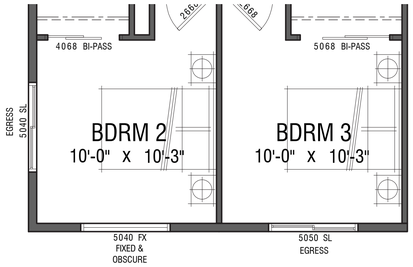
0 2 4 8

PRELIMINARY PLAN REVIEW

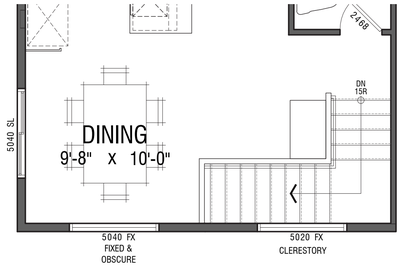
ARCHITECTS . PLANNERS . DESIGNERS

WHA.

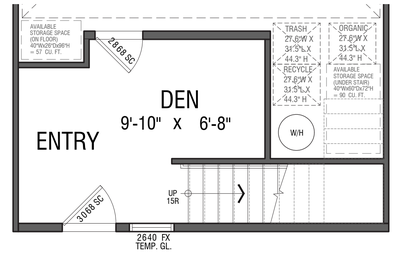
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO



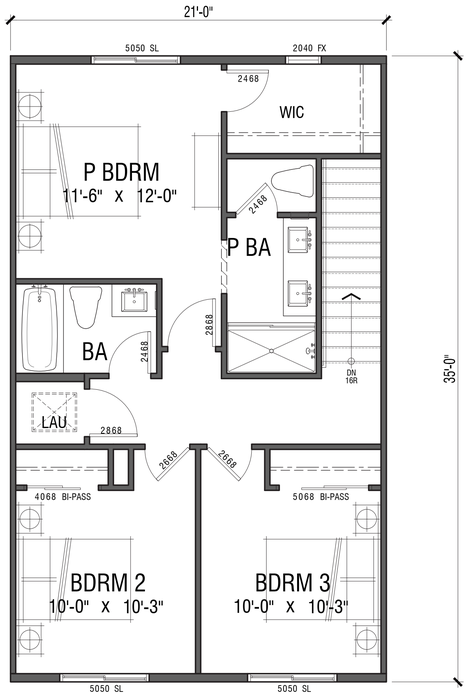
ALTERNATE 3RD FLOOR PLAN
AT BUILDING 4 & 6



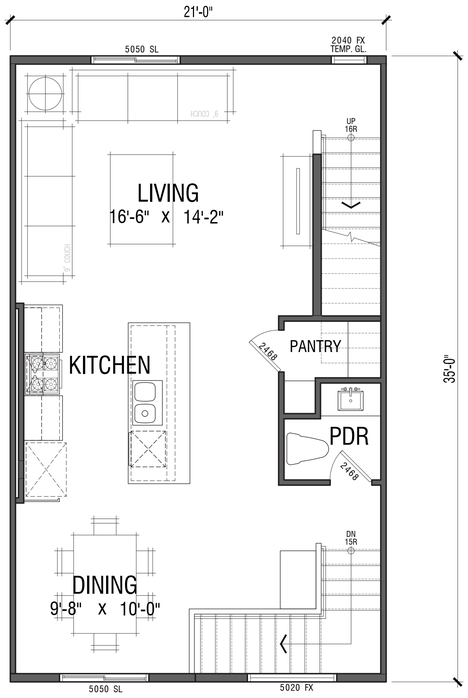
ALTERNATE 2ND FLOOR PLAN
AT BUILDING 4 & 6



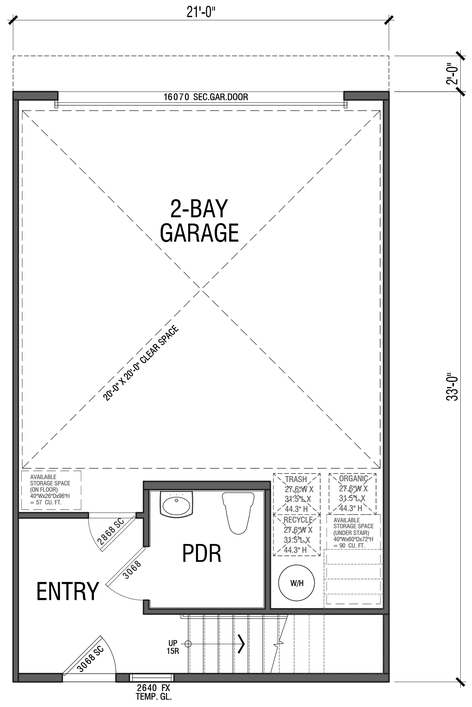
ALTERNATE 1ST FLOOR PLAN



Third Floor



Second Floor



First Floor

PLAN 3

1,562 SF
3 BEDROOM / 3 BATHROOM
2-BAY
8'-1" / 8'-7" / 8'-7" PLATE

PLAN 3 | UNIT FLOOR PLANS

12701 BUARO STREET

GARDEN GROVE, CA

A3
ASHTON3

A-9

PRELIMINARY PLAN REVIEW

ARCHITECTS . PLANNERS . DESIGNERS
WHA.
ORANGE COUNTY . LOS ANGELES . BAY AREA . SACRAMENTO

LEGEND

1. Central community open space area with free-standing (coal) BBQ, table seating & trash receptacle for social events and group gatherings, see see Enlargement 'B' sheet L-2.
2. Three community cluster mailboxes, per USPS review and approval.
3. Reading nook with Adirondack seating and side table, see Enlargement 'A' sheet L-2.
4. Proposed Wall, Pilaster per Wall Plan.
5. Enhanced vehicular paving at main project entry.
6. Proposed tree, per Planting Plan.
7. 4' wide pedestrian curb-adjacent sidewalk, natural colored concrete, with light broom finish and saw-cut or narrow tooled joints.
8. 4' wide community natural colored concrete sidewalk, with light broom finish and saw-cut or narrow tooled joints.
9. 4' wide unit entry natural colored concrete walk, with light broom finish and saw-cut or narrow tooled joints.
10. Accessible parking stall and striping, per Civil plans.
11. Natural colored concrete driveway, with light broom finish and tooled joints.
12. Entry monument, per separate future submittal.
13. Common area landscape, builder installed and HOA maintained.
14. Property line.
15. Public street R.O.W.
16. Proposed public street sidewalk, per Civil plans.
17. Transformer to be screened with landscape, quantity and final locations to be determined.
18. Short term bike parking (1 bike racks to accommodate 2 bikes).
19. Community dog bag station (black in color), for pet owners.
20. Vines on metal trellis attached to adjacent wall (along north only) set in footings.


2


12


18


6


5


20


19

*Conceptual images (provided herein are conceptual and subject to change)

0 10' 20' 40'
Scale: 1" = 20'

SCHEMATIC LANDSCAPE PLAN

12701 BUARO STREET

GARDEN GROVE, CA

L-1

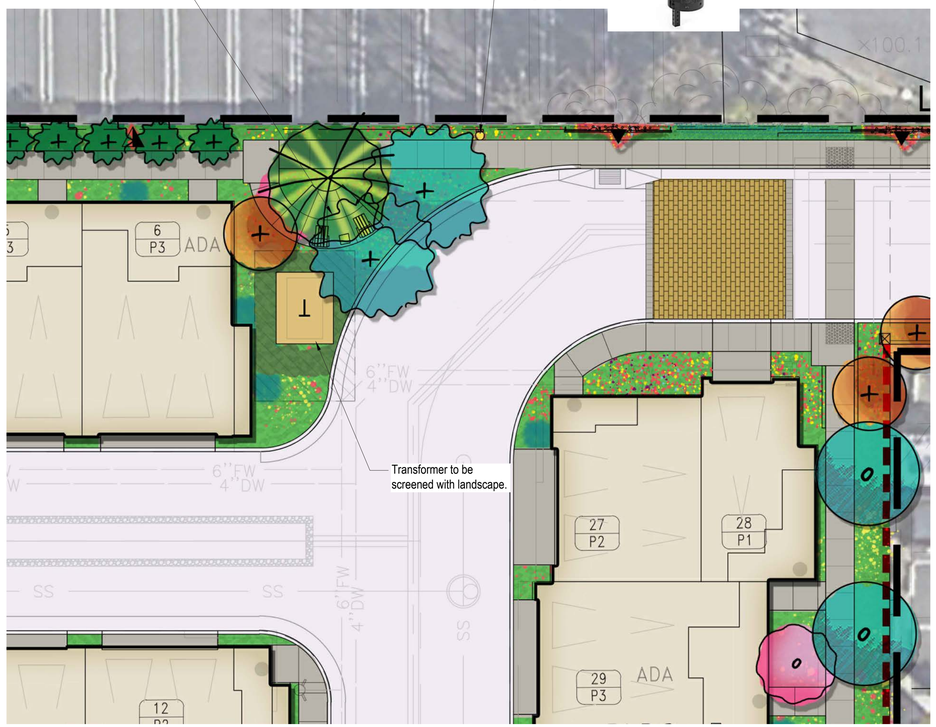
PRELIMINARY PLAN REVIEW

A3 ASHTON3

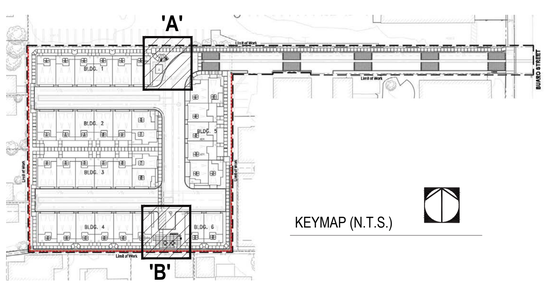
studio PAD

Reading nook with Adirondack seating and side table.

Dog-bag Station

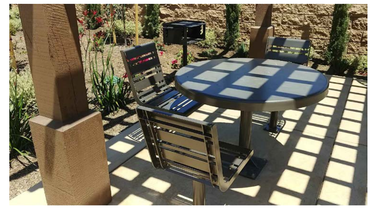


Enlargement 'A' - Reading Nook (1"=10'-0")

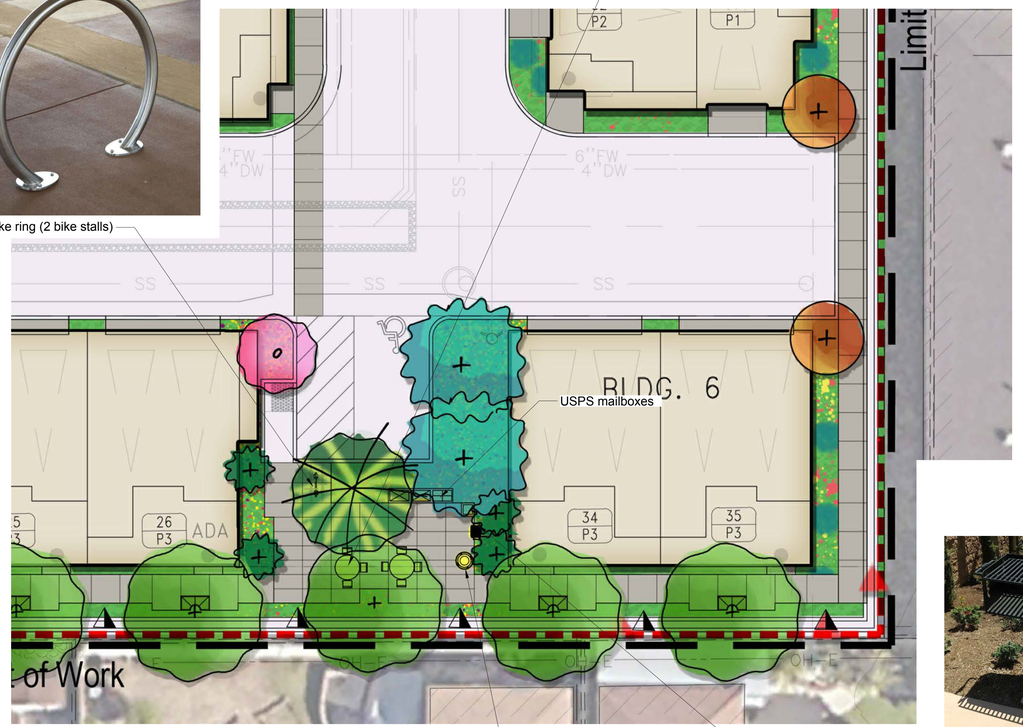


KEYMAP (N.T.S.)

Bike ring (2 bike stalls)



ADA table seating



Enlargement 'B' - Central Open Space (1"=10'-0")

Free-standing BBQ (coal) and coal bin storage

Trash receptacle

0 5' 10' 20'

Scale: 1" = 10'

SCHEMATIC OPEN SPACE ENLARGEMENT PLAN

12701 BUARO STREET

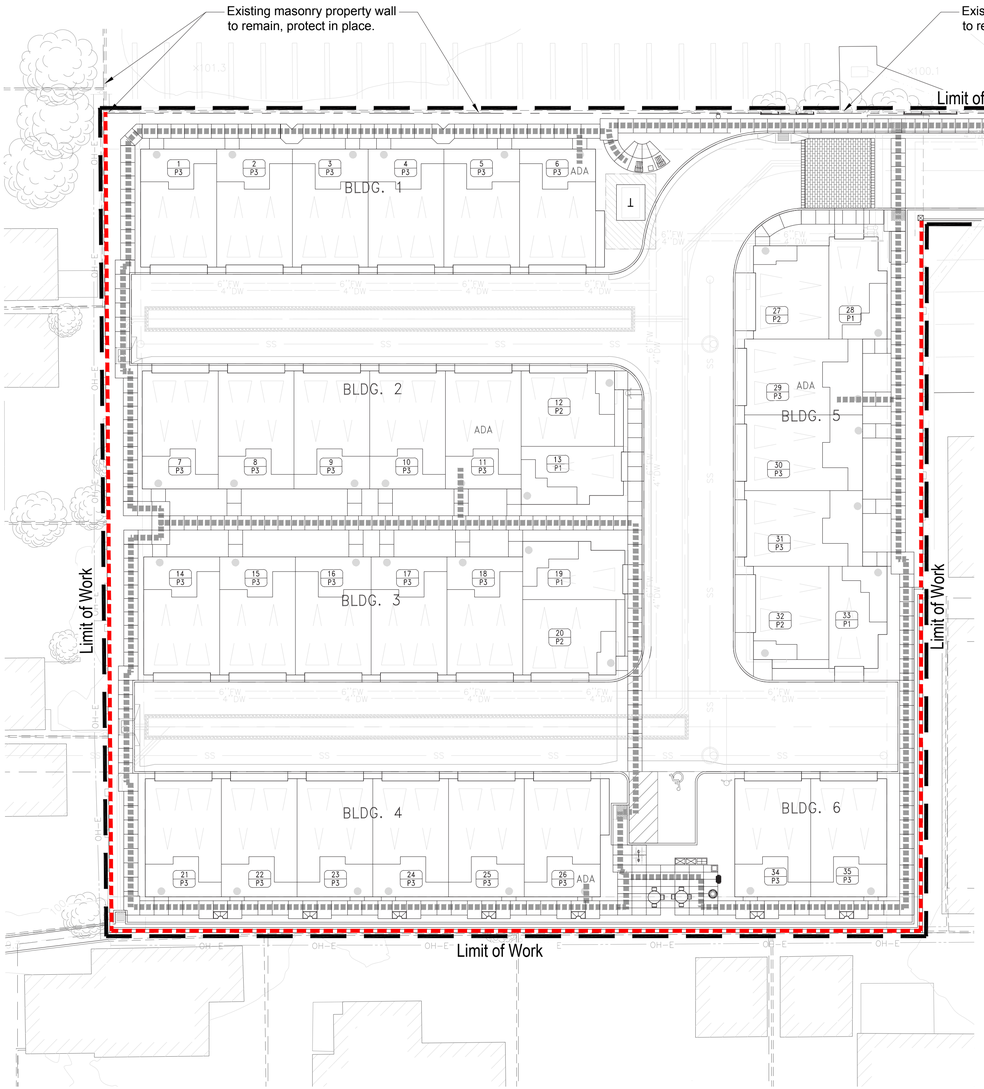
GARDEN GROVE, CA

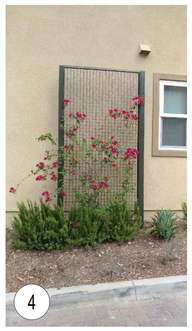
L-2

PRELIMINARY PLAN REVIEW

A3 ASHTON 3

studio PAD





*Conceptual images (provided herein are conceptual and subject to change)

WALL LEGEND

1. 6'-0" High split-face block (1-sided), with precision cap.
2. 6'-6" High (16" sq.) split-face block, with 18" sq. 2" high CMU cap.
3. 3'-6" High (10" wide) 2-sided monument sign wall (per separate submittal)
4. 7'-0" High metal vine trellis (set in footings, adjacent existing wall).

ADA Path of Travel

0 10' 20' 40'
Scale: 1" = 20'

SCHEMATIC WALL PLAN

12701 BUARO STREET

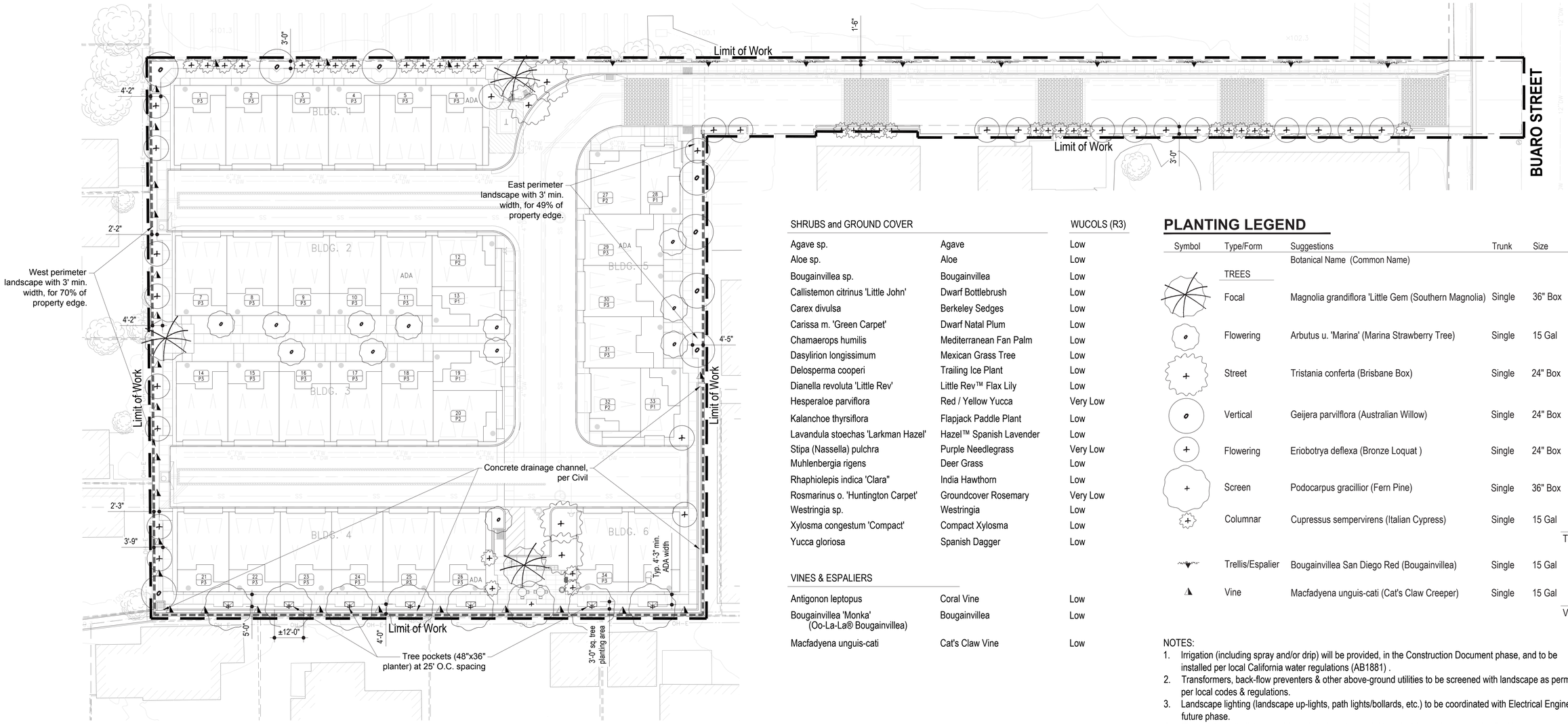
GARDEN GROVE, CA

L-3

PRELIMINARY PLAN REVIEW

A3 ASHTON3

studio PAD



SHRUBS and GROUND COVER		WUCOLS (R3)
Agave sp.	Agave	Low
Aloe sp.	Aloe	Low
Bougainvillea sp.	Bougainvillea	Low
Callistemon citrinus 'Little John'	Dwarf Bottlebrush	Low
Carex divulsa	Berkeley Sedges	Low
Carissa m. 'Green Carpet'	Dwarf Natal Plum	Low
Chamaerops humilis	Mediterranean Fan Palm	Low
Dasylirion longissimum	Mexican Grass Tree	Low
Delosperma cooperi	Trailing Ice Plant	Low
Dianella revoluta 'Little Rev'	Little Rev™ Flax Lily	Low
Hesperaloe parviflora	Red / Yellow Yucca	Very Low
Kalanchoe thyrsiflora	Flapjack Paddle Plant	Low
Lavandula stoechas 'Larkman Hazel'	Hazel™ Spanish Lavender	Low
Stipa (Nassella) pulchra	Purple Needlegrass	Very Low
Muhlenbergia rigens	Deer Grass	Low
Rhaphiolepis indica 'Clara"	India Hawthorn	Low
Rosmarinus o. 'Huntington Carpet'	Groundcover Rosemary	Very Low
Westringia sp.	Westringia	Low
Xylosma congestum 'Compact'	Compact Xylosma	Low
Yucca gloriosa	Spanish Dagger	Low
VINES & ESPALIERS		
Antigonon leptopus	Coral Vine	Low
Bougainvillea 'Monka' (Oo-La-La® Bougainvillea)	Bougainvillea	Low
Macfadyena unguis-cati	Cat's Claw Vine	Low

PLANTING LEGEND

Symbol	Type/Form	Suggestions Botanical Name (Common Name)	Trunk	Size	WUCOLS (R3)	Qty.
	TREES					
	Focal	Magnolia grandiflora 'Little Gem (Southern Magnolia)	Single	36" Box	Mod.	3
	Flowering	Arbutus u. 'Marina' (Marina Strawberry Tree)	Single	15 Gal	Low	12
	Street	Tristania conferta (Brisbane Box)	Single	24" Box	Mod.	4
	Vertical	Geijera parviflora (Australian Willow)	Single	24" Box	Low	8
	Flowering	Eriobotrya deflexa (Bronze Loquat)	Single	24" Box	Low	24
	Screen	Podocarpus gracillior (Fern Pine)	Single	36" Box	Mod.	8
	Columnar	Cupressus sempervirens (Italian Cypress)	Single	15 Gal	Low	33
					Tree Total =	92
	Trellis/Espalier	Bougainvillea San Diego Red (Bougainvillea)	Single	15 Gal	Low	9
	Vine	Macfadyena unguis-cati (Cat's Claw Creeper)	Single	15 Gal	Low	26
					Vine Total =	35

NOTES:
1. Irrigation (including spray and/or drip) will be provided, in the Construction Document phase, and to be installed per local California water regulations (AB1881) .
2. Transformers, back-flow preventers & other above-ground utilities to be screened with landscape as permitted per local codes & regulations.
3. Landscape lighting (landscape up-lights, path lights/bollards, etc.) to be coordinated with Electrical Engineer in future phase.
4. The plant palette listed provides a list of plant material to select from when preparing final landscape construction documents for this project. However, substitutions may be required due to availability, soils tests, or other conditions.
5. All trees within 5' of hardscape to be installed with deep root barriers.

0 10' 20' 40'
Scale: 1" = 20'

SCHEMATIC PLANTING PLAN

12701 BUARO STREET

GARDEN GROVE, CA

L-4

PRELIMINARY PLAN REVIEW

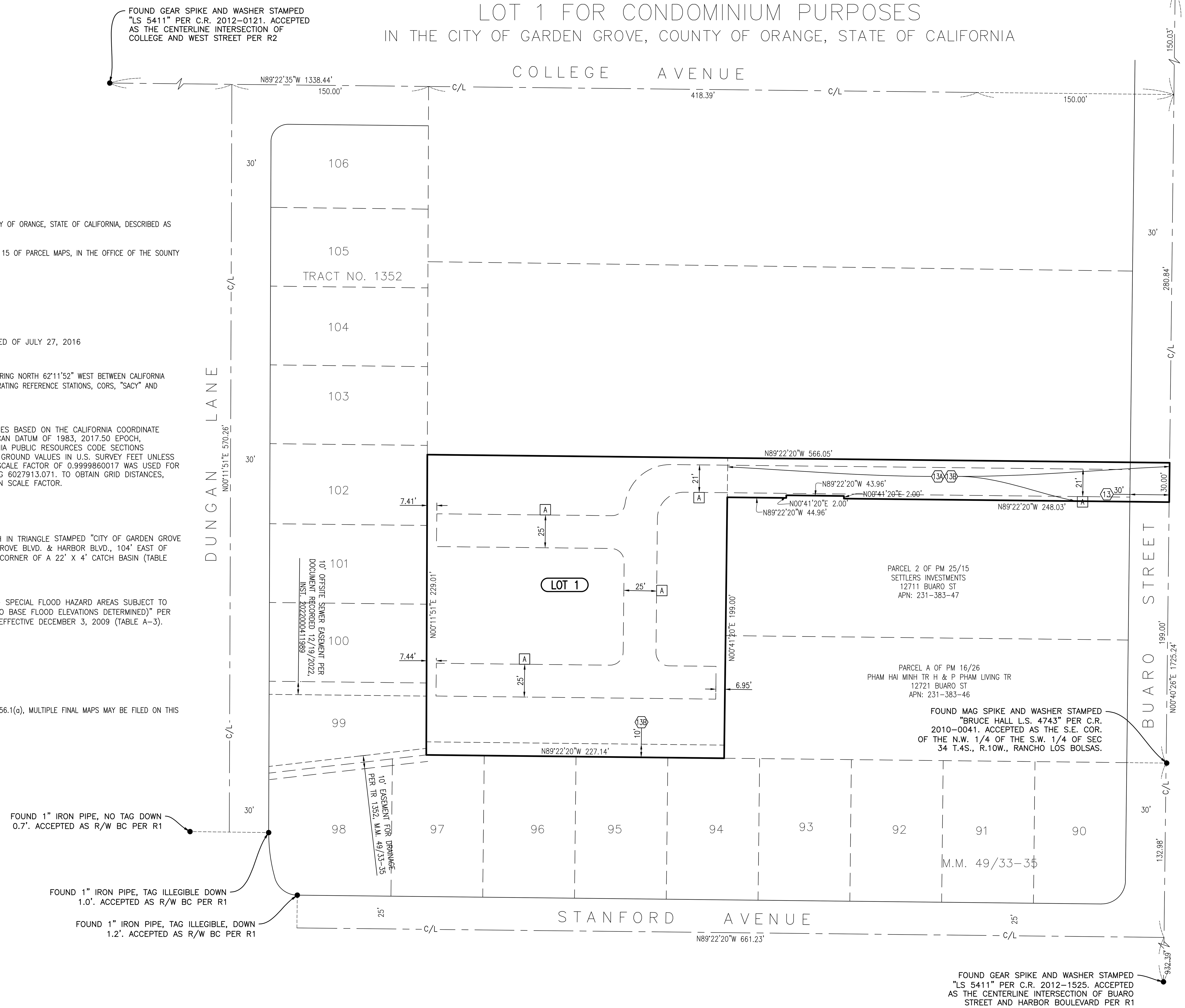
A3 ASHTON 3

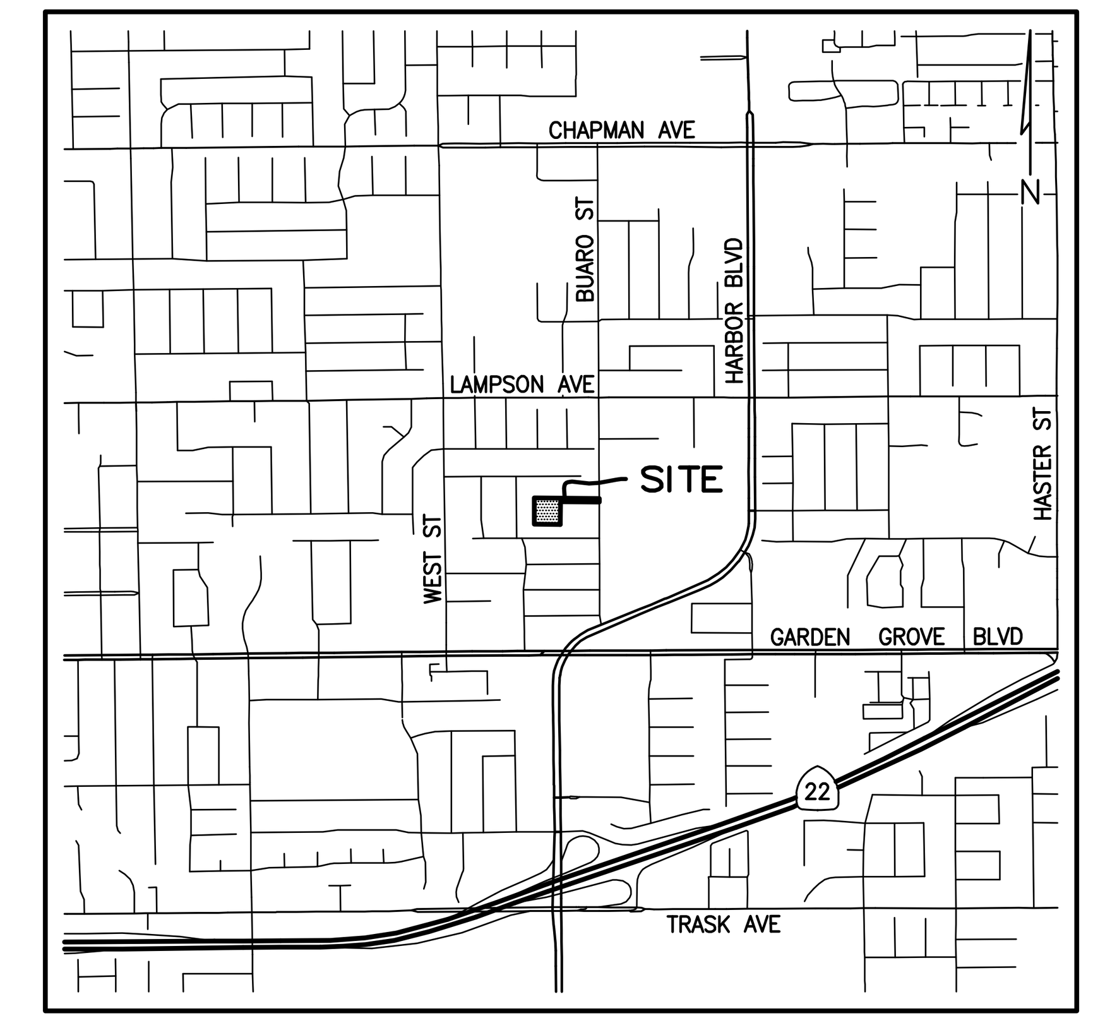
studio PAD

TENTATIVE TRACT MAP NO. 19314

LOT 1 FOR CONDOMINIUM PURPOSES

IN THE CITY OF GARDEN GROVE, COUNTY OF ORANGE, STATE OF CALIFORNIA





VICINITY MAP
SCALE: NONE

LEGAL DESCRIPTION:
REAL PROPERTY IN THE CITY OF GARDEN GROVE, COUNTY OF ORANGE, STATE OF CALIFORNIA, DESCRIBED AS FOLLOWS:

PARCEL 1 AS SHOWN ON A MAP FILED BOOK 25, PAGE 15 OF PARCEL MAPS, IN THE OFFICE OF THE SOUNTY RECORDER OF SAID COUNTY

SITE ADDRESS:
12701 BUARO STREET
GARDEN GROVE, CA 92840

VESTED OWNER:
JAMES EADS AND ELAINE EADS LIVING TRUST, DATED OF JULY 27, 2016

BASIS OF BEARINGS:
THE BEARINGS SHOWN HEREON ARE BASED ON THE BEARING NORTH 62°11'52" WEST BETWEEN CALIFORNIA SPATIAL REFERENCE CENTER, CSRS, CONTINUOUSLY OPERATING REFERENCE STATIONS, CORS, "SACY" AND "BLSA".

DATUM STATEMENT:
ALL COORDINATES SHOWN HEREON ARE GRID VALUES BASED ON THE CALIFORNIA COORDINATE SYSTEM OF 1983, CCS83, ZONE 6, NORTH AMERICAN DATUM OF 1983, 2017.50 EPOCH, NAD83(2011), IN ACCORDANCE WITH THE CALIFORNIA PUBLIC RESOURCES CODE SECTIONS 8801-8819. ALL DISTANCES SHOWN HEREON ARE GROUND VALUES IN U.S. SURVEY FEET UNLESS OTHERWISE NOTED. A GENERALIZED COMBINATION SCALE FACTOR OF 0.9999860017 WAS USED FOR THIS PROJECT AT NORTHING 2226617.574, EASTING 6027913.071. TO OBTAIN GRID DISTANCES, MULTIPLY GROUND DISTANCES BY THE COMBINATION SCALE FACTOR.

BENCHMARK STATEMENT:
CITY OF GARDEN GROVE BENCHMARK NO. GG-159
ELEV: 102.774 (NAVD88 GG2012 ADJ)
DESCRIBED AS: 2 1/2" BRONZE DISK WITH PUNCH IN TRIANGLE STAMPED "CITY OF GARDEN GROVE BENCHMARK" NORTHEAST QUADRANT OF GARDEN GROVE BLVD. & HARBOR BLVD., 104' EAST OF B.C.R., 4' NORTH OF CURB FACE, IN NORTHWEST CORNER OF A 22' X 4' CATCH BASIN (TABLE A-5)

FLOOD NOTE:
THE SUBJECT PROPERTY FALLS WITHIN "ZONE A - SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUDATION BY THE 1% ANNUAL CHANCE FLOOD (NO BASE FLOOD ELEVATIONS DETERMINED)" PER FEMA MAP NO. 06059C0143J, A PRINTED PANEL, EFFECTIVE DECEMBER 3, 2009 (TABLE A-3).

LAND USE SUMMARY:
GROSS AREA: 1.429 AC
NET AREA: 1.409 AC
TOTAL PROPOSED DWELLING UNITS: 35

NOTE:
1) PURSUANT TO SUBDIVISION MAP ACT SECTION 66456.1(a), MULTIPLE FINAL MAPS MAY BE FILED ON THIS TENTATIVE MAP.

UTILITY PURVEYORS & SERVICES:
WATER:
GARDEN GROVE WATER SERVICE DEPARTMENT
(714) 741-5395

SEWER:
GARDEN GROVE PUBLIC WORKS
(714) 741-5375

ELECTRIC:
SOUTHERN CALIFORNIA EDISON
(714) 805-0614

GAS:
SOUTHERN CALIFORNIA GAS COMPANY
(800) 427-2000

TELEPHONE AND CABLE
SPECTRUM
(714) 903-4000

TRASH/REFUSE:
CR&R ENVIRONMENTAL SERVICES
(800) 826-9677

SHEET INDEX:
1 - TITLE SHEET
2 - PRELIMINARY SITE PLAN
3 - PRELIMINARY GRADING PLAN
4 - PRELIMINARY SECTIONS
5 - PRELIMINARY UTILITY PLAN

SUBDIVIDER:
ASHTON 3, LLC
20 PAMELA WAY
COTO DE CAZA, CA 92679
(949) 584-2042
CONTACT: MATT ASHTON

ENGINEER:
C&V CONSULTING, INC.
9830 IRVINE CENTER DRIVE
IRVINE, CA 92618
(949) 916-3800
CONTACT: RYAN BITTNER

EXISTING EASEMENTS:
THE FOLLOWING TITLE INFORMATION WAS DERIVED FROM A PRELIMINARY REPORT ISSUED BY FIRST AMERICAN TITLE COMPANY, ORDER NO.: OSA-6797921 DATED MARCH 2, 2022 AT 7:30 A.M.

⟨#⟩ DENOTES PLOTTED ITEM.

12 THE RESERVATION OF THE USE AND CONTROL OF CIENEGAS AND NATURAL STREAMS OF WATER, IF ANY NATURALLY UPON, FLOWING ACROSS, INTO OR BY SAID TRACT, AND THE RIGHT OF WAY FOR AN TO CONSTRUCT IRRIGATION OR DRAINAGE DITCHES THROUGH SAID TRACT TO IRRIGATE OR DRAIN THE ADJACENT LAND, AS RESERVED IN THE DEED FROM STEARNS RANCHOS, RECORDED MARCH 24, 1893 IN BOOK 181, PAGE 67 OF DEEDS.
(THE LOCATION OF SAID EASEMENT IS INDETERMINATE FROM RECORD)

⟨13⟩ THE EASEMENT FOR ROAD PURPOSES OVER THE EAST 30 FEET, AS DISCLOSED BY THAT CERTAIN PARCEL MAP RECORDED AUGUST 2, 1968 IN BOOK 16, PAGE 26 OF PARCEL MAPS.

⟨13A⟩ THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT" RECORDED FEBRUARY 15, 1968 AS INSTRUMENT NO. 8568 IN BOOK 8519, 397 OF OFFICIAL RECORDS.
(AGREEMENT IS TO PROVIDE DEDICATED PARKING FACILITIES AND A SHARED DRIVEWAY FOR PARCEL 2 OF P.M.B. 25/15)

⟨13B⟩ AN EASEMENT FOR DRAINAGE AND INCIDENTAL PURPOSES, RECORDED MAY 6, 1968 AS INSTRUMENT NO. 3242 IN BOOK 8593, PAGE 443 OF OFFICIAL RECORDS.
IN FAVOR OF: EGON M. JENSEN, A MARRIED MAN AS HIS SOLE AND SEPARATE PROPERTY

PROPOSED EASEMENTS:
[A] INDICATES AN EASEMENT FOR INGRESS AND EGRESS FOR EMERGENCY AND TRASH COLLECTION PURPOSES DEDICATED TO THE CITY OF GARDEN GROVE

LEGEND:

AP	ANGLE POINT
ASPH	ASPHALT PAVEMENT
BC	BUILDING CORNER
BEG	BEGIN
BO	BLOW-OFF VALVE
BLDG	BUILDING
BW	BLOCK WALL
CB	CATCH BASIN
CF	CURB FACE
CLF	CHAIN LINK FENCE
CMF	CORRUGATED METAL FENCE
CONC	CONCRETE PAVEMENT
DI	DRAIN INLET
DWY	DRIVEWAY
FH	FIRE HYDRANT
GM	GAS METER
LS	LANDSCAPING
MH	MANHOLE
PKWY	PARKWAY
P/L	PROPERTY LINE
RET	RETAINING
RH	RETAINING HEIGHT
ROW	RIGHT-OF-WAY
SDWK	SIDEWALK
SFH	SINGLE-FAMILY HOME
ST LT	STREET LIGHT
TE	TRASH ENCLOSURE
TEMP	TEMPORARY
TF	TRANSFORMER
WF	WOOD FENCE
WL	WALL
WM	WATER METER
V	VALVE

SYMBOLS:

○ BO	BLOW-OFF VALVE
DI	DRAIN INLET
FH	FIRE HYDRANT
	LIGHT STANDARD
Ⓓ	STORM DRAIN MANHOLE
Ⓢ	SANITARY SEWER MANHOLE
	SIGN POST
GM	GAS METER
WM	WATER METER
⊗ V	UTILITY VALVE
	UTILITY/POWER POLE
	BLOCK/RETAINING SCREEN WALL
	BLOCK/RETAINING LOW WALL
	PLANTER/DECORATIVE WALL
OH-E	OVERHEAD WIRE
	EDGE OF ASPHALT PAVEMENT
	WOOD/WROUGHT IRON FENCE
X	CHAIN LINK FENCE
	DIRECTION OF FLOW
93	MINOR CONTOUR (1' INTERVAL)
100	MAJOR CONTOUR (5' INTERVAL)
×91.5	SPOT ELEVATION

SCALE: 1" = 40'
0 20 40 80

SURVEYOR'S STATEMENT:
THE SURVEY ON WHICH THIS VESTING TENTATIVE MAP IS BASED WAS DONE BY ME, OR UNDER MY DIRECTION. FIELDWORK WAS COMPLETED ON [SURVEY DATE].

PROFESSIONAL LAND SURVEYOR DANE P. MCDOUGALL L.S. 9297 STATE OF CALIFORNIA

DANE P. MCDOUGALL, L.S. 9297

ENGINEER'S STATEMENT:
THIS VESTING TENTATIVE MAP WAS PREPARED BY ME, OR UNDER MY DIRECTION ON March 21, 2024.

RYAN J. BITTNER, R.C.E. 68167

PREPARED BY:

REGISTERED PROFESSIONAL ENGINEER RYAN J. BITTNER No. 68167 CIVIL STATE OF CALIFORNIA

C&V CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING
9830 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
(949) 916-3800
INFO@CVC-INC.NET
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PREPARED FOR:

ASHTON 3, LLC
20 PAMELA WAY,
COTO DE CAZA, CA 92679
(949) 584-2042

CITY OF GARDEN GROVE
DEPARTMENT OF PLANNING AND DEVELOPMENT

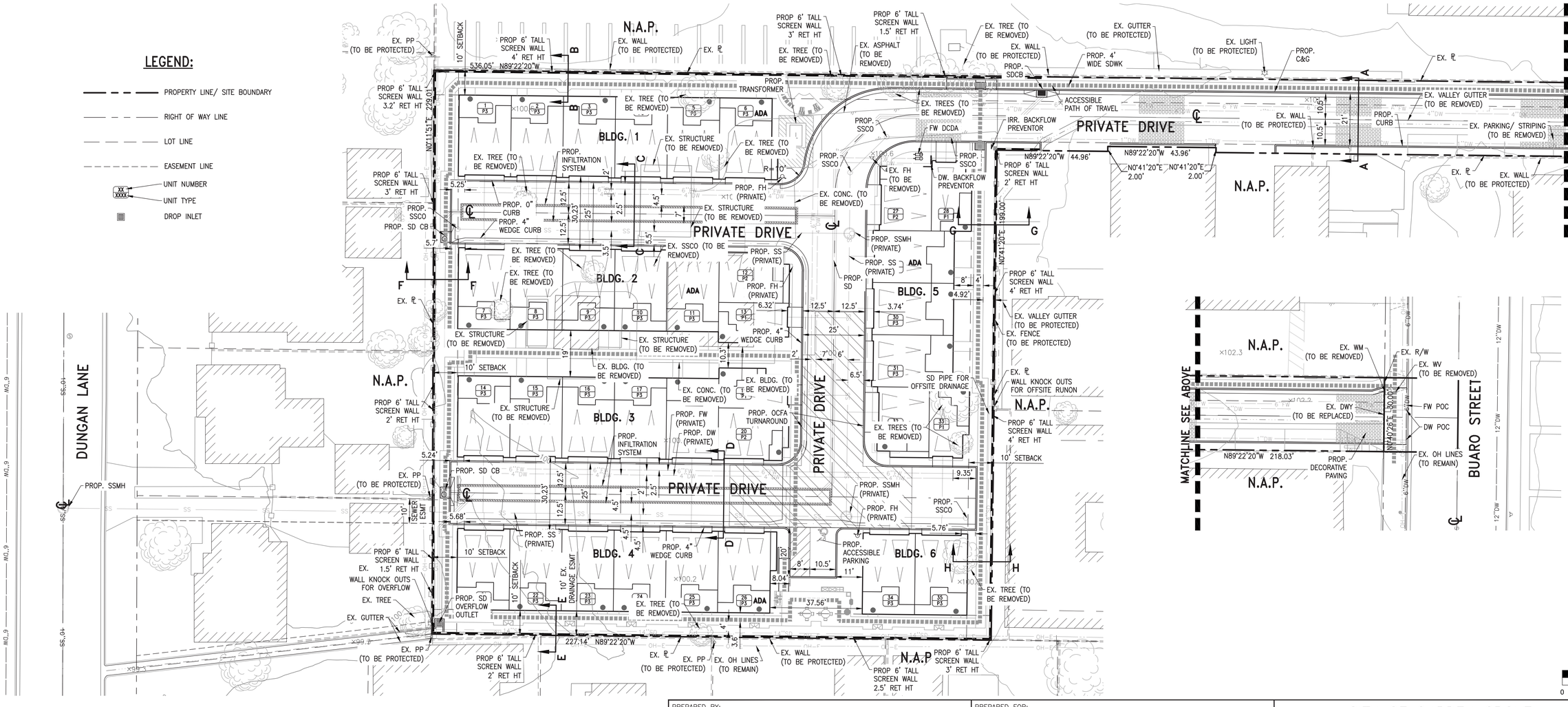
TENTATIVE TRACT MAP NO. 19314
12701 BUARO STREET
TITLE SHEET

PROJECT NO. ASHT-003

SHEET 1 OF 5

LEGEND:

- PROPERTY LINE/ SITE BOUNDARY
- RIGHT OF WAY LINE
- LOT LINE
- EASEMENT LINE
- XX / XXXX — UNIT NUMBER / UNIT TYPE
- DROP INLET



SCALE: 1" = 20'

0 10 20 40

PREPARED BY:

REGISTERED PROFESSIONAL ENGINEER — RYAN J. BITTNER — No. 68167 — CIVIL — STATE OF CALIFORNIA

C&V CONSULTING, INC.
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CITY OF GARDEN GROVE
DEPARTMENT OF PLANNING AND DEVELOPMENT

PROJECT NO. ASHT-003

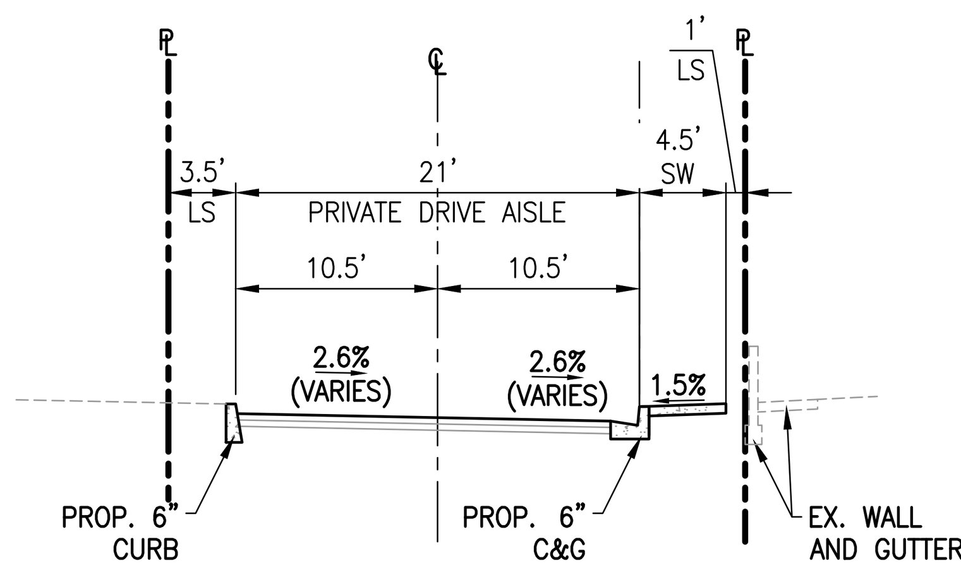
TENTATIVE TRACT MAP NO. 19314
12701 BUARO STREET
PRELIMINARY SITE PLAN

SHEET 2 OF 5

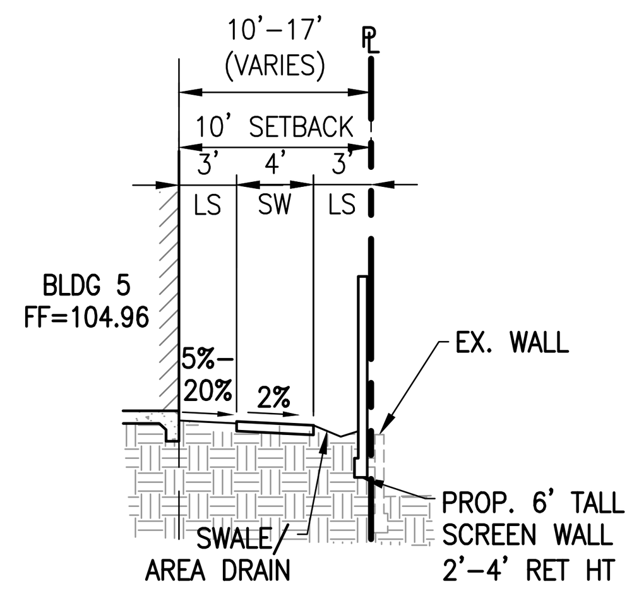
PLAN SET: PDR3
DATE: 3/21/2024

P:\ASHT-003\DWG\MXD\2-ASD3-DRS-01.DWG

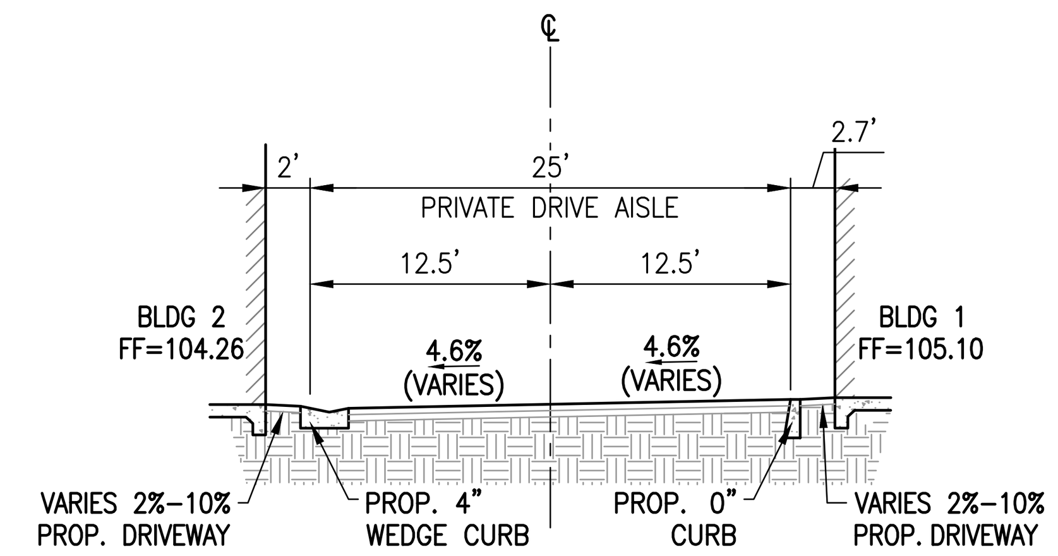
PREPARED BY:	PREPARED FOR:		
C&V CONSULTING, INC. CIVIL ENGINEERING LAND PLANNING & SURVEYING 9830 IRVINE CENTER DRIVE IRVINE, CALIFORNIA 92618 (949) 916-3800 INFO@CVC-INC.NET WWW.CVC-INC.NET REGISTERED PROFESSIONAL ENGINEER RYAN J. BITTNER No. 68167 CIVIL STATE OF CALIFORNIA	ASHTON 3, LLC 20 PAMELA WAY, COTO DE CAZA, CA 92679 (949) 584-2042	CITY OF GARDEN GROVE DEPARTMENT OF PLANNING AND DEVELOPMENT TENTATIVE TRACT MAP NO. 19314 12701 BUARO STREET PRELIMINARY GRADING PLAN	PROJECT NO. ASHT-003 SHEET 3 OF 5



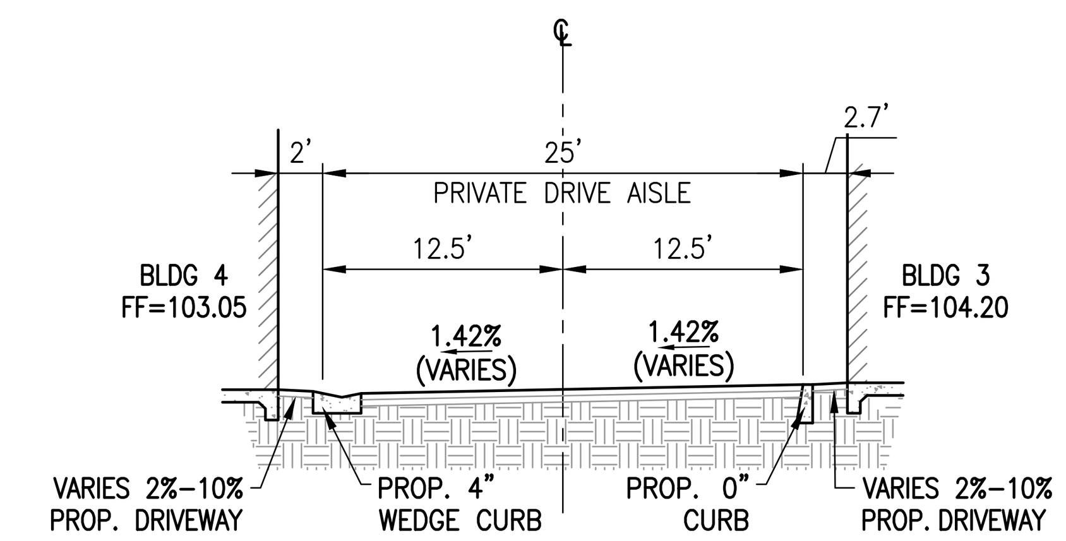
TYPICAL STREET SECTION
SECTION A
1"=10' HOR



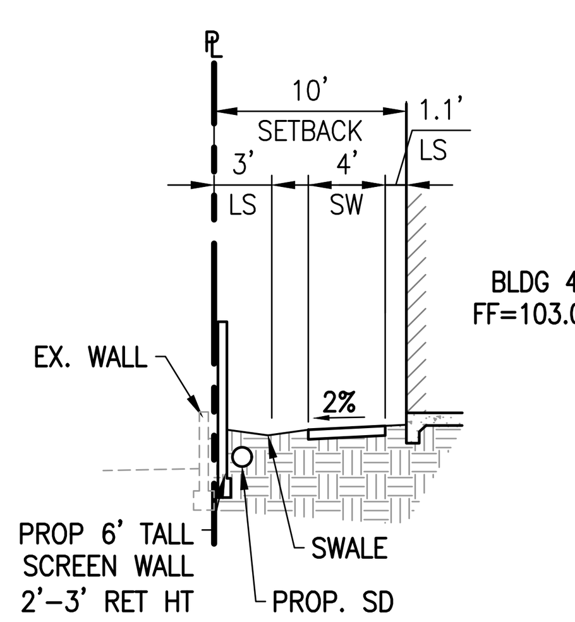
TYPICAL STREET SECTION
SECTION B
1"=10' HOR



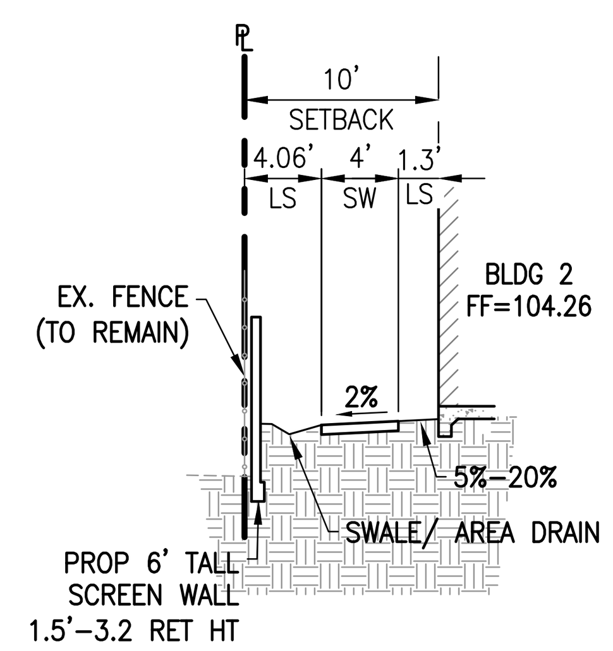
TYPICAL STREET SECTION
SECTION C
1"=10' HOR



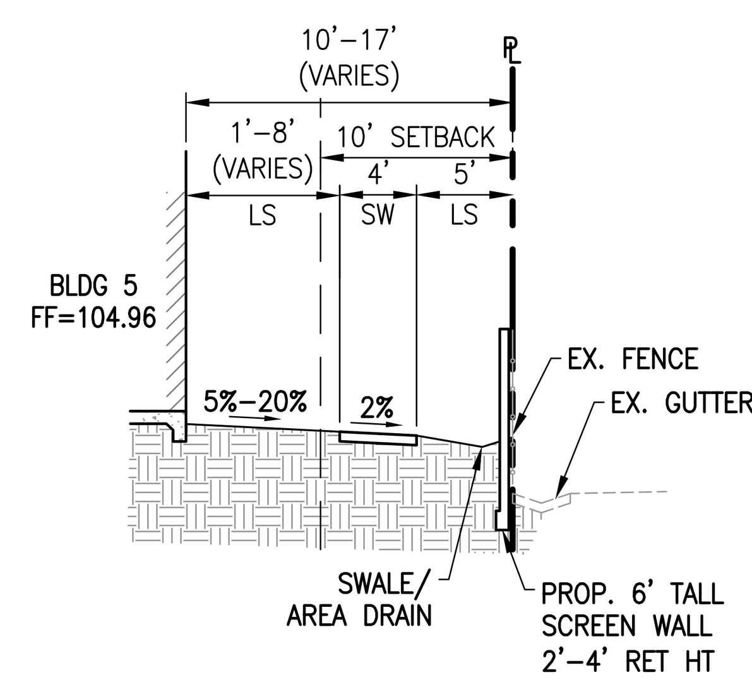
TYPICAL STREET SECTION
SECTION D
1"=10' HOR



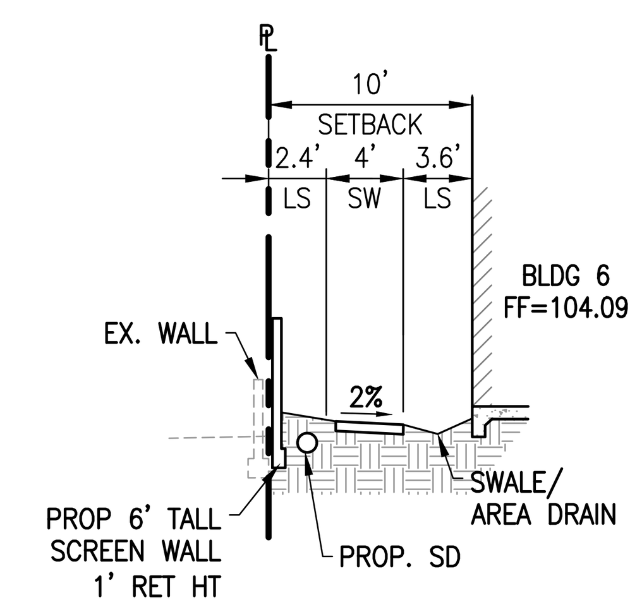
SOUTHERLY BOUNDARY SECTION
SECTION E
1"=10' HOR



WESTERLY BOUNDARY SECTION
SECTION F
1"=10' HOR



EASTERLY BOUNDARY SECTION
SECTION G
1"=10' HOR

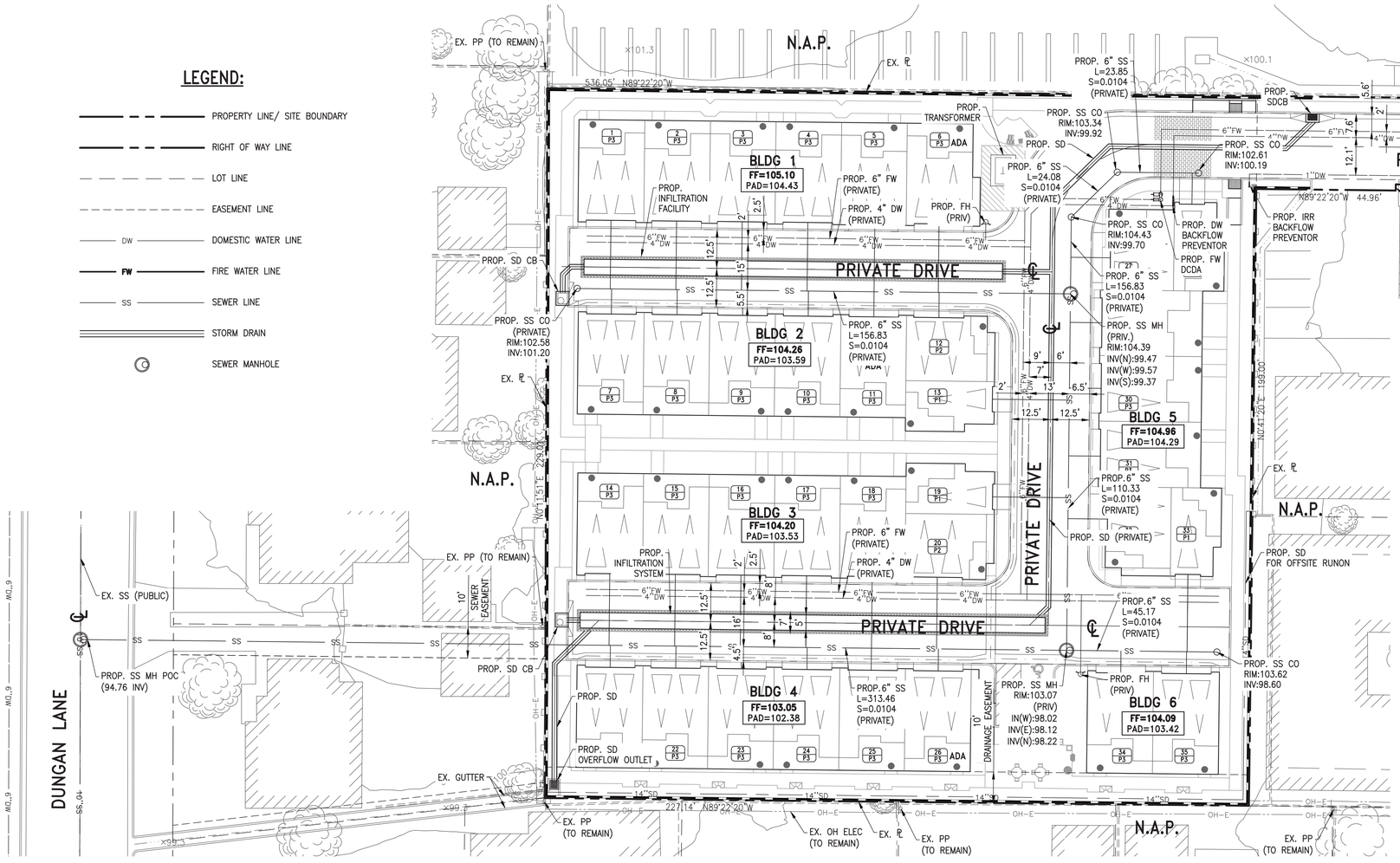


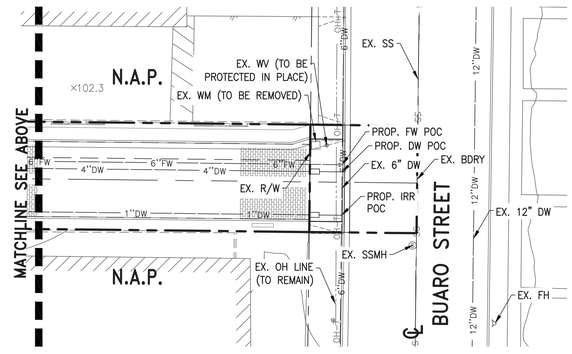
EASTERLY BOUNDARY SECTION
SECTION H
1"=10' HOR

PREPARED BY:	PREPARED FOR:		
REGISTERED PROFESSIONAL ENGINEER RYAN J. BITTNER No. 68167 CIVIL STATE OF CALIFORNIA C&V CONSULTING, INC. CIVIL ENGINEERING LAND PLANNING & SURVEYING 9830 IRVINE CENTER DRIVE IRVINE, CALIFORNIA 92618 (949) 916-3800 INFO@CVC-INC.NET WWW.CVC-INC.NET	ASHTON 3, LLC 20 PAMELA WAY, COTO DE CAZA, CA 92679 (949) 584-2042	CITY OF GARDEN GROVE DEPARTMENT OF PLANNING AND DEVELOPMENT TENTATIVE TRACT MAP NO. 19314 12701 BUARO STREET PRELIMINARY SECTIONS	PROJECT NO. ASHT-003 SHEET 4 OF 5

LEGEND:

- PROPERTY LINE/ SITE BOUNDARY
- RIGHT OF WAY LINE
- LOT LINE
- EASEMENT LINE
- DW — DOMESTIC WATER LINE
- FW — FIRE WATER LINE
- SS — SEWER LINE
- STORM DRAIN
- SEWER MANHOLE





SCALE: 1" = 20'

0 10 20 40

PREPARED BY:

REGISTERED PROFESSIONAL ENGINEER RYAN J. BITTNER No. 68167 CIVIL STATE OF CALIFORNIA

C&V CONSULTING, INC. CIVIL ENGINEERING LAND PLANNING & SURVEYING

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PREPARED FOR:

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CITY OF GARDEN GROVE
DEPARTMENT OF PLANNING AND DEVELOPMENT

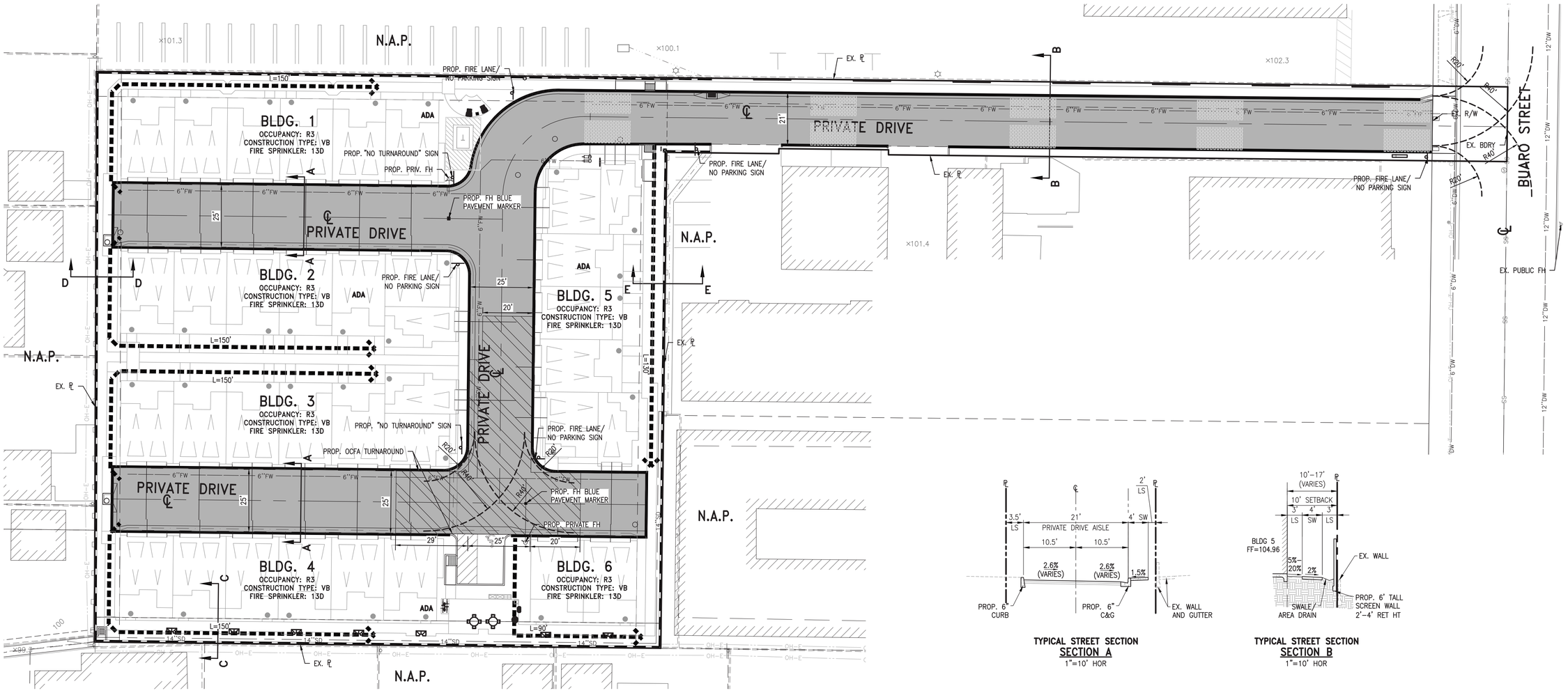
PROJECT NO. ASHT-003

TENTATIVE TRACT MAP NO. 19314
12701 BUARO STREET
PRELIMINARY UTILITY PLAN

SHEET 5 OF 5

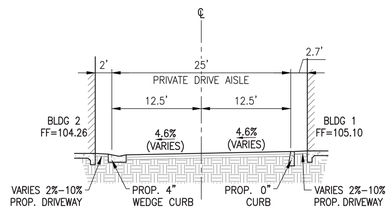
PLAN SET: PDS3
DATE: 3/27/2024

P:\ASHT-003\DWG\SHEETS\TM\TM-05-UTIL.DWG
BY: MARK MCMASTERS

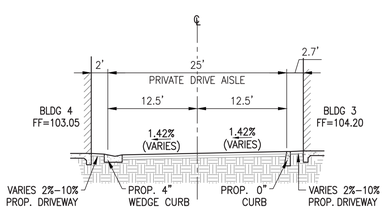


TYPICAL STREET SECTION
SECTION A
1"=10' HOR

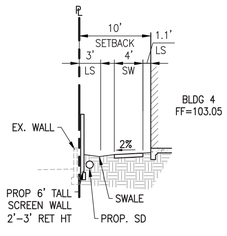
TYPICAL STREET SECTION
SECTION B
1"=10' HOR



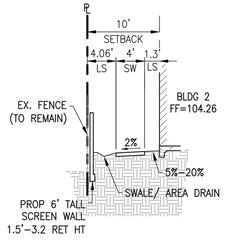
TYPICAL STREET SECTION
SECTION C
1"=10' HOR



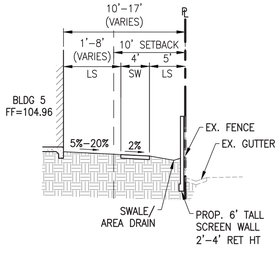
TYPICAL STREET SECTION
SECTION D
1"=10' HOR



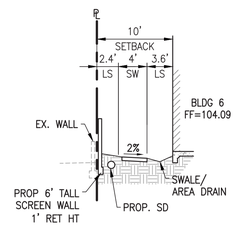
SOUTHERLY BOUNDARY SECTION
SECTION E
1"=10' HOR



WESTERLY BOUNDARY SECTION
SECTION F
1"=10' HOR



EASTERLY BOUNDARY SECTION
SECTION G
1"=10' HOR



EASTERLY BOUNDARY SECTION
SECTION H
1"=10' HOR

REGISTERED PROFESSIONAL ENGINEER
RYAN J. BITTNER
No. 68167
CIVIL
STATE OF CALIFORNIA

LEGEND

- HOSE PULL LENGTH PER PLAN
- PROP. FIRE HYDRANT WITH BLUE REFLECTOR
- FIRE ACCESS LANE
- FIRE ACCESS LANE SIGN
- EX. PROPERTY LINE/ RIGHT-OF-WAY
- FIRE TRUCK TURN RADIUS PER PLAN
- FIRE LANE – RED CURB

SCALE: 1" = 20'

0 10 20 40

NO.	DATE	REVISIONS
1		
2		
3		
4		
5		
6		
7		

DESIGNED:
DRAWN:
CHECKED:
SCALE:
DATE:

OCFA REVIEW AND INSPECTIONS (OCFA USE ONLY)

- ☐ NO OCFA REVIEW REQUIRED
- ☐ PLAN REVIEW ONLY
- ☐ PLAN REVIEW AND INSPECTION

PLAN PREPARED BY:

C&V CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING
9830 IRVINE CENTER DRIVE
IRVINE, CALIFORNIA 92618
(949) 916-3600
INFO@CVC-INC.NET
WWW.CVC-INC.NET
RYAN J BITTNER
RCE 68167

FIRE MASTER PLAN

12701 BUARO STREET, GARDEN GROVE, CA 92840

ORANGE COUNTY FIRE AUTHORITY

COMMUNITY RISK REDUCTION – PLANNING AND DEVELOPMENT SECTION

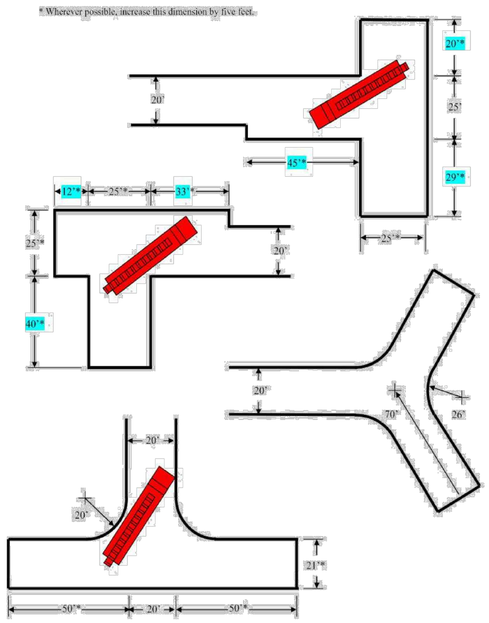
SERVICE REQUEST NUMBER
XXXXXX

SHEET 2

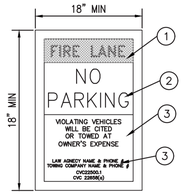
PLAN SET: PS03
DATE: 3/21/2024

PROJ: ASHT-003
DWG: P:\JOBS\ASHT-003\Dwg\Sheets\MP\MP-PS-02.dwg BY: smcmasters Mar 21, 2024 - 12:35:07pm

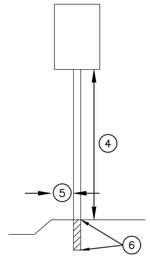
HAMMER HEAD/TURNING RADIUS DETAILS



FIRE LANE SIGN DETAILS & NOTES:



FIRE LANE ENTRANCE SIGN DETAIL
NOT TO SCALE



SIGN MOUNTING DETAIL
NOT TO SCALE

1. THE WORDS FIRE LANE SHALL BE WHITE REFLECTIVE ON RED BACKGROUND AND NO SMALLER THAN 2" INCHES IN HEIGHT
2. LETTERING SHALL BE RED ON WHITE REFLECTIVE BACKGROUND, NO SMALLER THAN 2" INCHES IN HEIGHT
3. LETTERING SHALL BE RED ON WHITE REFLECTIVE BACKGROUND, NO SMALLER THAN 1" IN HEIGHT
4. HEIGHT OF SIGN IN SIDEWALK OR PEDESTRIAN AREA SHALL BE 7'-0", AND 5'-0" IN ALL OTHER AREAS.
5. DEPTH OF SIGN SHALL BE 18 INCHES FROM STANDARD CURB AND 24 INCHES WITH ROLLED CURB TO CENTER OF POST.
6. BURY DEPTH SHALL BE A MINIMUM OF 24 INCHES.

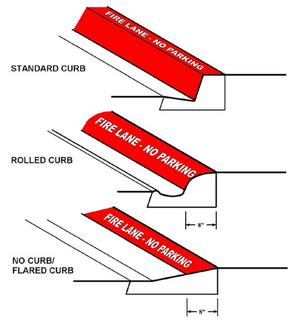
NOTES
ALL SIGN AND LETTERING DIMENSIONS SHOWN ARE MINIMUMS. "ARIAL NARROW" FONT IS USED IN SAMPLE THOUGH OTHER LEGIBLE SANS-SERIF FONTS MAY BE ACCEPTABLE.

THIS SIGN SHALL BE POSTED AT ALL VEHICLE ENTRANCES TO AREAS MARKED WITH EITHER RED CURBS OR FIRE LANE "NO PARKING" SIGNS. SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING THE DESIGNATED AREA. SIGNS SHALL BE MADE OF DURABLE MATERIAL AND INSTALLED PER ATTACHMENTS 13 AND 14 OF 2023 OCFA GUIDELINE B-01.

TOWING COMPANY CONTACT INFORMATION IS REQUIRED FOR ALL PROPERTIES WITH A STANDING WRITTEN AGREEMENT FOR SERVICES WITH A TOWING COMPANY PER THE CALIFORNIA VEHICLE CODE.

THE SIGNS SHALL BE SECURELY MOUNTED FACING THE DIRECTION OF TRAVEL AND CLEARLY VISIBLE TO ONCOMING TRAFFIC ENTERING DESIGNATED AREA. SIGNS SHALL BE OF DURABLE MATERIAL.

FIRE LANE RED CURB PAINT



NOTES
1. FIRE LANE ENTRANCE SIGN(S) SHALL ALSO BE PROVIDED PER 2023 OCFA GUIDELINE B-01.
2. CURBS SHALL BE PAINTED OSHA SAFETY RED.
3. "FIRE LANE – NO PARKING" SHALL BE PAINTED ON TOP OF CURB IN 3" WHITE LETTERING AT A SPACING OF 30' ON CENTER OR PORTION THEREOF.

REGISTERED PROFESSIONAL ENGINEER
RYAN J. BITTNER
No. 68167
CIVIL
STATE OF CALIFORNIA

NO.	DATE	REVISIONS
7		
6		
5		
4		
3		
2		
1		

DESIGNED:
DRAWN:
CHECKED:
SCALE:
DATE:

OCFA REVIEW AND INSPECTIONS (OCFA USE ONLY)
☐ NO OCFA REVIEW REQUIRED
☐ PLAN REVIEW ONLY
☐ PLAN REVIEW AND INSPECTION

PLAN PREPARED BY:
C&V CONSULTING, INC.
CIVIL ENGINEERING
LAND PLANNING & SURVEYING
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RYAN J BITTNER
RCE 68167

FIRE MASTER PLAN

12701 BUARO STREET, GARDEN GROVE, CA 92840

ORANGE COUNTY FIRE AUTHORITY

COMMUNITY RISK REDUCTION – PLANNING AND DEVELOPMENT SECTION

SERVICE REQUEST NUMBER
XXXXXX

SHEET 3

PLAN SET: PS03
DATE: 3/21/2024

PROJ: ASHT-003
DWG: P:\ASHT-003\Dwg\Sheets\FMP\FMP-PG-02.dwg BY: smcmasters Mar 21, 2024 - 12:50:22pm

CITY OF GARDEN GROVE
PLANNING SERVICES DIV
11222 ACACIA PARKWAY
GARDEN GROVE, CA 92840
TEL: (714) 741-5312 FAX: (714) 741-5578
ggcity.org

Attachment 3: Density Bonus Application

Density Bonus Application
(Government Code §65915 *et seq.*)

Housing development project applicants intending to request a density bonus, incentives or concessions, modifications or waivers, and/or reduced parking pursuant to the Section 65915 et seq. of the California Government (Density Bonuses and Other Incentives) must complete the following application. For additional information regarding density bonuses and affordability agreements, please refer to Section 9.12.030.070 of the Garden Grove Municipal Code, and to the Garden Grove Density Bonus Agreement Guidelines.

Date Filed:_____

DENSITY BONUS TYPE	
Please check one of the following (as proposed at the time of application submittal):	
☐	100% of all units in the development, including Total Units and density bonus units, but exclusive of a manager's unit or units, are for low income households, as defined by Section 50079.5 of the Health and Safety Code, except that up to 20 percent of the units in the development, including Total Units and density bonus units, may be for moderate income households, as defined in Section 50053 of the Health and Safety Code.
☒	At least 5% of the Total Units for very low income households, as defined in Section 50105 of the California Health and Safety Code.
☐	At least 10% of the Total Units for lower income households, as defined in Section 50079.5 of the California Health and Safety Code.
☐	At least 10% of the Total Units for moderate income households, as defined in Section 50093 of the California Health and Safety Code (common interest development offered to the public for purchase unless on-site option for Impact Fees, see 15.72.100.B.4).
☐	A senior citizen housing development, as defined in Sections 51.3 and 51.12 of the California Civil Code.
☐	At least 10% of the Total Units for transitional foster youth, as defined in California Education Code section 66025.9 (very low income households as defined in Section 50105 of the California Health and Safety Code).
☐	At least 10% of the Total Units for disabled veterans, as defined in California Government Code Section 18541 (very low income households as defined in Section 50105 of the California Health and Safety Code).
☐	At least 10% of the Total Units for homeless persons, as defined in the federal McKinney-Vento Homeless Assistance Act (42 U.S.C. Sec. 11301 et seq.) (very low income households, as defined in Section 50105 of the California Health and Safety Code).
☐	At least 20% of the Total Units for lower income students in a student housing development (that satisfies the requirements of California Government Code Section 65915(b)(1)(F)).
☐	Land donation (at least one acre in size, or of sufficient size to permit development of at least 40 units and otherwise satisfies the requirements of California Government Code Section 65915(g).)
☐	Child care facility (that satisfies the requirements of California Government Code Subsection 65915(h)).
☐	Condominium Conversion (that satisfies the requirements of California Government Code 65915.5)).

PRIMARY CONTACT INFORMATION	
Name:	Matt Ashton
Contact Type: ☐ Architect ☐ Engineer ☐ Property Owner ☒ Representative ☐ Other	
Mailing Address:	31311 Summerhill Court
City, State, Zip Code:	Coto de Caza, CA 92679
Phone No.:	949-584-2042
E-mail:	matt@ashton3.com

PROPERTY OWNER CONTACT INFORMATION (If different than Primary Contact)	
Name:	Charlie Kinstler
Mailing Address:	1001 Emerald Bay
City, State, Zip Code:	Laguna Beach, CA 92651
Phone No.:	562-505-5435
E-mail:	cvkljk@aol.com

PROJECT INFORMATION:		
Project Address: 12701 Buaro Street, Garden Grove, CA 92840		
APN(s): 231-383-48		
Zoning & General Plan Land Use: Zoning is R-2 (Limited Multiple Residential) & GP is Low Medium Density Residential		
Maximum Allowable Residential Density (before density bonus): 29 Homes		
Total Base Number of Housing Units (before density bonus): 29 Homes		
Market Rate Base Housing Units (before density bonus): 29 Homes		
Affordable Base Housing Units (before density bonus): 0 homes		
Size of Market Rate Units (# of Studios, 1 bedroom, 2 bedroom, etc.): 33 Units Total. Sellable SF: (3) 972 SF, 1BR, 1.5BA; (3) 1,231 SF, 2BR, 2.5BA; (27) 1,562 SF, 3BR, 3BA		
Size of Affordable Units (# of Studios, 1 bedroom, 2 bedroom, etc.): 2 Units Total. Sellable SF: (1) 972 SF, 2BR, 2.5BA; (1) 1,231 SF, 3BR, 3BA		
Proposed number of Very Low Income units : 2 Units		
Proposed number of Low Income units : NA		
Proposed number Moderate Income units : NA		
Percentage of Total Base Housing Units that are Affordable: 6.8 %		
Maximum Density Bonus Percentage (See Density Bonus Chart): 25 %		
Number of Required Parking Spaces: 51 Spaces (Per Density Bonus)		
Number of Parking Spaces Provided: 67 Spaces		
Residential Tenure: Does the project propose rental or ownership units? Ownership		
DENSITY BONUS REQUEST		
Density Bonus Percentage (calculate using "Density Bonus Chart"): 25 % Allowed; providing 22%		
Total Number of Density Bonus Units: 6 units		
Total Units in Development After Density Bonus is Applied: 35 units		
If requesting a Density Bonus for the following project types, please check the appropriate box and provide the following information:		
☐	Land Donation	Address (or APN) of land to be dedicated:
		Attach proof of site control.
		Attach evidence of meeting conditions for a land transfer density bonus as specified in the State Housing Density Bonuses and Incentives Law
☐	Child-Care Facility	Address and APN of child-care facility:
		Square footage of facility:
		Attach evidence of meeting conditions for a child care facility density bonus or Incentive as specified in the State Housing Density Bonuses and Incentives Law.
☐	Condominium Conversion	Attach evidence of meeting conditions for a condominium conversion Density Bonus as specified in the State Housing Density Bonuses and Incentives Law.

INCENTIVES/CONCESSIONS REQUEST

An applicant for a density bonus may also propose specific incentives/concessions pursuant to Subsection (d) of Government Code Section 65915. The number of incentives/concessions an applicant may receive is based on the number of affordable units and level of affordability provided. Use the Incentives/Concessions Calculator below to determine the number of incentives or concessions you are eligible for.

INCENTIVES/CONCESSIONS CALCULATOR

Affordability Level	Restricted Affordable Units Provided in Project	% of Base Project	Threshold for one (1) Incentive/ Concession (# of units)		Threshold for two (2) Incentives/ Concessions (# of units)		Threshold for three (3) Incentives/ Concessions (# of units)		Threshold for four (4) Incentives/ Concessions* (# of units)	
Very Low Income	2 units	7%	5%	X	10%		15%		100% affordable with ≥80% low income, ≤20% moderate	
Low Income			10%		17%		24%			
Moderate Income			10%		20%		30%			

** If a 100% affordable project is located within ½ mile of a major transit stop, the project is eligible for a height increase of up to three (3) additional stories, or thirty-three feet (33'-0"); however, if the project also seeks a waiver from any maximum controls on density, the project cannot receive a waiver of any other development standards (but can still receive four incentives). If this allowance is sought, please describe/identify the major transit stop that is within ½ mile of the qualifying 100% affordable project:*

DESCRIPTION OF INCENTIVES/CONCESSIONS REQUESTED

List all requested incentives/concessions. If a reduction in site development standards or a modification of zoning code requirements is sought, include references to specific Municipal Code Sections in question, and reference the requested incentives/concessions on the submitted plans.

Incentive #1

Existing Code:

On any R-2 or R-3 zoned property adjacent to an R-1 zoned property, the second floor shall be stepped back a minimum of 20 feet from the property line, and any third-floor area shall be stepped back a minimum of 40 feet from the property line. (City of Garden Grove Municipal Code, Section 9.12.040.020.A, and Section 9.12.040.050.A3)

Proposed Reduction:

When buildings adjacent to R-1, stepbacks on any floor and any side share be 10' from property line.

Provide evidence substantiating the applicant's eligibility for each incentive/concession requested, including information that clearly demonstrates that the requested incentive/concession will result in identifiable and actual cost reductions to provide for affordable housing costs. The Applicant may attach additional documentation as required.

The site is zoned R2 (designed to allow higher density residential development to help provide much needed housing in the city) and the property bounded on 3 sides by R1 zoning. The extensive building setbacks required for this adjacency of 20' for 1st and 2nd floors and 40' for the 3rd floor, on a site that is essentially 1.2 acres (without the access drive) is a hardship. This creates a loss of 27% of the land area plus an additional loss of buildable square footage due to the 40' setback for the third floor. Additionally, the construction costs increase dramatically with the stepping back of the 3rd floor levels. For a project aiming to provide 2 very low affordable homes, it is extremely important to consider efficient design and avoid the added costs.

MODIFICATION/WAIVER REQUEST

Pursuant to Subsection (e) of Government Code Section 65915, an applicant may also propose the waiver or reduction of development standards that have the effect of physically precluding the construction of a housing development incorporating the density bonus and any incentives or concessions granted to the applicant.

DESCRIPTION OF MODIFICATIONS/WAIVERS REQUESTED

List all development standards for which you are seeking a waiver or reduction pursuant to Subsection (e) of Government Code Section 65915. Include references to specific Municipal Code Sections in question, and reference development standards to be modified or waived on the submitted plans.

Waiver #1

Existing: Front: 20' to 1st & 2nd floor, 25' to 3rd floor; Side and Rear: 10' to 1st & 2nd floor, 15' to 3rd floor. (City of Garden Grove Municipal Code, Section 9.12.040.020.A)

Reduction: Reduce front, side, and rear setback to 10' for all floors.

Waiver #2

Existing: Distance between vehicular accessways and residential units: minimum of five feet. (City of Garden Grove Municipal Code, Section 9.12.040.050.A 2.e)

Reduction: Distance between vehicular accessways and residential units is 1'-9" on the ground level at the narrowest point.

Waiver #3

Existing: Each individual dwelling unit shall have a main entry that is clearly defined by use of a stoop, framed doorway, or covered doorway that is recessed from the building façade a minimum depth of three feet.(City of Garden Grove Municipal Code, Section 9.12.040.050.G.1)

Reduction: Each unit will have a clearly designed entry with a 1' eyebrow awning.

---------- Continued on the next page ----------

Provide evidence substantiating the applicant's eligibility for each waiver or reduction of a development standard being requested, including documentation demonstrating that the waiver or reduction is physically necessary to construct the housing development with the additional density allowed pursuant to the density bonus and incorporating any incentives or concessions required to be granted. Where more than one modification or waiver is sought, the applicant should clearly demonstrate why the modifications/waivers are cumulatively necessary to prevent a development standard from physically precluding the construction of the development.

Evidence #1

The existing setback for R2 zones will cause a significant loss on the project site area which has a tremendous affect on the project density and construction feasibility. Maximizing density and efficient architectural design are essential factors to not only ensure financial feasibility but also in achieving the ultimate city goal of providing more housing opportunities within the city.

Evidence #2

Given the size limit of the project, not all the units have 5' separation from the roadways. But each unit has a minimum 2' driveway apron. All the roadways are designed to meet the emergency truck access requirement and buildings are outside of the path of travel to alleviate any safety concerns.

Evidence #3

If the entrance is recessed 3 feet, it will affect the uses of all the floors. The unit will become smaller and/or the density will be reduced. And there will not be enough space for ADA bathroom. All of these items will impact the feasibility of the project. The awning in the proposed project still provides clear definition of the entrance in an attractive manner.

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MODIFICATION/WAIVER REQUEST

Pursuant to Subsection (e) of Government Code Section 65915, an applicant may also propose the waiver or reduction of development standards that have the effect of physically precluding the construction of a housing development incorporating the density bonus and any incentives or concessions granted to the applicant.

DESCRIPTION OF MODIFICATIONS/WAIVERS REQUESTED

List all development standards for which you are seeking a waiver or reduction pursuant to Subsection (e) of Government Code Section 65915. Include references to specific Municipal Code Sections in question, and reference development standards to be modified or waived on the submitted plans.

Waiver #4

Existing: The minimum area for any one active recreation area shall be 900 square feet with minimum horizontal dimensions of 30 feet in any direction. (City of Garden Grove Municipal Code, Section 9.12.040.050.J.7.b)

Reduction: The minimum area for any one active recreation area shall be 900 square feet with minimum horizontal dimensions of 25 feet in any direction.

Waiver #5

Existing: A project site may include more than one active recreation area. The combined active recreation area for a project site shall be as set forth in the table below, which is 2,500 sf for this size of development. (City of Garden Grove Municipal Code, Section 9.12.040.050.J.7.b and c)

Reduction: 920 square feet active recreation area is provided.

Waiver #6

Existing: Common open space/recreation areas shall be designed to provide specific amenities. Development up to 35 units shall provide two of three: 1. Business Center with Workstations – 2 minimum; 2. Indoor or Outdoor Gym – 250 sf minimum; 3. Clubhouse with 400 sf Kitchen. (City of Garden Grove Municipal Code, Section 9.12.040.050.J.7.d)

Reduction: The project will provide amenities like barbeque with table and seating, reading nook, dog-bag station, and trails.

---------- Continued on the next page ----------

Provide evidence substantiating the applicant's eligibility for each waiver or reduction of a development standard being requested, including documentation demonstrating that the waiver or reduction is physically necessary to construct the housing development with the additional density allowed pursuant to the density bonus and incorporating any incentives or concessions required to be granted. Where more than one modification or waiver is sought, the applicant should clearly demonstrate why the modifications/waivers are cumulatively necessary to prevent a development standard from physically precluding the construction of the development.

Evidence #4-6

This size of this site and the number of homes cannot financially support the construction of a business center, clubhouse or indoor/outdoor gym. Open space, soft programming such as bbq area, seating area, and community gardens are anticipated. The site is located roughly 3/4 of a mile from Haster Basin Recreational Park and roughly ¼ mile from the UPS business center located in the Harbor Town and Country Shopping Center.

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MODIFICATION/WAIVER REQUEST

Pursuant to Subsection (e) of Government Code Section 65915, an applicant may also propose the waiver or reduction of development standards that have the effect of physically precluding the construction of a housing development incorporating the density bonus and any incentives or concessions granted to the applicant.

DESCRIPTION OF MODIFICATIONS/WAIVERS REQUESTED

List all development standards for which you are seeking a waiver or reduction pursuant to Subsection (e) of Government Code Section 65915. Include references to specific Municipal Code Sections in question, and reference development standards to be modified or waived on the submitted plans.

Waiver #7

Existing: The combined usable private and common open space for the entire development shall equal a minimum of 300 square feet per unit. (City of Garden Grove Municipal Code, Section 9.12.040.050.J.2)

Reduction: The combined usable private and common open space for the entire development shall equal a minimum of 163 square feet per unit.

Waiver #8

Existing: For more than five units, three cubic yard bins shall be utilized. A storage enclosure shall be provided sufficient in size to hold one or more standard three-cubic-yard bins. Each enclosure shall provide sufficient area for the collection of refuse and recyclable materials. (City of Garden Grove Municipal Code, Section 9.12.040.260.B.2)

Reduction: Each unit has individual trash, recycling and organic containers inside the garage.

Provide evidence substantiating the applicant's eligibility for each waiver or reduction of a development standard being requested, including documentation demonstrating that the waiver or reduction is physically necessary to construct the housing development with the additional density allowed pursuant to the density bonus and incorporating any incentives or concessions required to be granted. Where more than one modification or waiver is sought, the applicant should clearly demonstrate why the modifications/waivers are cumulatively necessary to prevent a development standard from physically precluding the construction of the development.

Evidence #7

If the project follows development standard of 300 sf/unit, the project will need to provide 10,500 sf of combined usable open space, which will be more than 28% of the 36,790 sf net area (excluding all the roadways). It will largely impact the project density which impacts the overall goals of the City for more housing.

Evidence #8

Both building design and site plan demonstrate the capability of storing and collecting individual waste bins. Trash bins inside each household help keep the neighborhood clean and safe. Additionally, this will reinforces the feeling, convenience and pride of homeownership.

MODIFICATION/WAIVER REQUEST

Pursuant to Subsection (e) of Government Code Section 65915, an applicant may also propose the waiver or reduction of development standards that have the effect of physically precluding the construction of a housing development incorporating the density bonus and any incentives or concessions granted to the applicant.

DESCRIPTION OF MODIFICATIONS/WAIVERS REQUESTED

List all development standards for which you are seeking a waiver or reduction pursuant to Subsection (e) of Government Code Section 65915. Include references to specific Municipal Code Sections in question, and reference development standards to be modified or waived on the submitted plans.

Waiver #9

Existing: Buildings (one, two, or three story) shall maintain a minimum separation of 10 feet;(City of Garden Grove Municipal Code, Section 9.12.040.050.A.1.a)

Existing: No pedestrian walkways/pathways shall be provided within any separation area required under 9.12.040.050. A unless that separation area is increased in width by a minimum of two feet. (City of Garden Grove Municipal Code, Section 9.12.040.050.A.2.i)

Reduction: Buildings (one, two, or three story) shall maintain a minimum separation of 10 feet. A waiver from the two feet increase is requested as a 3' landscape buffer between walkway and building is required and met.

Waiver #10

Existing: Passive open space areas shall be improved with at least three types of the amenities in the following list: pathway, bench/tables; raised landscape beds, Gazebo or similar shade structure, community garden, outdoor game feature, water fountains or other water features. (City of Garden Grove Municipal Code, Section 9.12.040.050.11)

Reduction: Passive open space areas shall be improved with at least **two** types (*versus three*) of the amenities in the following list:...

Provide evidence substantiating the applicant's eligibility for each waiver or reduction of a development standard being requested, including documentation demonstrating that the waiver or reduction is physically necessary to construct the housing development with the additional density allowed pursuant to the density bonus and incorporating any incentives or concessions required to be granted. Where more than one modification or waiver is sought, the applicant should clearly demonstrate why the modifications/waivers are cumulatively necessary to prevent a development standard from physically precluding the construction of the development.

Evidence #9

There are two units (Unit 13 and unit 19) are 10.33' apart. The front doors of these two units are intentionally not facing each other. The front door to front door is 15' apart with ample room for an ADA sidewalk and the required 3' landscape buffer.

Evidence #10

The project provides an ADA accessible pathway that weaves around the site. The project also provide a landscaped courtyard in a centralized location. An intimate reading nook and seating area is provided in a separate location and easily walkable from each home. The precious balance between responsible higher density on this 1.2 acre site and livability for future residents is achieved with creative and well designed intimate spaces. Thoughtful relaxing nodes connected with ADA walkways will encourage residents to walk about in the safety and comfort of their own neighborhood.

PARKING RATIOS			
Are you requesting application of the onsite vehicular parking ratios set forth in Subsection (p)(1) of Government Code Section 65915?			
☒	Yes	☐	No

SPECIAL PARKING REQUIREMENTS	
If you are requesting application of a reduced onsite parking ratio pursuant to Subsections (p)(2), (p)(3), or (p)(4) of Government Code Section 65915, select the onsite parking standard requested per the appropriate development type:	
☐	Rental/for sale projects with at least 11% very low income or 20% lower income units, within ½ mile of accessible major transit stop** – 0.5 spaces per unit
☐	Rental projects 100% affordable to lower income, within ½ mile of accessible major transit stop** – 0 spaces per unit
☐	Rental senior projects 100% affordable to lower income, either with paratransit service or within ½ half mile of accessible bus route** (operating ≥8 times per day) – 0 spaces per unit
☐	Rental special needs projects 100% affordable to lower income households, either with paratransit service or within ½ half mile of accessible bus route** (operating ≥8 times per day) – 0 spaces per unit
☐	Rental supportive housing developments 100% affordable to lower income households – 0 spaces
*** If applicable, please describe/identify the major transit stop or accessible bus route that is within ½ mile of the project.*	

ASSOCIATED HOUSING DEVELOPMENT FORMS & APPLICATIONS	
Dependent upon the nature of the request, and the design of the project, the following forms may also be required:	
☐ Replacement Unit Determination	☐ SB 330 Housing Development Pre-Application
☐ SB 35 Housing Streamlining Eligibility Checklist	☐ Preliminary Development Review Application

CERTIFICATION:

I certify and declare under penalty of perjury under the laws of the State of California that the answers furnished above, and in any attached exhibits, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. I further understand that additional information may be required by the City of Garden Grove to complete my review. Furthermore, developments requesting a density bonus shall enter into a density bonus housing agreement with the City. A density bonus housing agreement shall be made a condition of the discretionary planning permits for all housing developments, and shall be recorded as a restriction on any parcels on which the target units or density bonus units will be constructed. The density bonus housing agreement shall be recorded prior to final or parcel map approval, or, where the housing development does not include a map, prior to issuance of a building permit for any structure in the housing development. The density bonus housing agreement shall run with the land and bind on all future owners and successors in interest.

_____ _____

Applicant Signature Date

_____ _____

Property Owner Signature Date

RK engineering group, inc.
parking
acoustical engineering
air quality & ghg

April 17, 2024

Mr. Matt Ashton
ASHTON 3, LLC.
5 Hoya Street
Rancho Mission Viejo, CA 92694

Subject: Buaro Street Residential Project Trip Generation & VMT Screening Analysis, City of Garden Grove

Dear Mr. Ashton:

A. Introduction

RK ENGINEERING GROUP, INC. (RK) is pleased to provide this Trip Generation and Vehicle Miles Traveled (VMT) Screening Analysis for the proposed Buaro Street Residential Project (hereinafter referred to as "project").

The purpose of this study is to evaluate the project's potential impact on level of service (LOS) and vehicle miles traveled (VMT), pursuant to the *City of Garden Grove Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment, May 2020 (TIA Guidelines)*.

Based on the project's size and location, it is not expected to degrade existing operational LOS along roadways or intersections in the vicinity of the site, and it may be presumed to result in a less than significant VMT impact under CEQA.

B. Project Description

The project site is located at 12701 Buaro Street, in the City of Garden Grove. The project site is currently occupied by one (1) existing single-family home. The existing home is currently vacant.

The proposed project consists of demolishing the existing single-family home and constructing thirty-five (35) residential townhomes on an approximately 1.4-acre site. Access to the project is proposed via one (1) existing shared driveway on Buaro Street.

1401 dove street, ste. 540
newport beach, ca 92660
P (949) 474-0809
W rkengineer.com

Exhibit A shows the location map of the proposed project. The site plan used for this analysis, provided by WILLIAM HEZMALHALCH ARCHITECTS, INC., is provided in Exhibit B.

C. Trip Generation

Trip generation represents the amount of traffic that is attracted and produced by a development.

Trip generation is estimated based on the trip generation rates from the latest *Institute of Transportation Engineers (ITE) Trip Generation Manual*. The latest version (11th Edition, 2021) of the ITE Manual was utilized for this trip generation analysis. The publication provides a comprehensive evaluation of trip generation rates for a variety of land uses.

The proposed project consists of demolishing the existing single-family detached residential home that currently occupies the site and constructing 35 residential townhomes in its place. As such, ITE Land Use Code 215: Single-Family Attached Housing and ITE Land Use Code 210: Single-Family Detached Housing trip rates accurately reflect the project and existing land uses. Table 1 shows the ITE trip generation rates (11th Edition) utilized for the trip generation analysis of the proposed project land use.

Table 1
ITE Trip Generation Rates[1]

Land Use	Units[2]	ITE Code	AM			PM			Daily
			In	Out	Total	In	Out	Total	
Single-Family Attached Housing	215	DU	25%	75%	0.48	59%	41%	0.57	7.20
Single-Family Detached Housing	210	DU	25%	75%	0.70	63%	37%	0.94	9.43

[1] Source: *ITE Trip Generation Manual* (11th Edition, 2021).

[2] DU = Dwelling Units.

Utilizing the trip generation rates from Table 1, Table 2 shows the forecasted trip generation for the proposed project with the existing land use trip credit.

Table 2
Project Trip Generation[1]

Land Use (ITE Code)	Quantity	Units	AM			PM			Daily
			In	Out	Total	In	Out	Total	
Proposed Project Trip Generation Forecast									
Single-Family Attached Housing (215)	35	DU	4	13	17	12	8	20	252
[A] Proposed Project Trip Generation Forecast Sub-Total			**4**	**13**	**17**	**12**	**8**	**20**	**252**
Existing Entitled Land Use Trip Generation Forecast									
Single-Family Detached Housing (210)	1	TSF	0	1	1	1	0	1	9
[B] Existing Entitled Land Use Trip Generation Forecast Sub-Total			**0**	**1**	**1**	**1**	**0**	**1**	**9**
Total Net Trip Generation Forecast [A] - [B]			***+4***	***+12***	***+16***	***+11***	***+8***	***+19***	***+243***

[1] Source: *ITE Trip Generation Manual (11th Edition, 2021).*

[2] TSF = Thousand Square Feet

As shown at the bottom of Table 2, the project is forecast to generate approximately 243 net new daily trips which includes 16 additional trips during the AM peak hour and 19 additional trips during the PM hour trips.

Per the Garden Grove TIA Guidelines, a traffic impact analysis, which includes LOS analysis, shall be required for a proposed project when either the AM or PM peak hour trip generation is expected to exceed 50 vehicle trips from the proposed development. Based on the published rates from the latest ITE Manual, the proposed project is not expected to exceed 50 net new peak hour trips (i.e., 16 net new AM peak hour trips and 19 net new PM peak hour trips). Hence, a full traffic impact study is not expected to be required.

D. VMT Screening Assessment

The Garden Grove TIA Guidelines identify three (3) types of screening that can be applied to effectively screen development projects from requiring a project-level VMT assessment.

The results of the screening assessment are summarized in Table 3.

Table 3
Step 1: Transit Priority Area Screening Check for Appropriateness

Criteria	Satisfied
• *Step 1: Transit Priority Area (TPA) Screening*	Not Satisfied
• ***Step 2: Low VMT Area Screening***	**Satisfied**
• *Step 3: Project Type Screening*	Not Satisfied

The following section provides additional information on the VMT Screening Assessment.

Step 1: Transit Priority Area (TPA) Screening

Per the City's VMT guidelines, projects which are located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary. A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor.

The City's VMT guidelines indicate that the use of the TPA Screening may *NOT* be appropriate if the project:

1. Has a Floor Area Ratio (FAR) of less than 0.75;

2. Includes more parking for use by residents, customers, or employees of the project than required by the City;

3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Southern California Association of Governments [SCAG]); or

4. Replaces affordable residential units with a smaller number of moderate- or high-income residential units.

The City of Garden Grove has developed a TPA map as part of the City of Garden Grove VMT Impact Analysis Methodologies Assessment memorandum, which was utilized to determine whether the project can be screened out based on the TPA screening criteria. The Garden Grove TPA map is provided in Exhibit C.

As shown in Exhibit C, the proposed project is situated in an existing TPA.

However, the project does not meet all of the TPA Screen Check for Appropriateness requirements, as shown in Table 3.

Table 4
Step 1: Transit Priority Area Screening Check for Appropriateness

Criteria	Findings	Satisfied
Has a Floor Area Ratio (FAR) of less than 0.75	The proposed project is expected to have a FAR less than 0.75. The project consists of 22,814 square feet of building area on a 61,294 square foot parcel (i.e., FAR of 0.37).	Not Satisfied
Includes more parking for use by residents, customers, or employees of the project than required by the City	The project is expected to provide more parking than is required by the City. The project is required to provide 51 total spaces and will provide 67 total spaces.	Not Satisfied
Is inconsistent with the applicable Sustainable Communities Strategy (SCS)	The proposed project is consistent with the City of Garden Grove General Plan land use designation and is consistent with the SCS.	Satisfied
Replaces affordable residential units with a smaller number of moderate- or high-income residential units	The project is not replacing any existing affordable housing units.	Satisfied

As a result, Step 1: Transit Priority Area (TPA) Screening criteria is NOT met.

Step 2: Low VMT Area Screening

Per the City's VMT guidelines, residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary.

The City of Garden Grove has developed a Low VMT Area map as part of the City of Garden Grove VMT Impact Analysis Methodologies Assessment memorandum, which was utilized to determine whether the project can be screened out based on the Low VMT Area Screening criteria. The Garden Grove Low VMT Area map is provided in Exhibit D.

As shown in Exhibit D, the proposed project is located in a traffic analysis zone (TAZ) with a total VMT per service population that is at least 15% below the County average.

Furthermore, the proposed project consists of constructing thirty-five (35) residential units, which is consistent with the existing land uses within the TAZ that the project site is located within. Therefore, it can be presumed that there is nothing unique about the project that would otherwise be misrepresented utilizing the data shown on the Daily VMT per Service Population map.

As a result, Step 2: Low VMT Area Screening is met.

A copy of the City of Garden Grove VMT Impact Analysis Methodologies Assessment memorandum Appendix B-2 is provided in Exhibit D.

Step 3: Project Type Screening

According to the City's VMT guidelines, land use projects that are local serving in nature can be presumed to have a less than significant impact absent substantial evidence to the contrary. These include the following land use types:

- Local-serving K-12 schools
- Local parks
- Day care centers
- Local-serving retail uses less than 50,000 square feet, including:
    - Gas stations
    - Banks
    - Restaurants
    - Shopping centers

- Local-serving hotels (e.g., non-destination hotels)
- Student housing projects on or adjacent to a college campus
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (public libraries, fire stations, local government)
- Affordable, supportive, or transitional housing
- Assisted living facilities
- Senior housing (as defined by HUD)
- Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS
- Projects generating less than 110 daily vehicle trips
    - This generally corresponds to the following "typical" development potentials:
        - 11 single family housing units
        - 16 multi-family, condominiums, or townhouse housing units
        - 10,000 square feet of office
        - 15,000 square feet of industrial
        - 63,000 square feet of warehousing
        - 79,000 square feet of high cube transload and short-term storage warehouse

As discussed above, the proposed project is forecast to generate approximately 243 net new daily trips. As a result, Step 3: Project Type Screening criteria is NOT met.

E. Summary of Project Impacts

The following section summarizes the project's effect on transportation per the CEQA Guidelines Appendix G Checklist Form.

Table 5
CEQA Transportation Impact Criteria

Noise Impact Criteria	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?			X	
b) Conflict or be inconsistent with CEQA Guidelines Sectio 15064.3, subdivision (b)?			X	
c) Substantially increase hazards due to a geometric design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?			X	
d) Result in inadequate emergency access?			X	

F. Conclusions

RK Engineering Group, Inc. has completed this Trip Generation and Vehicle Miles Traveled (VMT) Screening Assessment for the proposed Buaro Street Residential Project.

Per the Garden Grove TIA Guidelines, a Non-CEQA Transportation Assessment, which includes LOS analysis, shall be required for proposed projects when either the AM or PM peak hour trip generation is expected to exceed 50 vehicle trips from the proposed development. The project is not expected to exceed 50 net new peak hour trips (i.e., 16 net new AM peak hour trips and 19 net new PM peak hour trips). Hence, a full traffic impact study is not expected to be required.

Furthermore, the proposed project satisfies the VMT screening requirements based on Step 2: Low VMT Area Screening. As a result, the project can be screened out of a detailed VMT analysis and is presumed to have a less than significant impact on VMT under CEQA.

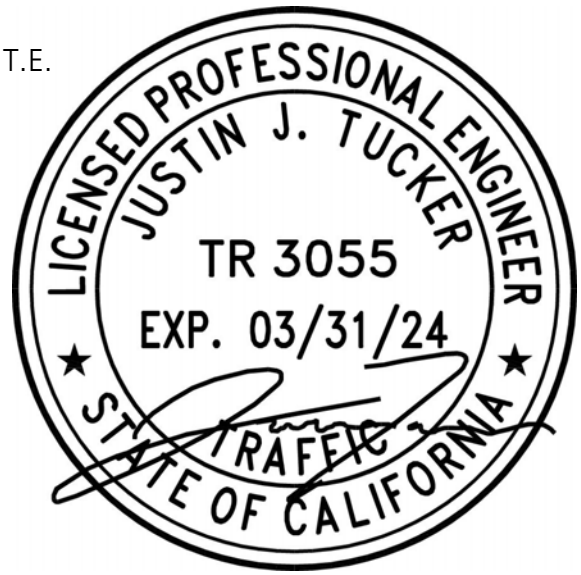
RK Engineering Group, Inc. appreciates this opportunity to assist ASHTON 3, LLC. with this project. If you have any questions regarding this study, please do not hesitate to contact us at (949) 474-0809.

Sincerely,

RK ENGINEERING GROUP, INC.

Justin Tucker, P.E., T.E.
Associate Principal

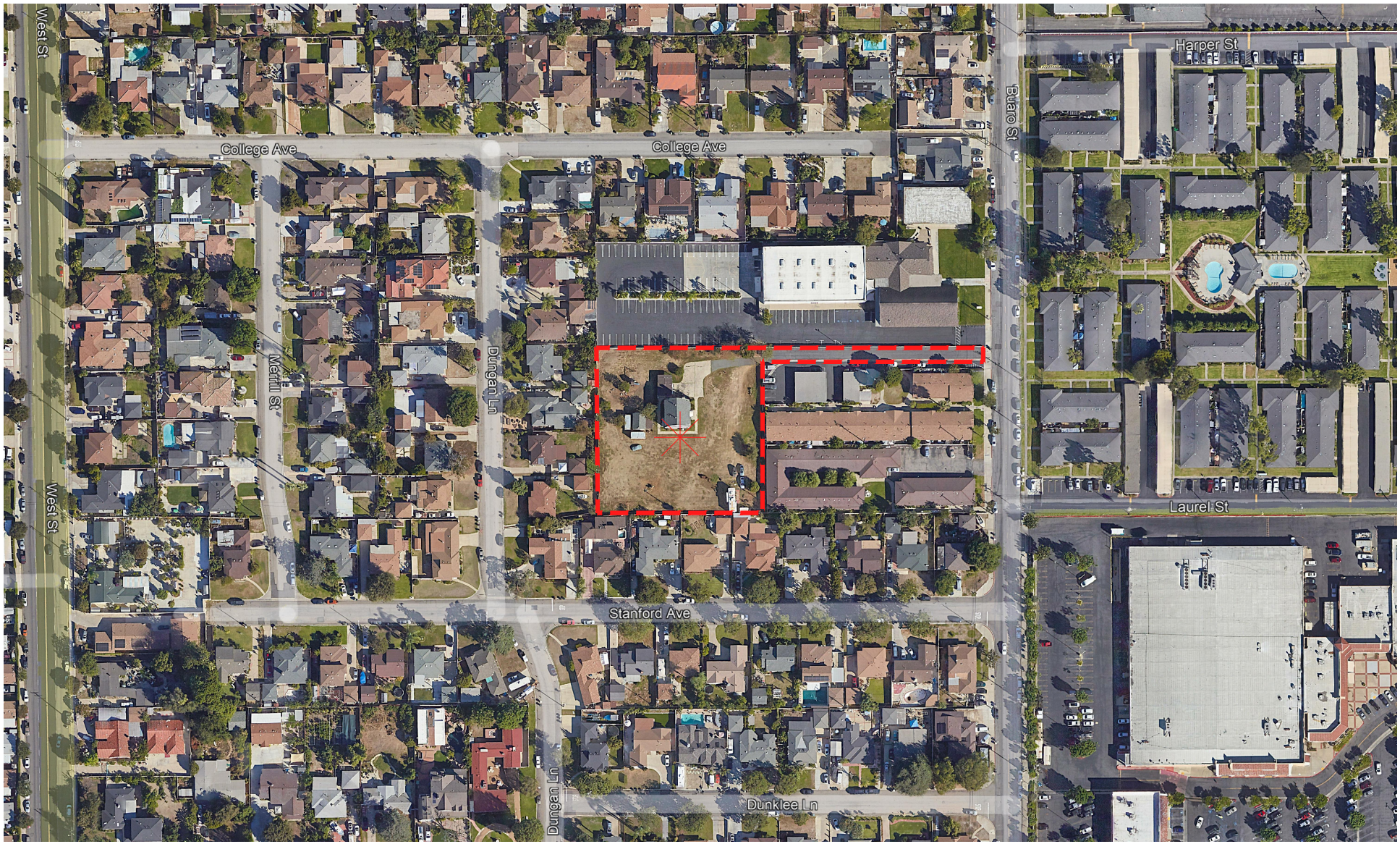
Becca Morrison
Environmental Specialis



Exhibits

Exhibit A

Location Map



Legend:

= Project Site Boundary

= Project Site

N

RK engineering group, inc.

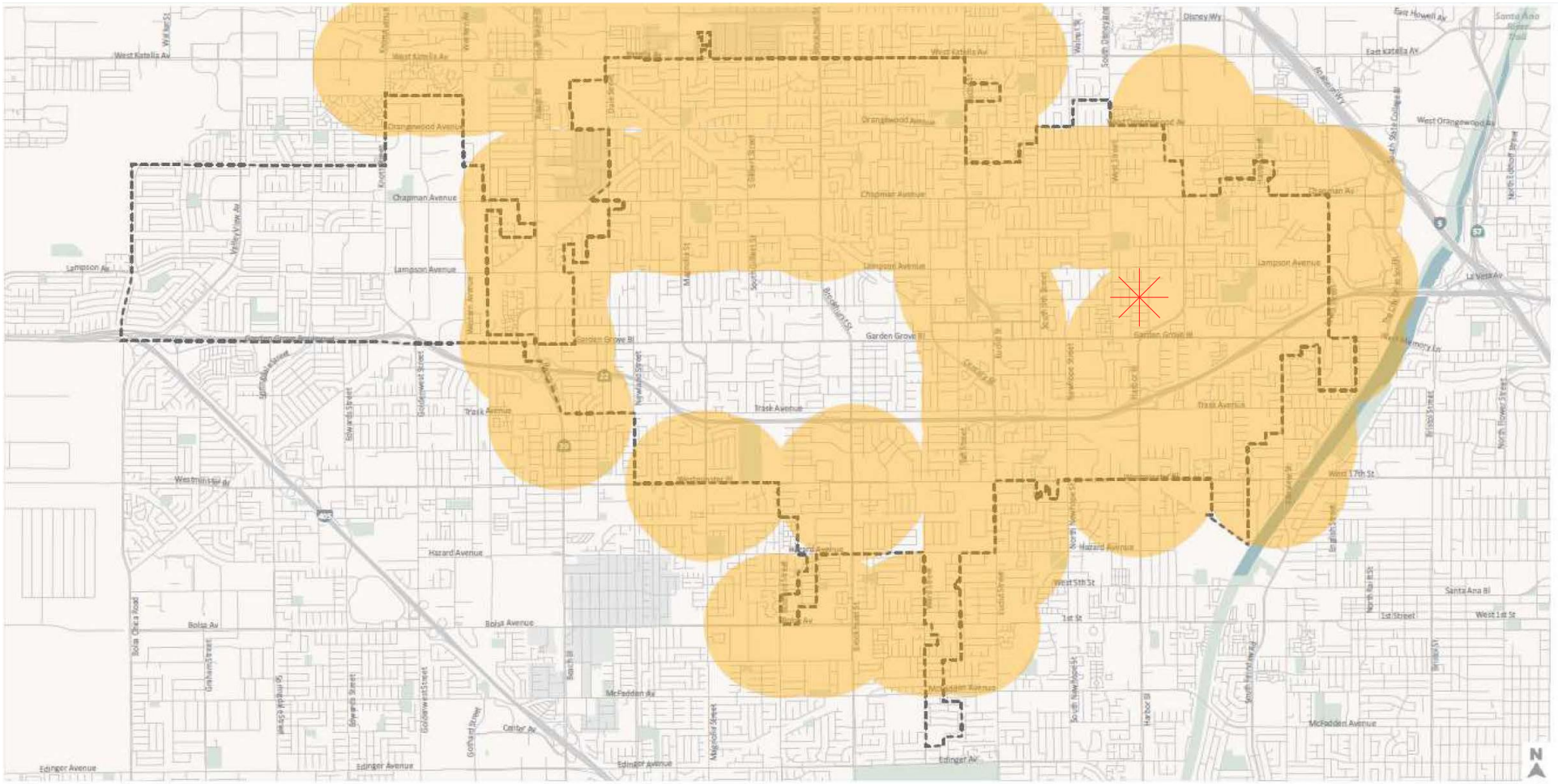
Exhibit B

Site Plan

N

Exhibit C

City of Garden Grove Transit Priority Area (TPA) Map



Legend:

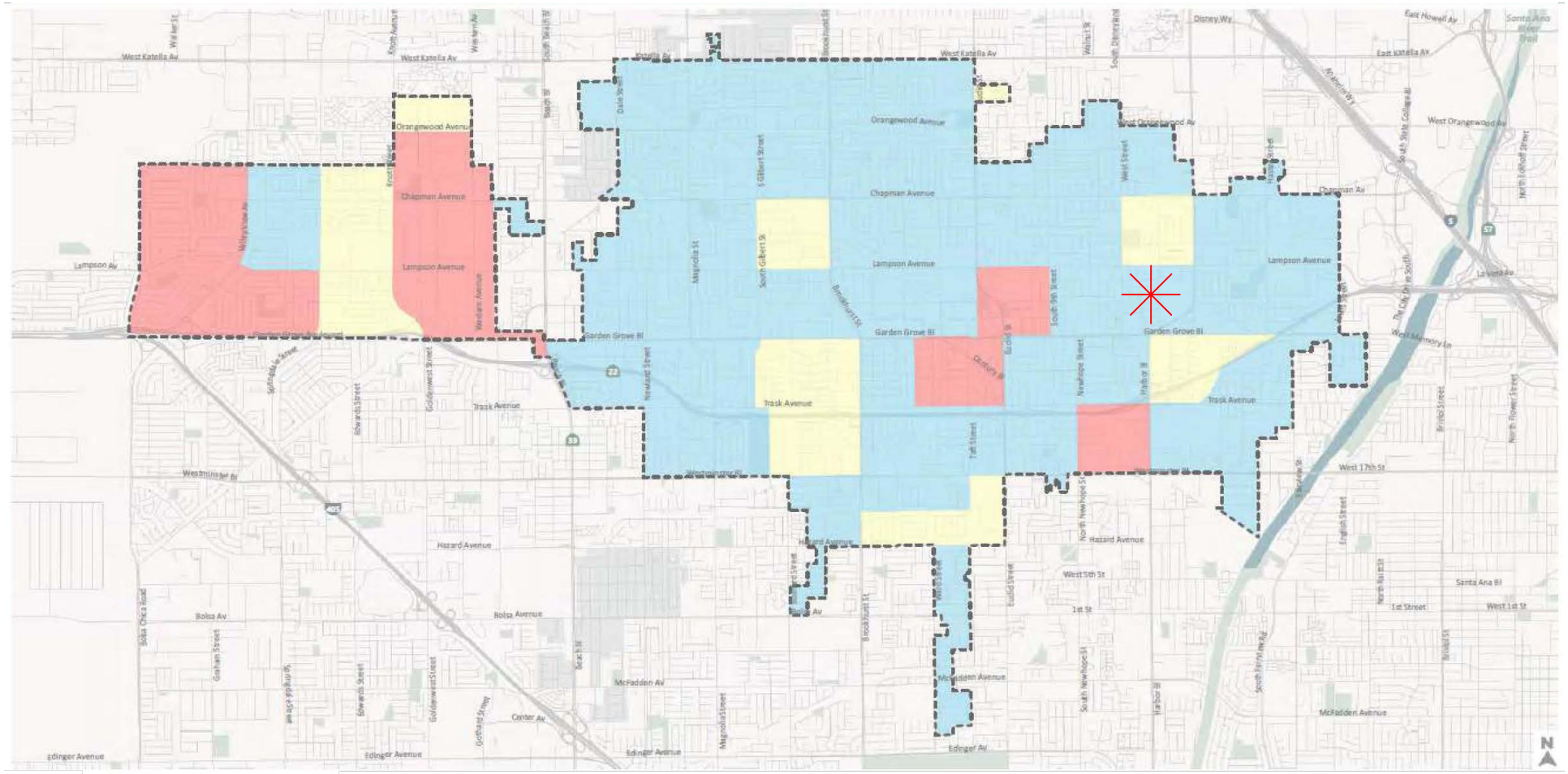
= Project Site

N

RK engineering group, inc.

Exhibit D

City of Garden Grove Low VMT Area Map



RK engineering group, inc.

April 17, 2024

Mr. Matt Ashton
ASHTON 3, LLC.
5 Hoya Street
Rancho Mission Viejo

Subject: Buaro Street Residential Project Air Quality and Greenhouse Gas Analysis, City of Garden Grove

Dear Mr. Ashton:

1.0 Introduction

RK ENGINEERING GROUP, INC. (RK) is pleased to provide this air quality and greenhouse gas analysis for the proposed Buaro Street Residential Project (hereinafter referred to as "project").

The purpose of this study is to calculate the criteria air pollutant and greenhouse gas emissions associated with the construction and operation of the proposed project and compare the results to the thresholds of the South Coast Air Quality Management District's (SCAQMD) standards. This assessment was conducted within the context of the California Environmental Quality Act (CEQA) and the methodology and emission factors used in this analysis are endorsed by the SCAQMD and the California Air Resource Board (CARB).

1.1 Project Description

The project site is located at 12701 Buaro Street, in the City of Garden Grove. The project site is currently occupied by one (1) existing single-family home.

The proposed project consists of demolishing the existing single-family home and constructing thirty-five (35) three-story residential townhomes on an approximately 1.4-acre site.

Construction of the project is expected to consist of demolition, site preparation, grading, building construction, paving, and architectural coating. Preliminary earthwork calculations suggest that the project will require approximately 176 cubic yards of import for grading purposes. However, given the preliminary nature of the estimate, this analysis conservatively assesses impacts based on 500 cubic yards of import.

A project site location map is provided in Exhibit A. The project's site plan, provided by WILLIAM HEZMALHALCH ARCHITECTS, is provided in Exhibit B.

Table 1 summarizes the proposed project land use.

Table 1
Proposed Project Land Use Summary

Project Land Use	CalEEMod Land Use Category	Amount	Units[1]
Townhomes	Condo/Townhouse High Rise	35	DU
On-Site Paved Surfaces[2]	Parking Lot	67	Spaces

[1] DU = Dwelling Units.

[2] Emissions from the construction and operation of onsite paved surfaces (i.e., drive aisles/onside circulation) are calculated within CalEEMod utilizing the "Parking Lot" land use. The "Parking Lot" land use accounts for emissions associated with paving during construction, energy used to supply outdoor light/electricity, etc.

1.2 Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases. For CEQA purposes, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours or longer, such as residences, hospitals, and schools, as described in the Localized Significance Threshold Methodology (SCAQMD 2008a, page 3-2).

The nearest sensitive land uses to the project site include the following:

Receptor-1 Existing Village Bible Church located approximately 0 feet (~0 meters) north of the northern boundary of the proposed project site, south of College Avenue.

Receptor-2 Existing single-family residential land uses located approximately 146 feet (~45 meters) north of the northern boundary of the proposed project site, south of College Avenue.

Receptor-3 Existing multi-family residential land uses located approximately 0 feet (~0 meters) east of the eastern boundary of the proposed project site, west of Buaro Street.

Receptor-4 Existing single-family residential land uses located approximately 0 feet (~0 meters) north of the northern boundary of the proposed project site, north of Stanford Avenue.

Receptor-5 Existing single-family residential land uses located approximately 0 feet (~0 meters) west of the western boundary of the project site, east of Dungan Lane.

For conservative localized analysis purposes, sensitive receptors are considered to be less than 25 meters from the project site. A project site location map, including sensitive receptor locations, is provided in Exhibit A.

1.3 Environmental Setting

The project is located in the SCAQMD Inland Orange County general forecasting area and the Central Orange County Source Receptor Area (SRA-17). The project site is bound by a church to the north and residential land uses to the east, west, and south.

1.4 Project Design Features

The following design features include several standard rules and requirements, best practices, and building code requirements for reducing air quality and GHG emissions. Design features are assumed to be integrated into the project design and required as part of the conditions of approval of the project.

Construction:

1. The project must follow the standard SCAQMD rules and requirements with regards to fugitive dust control, which include, but are not limited to the following:

   - All active construction areas shall be watered two (2) times daily.
   - Any visible dirt deposition on any public roadway shall be swept or washed at the site access points within 30 minutes.
   - Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered twice daily.
   - All operations on any unpaved surface shall be suspended if winds exceed 15 mph.
   - Access points shall be washed or swept daily.
   - Construction sites shall be sandbagged for erosion control.

- Cover all trucks hauling dirt, sand, soil, or other loose materials, and maintain at least 2 feet of freeboard space in accordance with the requirements of California Vehicle Code (CVC) section 23114.
- Use gravel aprons or track out grates at all truck exits.
- Replace the ground cover of disturbed areas as quickly as possible.

2. Construction equipment should be maintained in proper tune.

3. All construction vehicles should be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.

Operations:

4. The project must comply with the mandatory requirements of the California Building Standards Code, Title 24, Part 6 (Energy Code) and Part 11 (CALGreen), including, but not limited to:

   - Install low-flow fixtures and toilets, water-efficient irrigation systems, drought tolerant/native landscaping, and reduce the amount of turf.

   - Provide the necessary infrastructure to support electric vehicle charging.

   - Provide solar installations (or other sources of on-site renewable energy) per the prescribed Energy Design Ratings.

5. Participate in the local waste management recycling and composting programs.

2.0 Modeling Parameters and Assumptions

The California Emissions Estimator Model Version 2022.1.1.21 (CalEEMod) was used to calculate criteria air pollutants and GHG emissions from the operation of the project.

2.1 Construction Assumptions

Construction of the project is expected to consist of demolition, site preparation, grading, building construction, paving, and architectural coating. For the purposes of this analysis, construction phases are not expected to overlap.

Preliminary earthwork numbers suggest that the project will require approximately 176 cubic yards of import for grading purposes. However, given the preliminary nature of the estimate, this analysis conservatively assesses impacts based on 500 cubic yards of import. The CalEEMod default construction equipment list is based on survey data and the size of the site. The parameters used to estimate construction emissions, such as the worker and vendor trips and trip lengths, utilize the CalEEMod defaults. The construction equipment list is shown in Table 2.

The project will be required to comply with several standard fugitive dust control measures, per SCAQMD Rule 403. The following key inputs are utilized in CalEEMod and are based upon data provided from SCAQMD[1]. It should be noted that while Rule 403 requires vehicle speeds of 15 m.p.h. or less on unpaved roads and daily sweeping/washing of deposition on paved public roadways, the CalEEMod default fugitive dust control measures are less stringent than those established by the SCAQMD. Specifically, CalEEMod offers control measures limiting vehicle speeds to 25 m.p.h. on unpaved surfaces and requiring monthly sweeping/washing of deposition on paved public roadways. Consequently, the resulting estimated fugitive dust emissions provided by CalEEMod provide a conservative estimate due to the less restrictive control measures used within the model.

The following inputs are the CalEEMod defaults and are used for a conservative analysis of construction impacts.

- Water exposed area – 61% PM_{10} and $PM_{2.5}$ reduction.
- Water unpaved roads twice daily – 55% PM_{10} and $PM_{2.5}$ reduction.
- Limit vehicle speeds on unpaved roads to 25 mph – 44% PM_{10} and $PM_{2.5}$ reduction.
- Sweep paved roads once per month – 9% PM_{10} and $PM_{2.5}$ reduction.

[1] SCAQMD. Fugitive Dust Mitigation Measures. http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook/mitigation-measures-and-control-efficiencies/fugitive-dust

Table 2
Construction Equipment Assumptions[1]

Phase	Equipment	Number	Hours Per Day	Soil Disturbance Rate (Acres/ 8hr-Day)	Off-Road Equipment Daily Disturbance Footprint (Acres)	Total Daily Disturbance Footprint (Acres)
Demolition	Tractors/Loaders/Backhoes	3	8	0.50	1.50	2.00
	Rubber Tired Dozers	1	8	0.50	0.50	
	Concrete/Industrial Saws	1	8	0.00	0.00	
Site Preparation	Graders	1	8	0.50	0.50	1.44
	Rubber Tired Dozers	1	7	0.50	0.44	
	Tractors/Loaders/Backhoes	1	8	0.50	0.50	
Grading	Graders	1	8	0.50	0.50	1.88
	Tractors/Loaders/Backhoes	2	7	0.50	0.88	
	Rubber Tired Dozers	1	8	0.50	0.50	
	Cranes	1	6	0.00	0.00	
Building Construction	Forklifts	1	6	0.00	0.00	0.38
	Generator Sets	1	8	0.00	0.00	
	Tractors/Loaders/Backhoes	1	6	0.50	0.38	
	Welders	3	8	0.00	0.00	
	Tractors/Loaders/Backhoes	1	8	0.50	0.50	
Paving	Pavers	1	6	0.00	0.00	0.50
	Paving Equipment	1	8	0.00	0.00	
	Rollers	1	7	0.00	0.00	
	Cement and Mortar Mixers	1	6	0.00	0.00	
	Air Compressors	1	6	0.00	0.00	
Architectural Coating	Tractors/Loaders/Backhoes	3	8	0.50	1.50	0.0

[1] CalEEMod Defaults

2.2 Operational Assumptions

Operational emissions occur over the life of the project and are considered "long-term" sources of emissions. Operational emissions include both direct and indirect sources. This section briefly describes the operational sources of emissions analyzed for the project.

Mobile Source Emissions

Estimates of mobile source emissions associated with the project are based on trip generation information provided by the *Buaro Street Residential Project Trip Generation & VMT Screening Analysis, City of Garden Grove* (TIA Screening) performed by RK Engineering Group in April 2024. The TIA Screening estimates that the project will generate approximately 243 net trips per day.

The project's total vehicle miles traveled is shown in Table 3.

Table 3
Operational Vehicle Miles Traveled[1]

Land Use	Annual Home-Based Vehicle Miles Traveled (VMT)
Condo/Townhouse High Rise	677,367
Parking Lot	--
Total	**677,367**

[1] CalEEMod defaults.

To be conservative, this analysis assumes that 2% of the total trips associated with the project will be heavy trucks with a gross vehicle weight rating (GVWR) of 10,000 pounds or greater. This includes LHD2, MHD, HHD, OBUS, UBUS, and SBUS vehicles (i.e., garbage trucks, urban buses, school buses, etc.). This is a conservative estimate, residential land uses primarily generate trips from passenger vehicles, which produce less emissions compared to heavy trucks. The adjusted vehicle mix is proportioned according to the default CalEEMod vehicle mix.

Energy Source Emissions

Energy usage includes both direct and indirect sources of emissions. Direct sources of emissions include on-site natural gas usage (non-hearth) for heating, while indirect emissions include electricity generated by offsite power plants. Natural gas use is measured in units of thousand British Thermal Units (kBTU) per size metric for each land use subtype and electricity use is measured in kilowatt hours (kWh) per size metric for each land use subtype.

CalEEMod divides building electricity and natural gas use into uses that are subject to Title 24 standards and those that are not. Lighting electricity usage is also calculated as a separate category in CalEEMod. For electricity, Title 24 uses include the major building

envelope systems covered by Part 6 (California Energy Code) of Title 24, such as space heating, space cooling, water heating, and ventilation. Non-Title 24 uses include all other end uses, such as appliances, electronics, and other miscellaneous plug-in uses. Because some lighting is not considered as part of the building envelope energy budget, makes lighting a separate category.

For natural gas, uses are likewise categorized as Title 24 or Non-Title 24. Title 24 uses include building heating and hot water end uses. Non-Title 24 natural gas uses include cooking and appliances (including pool/spa heaters).

The baseline values are based on the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.

The project will be required to provide an on-site solar readiness zone, as prescribed by the 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings. In addition, the project will provide 5 electric vehicle charging stations, exceeding the state standard.

Table 4 shows the total annual expected electricity and natural gas usage for the proposed project.

Table 4
Electricity and Natural Gas Usage

Land Use	Electricity Usage[1] (kWhr/yr)[2]	Natural Gas Usage[1] (kBTU/yr)[2]
Condo/Townhouse High Rise	128,304.19	388,739.50
Parking Lot	20,793.61	--
Total	**149,097.80**	**388,739.50**

[1] CalEEMod default estimates.
[2] kWhr/yr = Kilowatt Hours per Year; kBTU/yr = Thousand British Thermal Units per Year.

Area Source Emissions

Area source emissions are direct sources of emissions that fall under four categories: hearths, consumer products, architectural coatings, and landscaping equipment.

Consumer products are various solvents used in non-industrial applications which emit ROGs during their product use. These typically include cleaning supplies, kitchen aerosols, cosmetics, and toiletries.

Other Sources of Operational Emissions

Water. Greenhouse gas emissions are generated from the upstream energy required to supply and treat the water used on the project site. Indirect emissions from water usage are counted as part of the project's overall impact. The estimated water usage for the project is reported in Table 5.

Waste. CalEEMod calculates the indirect GHG emissions associated with waste that is disposed of at a landfill. The program uses annual waste disposal rates from the California Department of Resources Recycling and Recovery (CalRecycle) data for individual land uses. The program quantifies the GHG emissions associated with the decomposition of waste, which generates methane based on the total amount of degradable organic carbon. The estimated waste generation is reported in Table 5.

Table 5
Operational Water Usage and Waste Generation

Land Use	Water Usage[1] (gallons/year)			Waste Generation[1] (tons/year)
	Indoor	Outdoor	Total	
Condo/Townhouse High Rise	1,313,397.75	228,625.29	1,542,023.04	25.81
Parking Lot	--	--	--	--
Total	**1,313,397.75**	**228,625.29**	**1,542,023.04**	**25.81**

[1] CalEEMod default estimates.

3.0 Air Quality Analysis

The following section summarizes the results of the daily air quality emissions analysis. Air quality emissions have been quantified using the California Emissions Estimator Model Version 2022.1.1 (CalEEMod). Project emissions during the construction and operation of the project are compared to thresholds of significance established by the SCAQMD.

3.1 SCAQMD Air Quality Significance Thresholds

The SCAQMD has established air quality emissions thresholds for criteria air pollutants for the purpose of determining whether a project may have a significant effect on the

environment per Section 15002(g) of the Guidelines for implementing CEQA. Where emissions are below the thresholds of significance, a project would be in compliance with the federal and state air quality standards.

Table 6 lists the air quality significance thresholds for the six criteria air pollutants analyzed in this report. Lead is not included as part of this analysis as the project is not expected to emit lead in any significant measurable quantity.

Table 6
SCAQMD Regional Air Quality Significance Thresholds

Mass Daily Thresholds[1]		
Pollutant	**Construction (lbs/day)**	**Operation (lbs/day)**
NO_X	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550

[1] Source: SCAQMD CEQA Handbook, 1993

Table 7 lists the Localized Significance Thresholds (LST) used to determine whether a project may generate significant adverse localized air quality impacts. 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. LSTs are developed based on the ambient concentrations of four applicable air pollutants for Source Receptor Area (SRA) 17 – Central Orange County for a 2-acre site at a distance of 25 meters to the nearest sensitive receptor. Although the nearest sensitive receptors are located approximately less than 25 meters from the project site, SCAQMD LST methodology states that projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.

Table 7
SCAQMD Localized Significance Thresholds[1] (LST)

Pollutant	Construction (lbs/day)	Operation (lbs/day)
NO_X	115.0	115.0
CO	715.0	715.0
PM_{10}	6.0	2.0
$PM_{2.5}$	4.0	1.0

[1] Source: SCAQMD Mass Rate Localized Significance Thresholds for a 2-acre site in SRA-17 at 25 meters.

3.2 Air Quality Emissions (lbs/day) – Construction

Construction-related daily air quality emissions include both on-site and off-site emissions associated with the construction of the project.

Table 8 shows the project-related regional air quality emissions compared with the established SCAQMD thresholds of significance. As shown in Table 8, daily emissions of criteria pollutants are expected to be below the applicable thresholds.

CalEEMod emissions outputs are provided in Appendix A.

Table 8
Daily Construction Emissions

Maximum Daily Emissions (lbs/day)[1]						
Activity	**VOC**	**NO_x**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Demolition	1.66	15.76	16.84	0.02	0.95	0.68
Site Preparation	1.46	13.72	13.38	0.02	3.19	1.79
Grading	1.71	17.31	16.62	0.03	3.94	2.14
Building Construction	1.23	9.68	11.68	0.02	0.73	0.43
Paving	0.68	4.68	7.20	0.01	0.37	0.22
Architectural Coating	31.48	0.90	1.42	0.00	0.09	0.04
Maximum[1]	**31.48**	**17.31**	**16.62**	**0.03**	**3.94**	**2.14**
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

[1] Maximum daily emission during summer or winter; includes both on-site and off-site project emissions.

Table 9 shows the project-related localized air quality emissions compared with the established SCAQMD thresholds of significance. As shown in Table 9, daily localized emissions of criteria pollutants are expected to be below the applicable thresholds.

Table 9
Localized Construction Emissions

Maximum Daily Emissions (lbs/day)[1]				
Activity	**NOx**	**CO**	**PM_{10}**	**$PM_{2.5}$**
On-site Emissions	15.88	16.03	3.51	2.02
SCAQMD Construction Threshold[2]	115.0	715.0	6.0	4.0
Exceeds Threshold (?)	**No**	**No**	**No**	**No**

[1] Maximum daily emission during summer or winter; includes on-site project emissions only.
[2] Source: SCAQMD Mass Rate Localized Significance Thresholds for a 2-acre site in SRA-17 at 25 meters.

The project must follow mandatory SCAQMD rules and requirements with regard to fugitive dust control. Compliance with the standard dust control measures is considered to be part of the conditions of approval for the project and is reflected in the emissions shown in Tables 8 and 9 above.

Tables 8 and 9 show that the project's regional and localized construction emissions will be below the applicable SCAQMD standards and thresholds of significance. As a result, the project would not contribute substantially to an existing or projected air quality violation.

Furthermore, by complying with the SCAQMD standards, the project would not contribute to a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).

Therefore, the project's short-term impact from construction-related air quality emissions will be less than significant.

3.3 Air Quality Emissions (lbs/day) – Operations

Operational daily air quality emissions include both on-site and off-site emissions and represent the worst-case daily emissions levels during summer or winter.

Table 10 shows the project-related regional air quality emissions compared with the established SCAQMD thresholds of significance. As shown in Table 10, daily emissions of criteria pollutants are expected to be below the applicable thresholds.

CalEEMod emissions outputs are provided in Appendix A.

Table 10
Regional Operational Emissions

Activity	Air Pollutant Emissions (lbs/day)[1]					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Sources	0.74	0.51	5.86	0.01	1.32	0.34
Area Sources	1.35	0.60	2.23	0.00	0.05	0.05
Energy Sources	0.01	0.10	0.04	0.00	0.01	0.01
Total	**2.10**	**1.21**	**8.13**	**0.01**	**1.38**	**0.40**
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

[1] Air pollutant emissions include both on-site and off-site activities and represent the worst-case daily emissions during either summer or winter.

Table 11 shows the project's operational emissions at the local level compared with the established SCAQMD thresholds of significance. Localized emissions include on-site emissions only and represent the worst-case daily emissions levels during summer or winter.

As shown in Table 11, daily localized emissions of criteria pollutants are expected to be below the applicable thresholds.

Table 11
Localized Operational Emissions

Activity	Air Pollutant Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-site Emissions[1]	1.39	2.56	0.12	0.07
SCAQMD Threshold[2]	115.0	715.0	2.0	1.0
Exceeds Threshold (?)	**No**	**No**	**No**	**No**

[1] Localized emissions include the maximum daily on-site emissions during summer or winter. It is estimated that 5% of mobile emissions will occur on-site.
[2] Source: SCAQMD Mass Rate Localized Significance Thresholds for a 2-acre site in SRA-17 at 25 meters.

As shown in Tables 10 and 11, the project's operational emissions will be below the applicable SCAQMD air quality thresholds of significance, and the project would not contribute substantially to an existing or projected air quality violation. Furthermore, by complying with SCAQMD standards, the project would not contribute to a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).

Therefore, the project's long-term impact from construction-related air quality emissions will be less than significant.

3.3 Air Toxics Analysis

The SCAQMD does not consider residential land uses to be a major source of toxic air contaminants (TAC) that may result in exposure of sensitive receptors to significant pollutant concentrations. Examples of land uses that are major sources of TACs include distribution centers with heavy truck traffic, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing stations.

The project will generate diesel particulate matter (DPM), a known source of TACs, during construction from off-road diesel equipment and trucks. However, the proposed project's construction activity is not expected to be a long-term (i.e., 30 years) source of toxic air contaminant emissions. Due to the significantly reduced risk from short-term exposure, SCAQMD does not typically require the evaluation of long-term cancer risk or chronic health impacts for construction operations for a project of this size.

Given the minimal amount of earthwork and heavy construction equipment expected to be needed for this project, the potential DPM exposure to adjacent sensitive receptors is considered less than significant.

3.4 Summary of Air Quality Impacts

The following section evaluates the potential significance of project air quality impacts according to CEQA criteria.

Table 12
CEQA Air Quality Impact Criteria

Air Quality Impact Criteria	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with, or obstruct implementation of, the applicable air quality plan?			X	
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard?			X	
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

4.0 Greenhouse Gas Analysis

The following section describes the results of the GHG analysis. GHG emissions are quantified for on-site and off-site operational activity using CalEEMod.

4.1 SCAQMD Greenhouse Gas (GHG) Interim Significance Thresholds

The SCAQMD has published the *Interim CEQA Greenhouse Gas (GHG) Significance Thresholds, December 2008,* to assist local agencies with determining the impact of a project's GHG emissions. SCAQMD's objective in providing the GHG guidelines is to establish a performance standard that will ultimately contribute to reducing GHG emissions below 1990 levels, and thus achieve the requirements of the California Global Warming Solutions Act (AB 32).

In the absence of a formal threshold established by the State, SCAQMD's interim GHG threshold has been established for use by lead agencies in determining significance of GHG emissions in CEQA. SCAQMD guidance describes a five-tiered approach for determining significance. Tier 3 is the primary method used for development projects of this size and is the approach used in this analysis. The Tier 3 approach limits the amount of GHG emissions from residential and commercial development projects to 3,000 metric tons of CO_2 equivalents per year ($MTCO_2e/yr$).

If the project exceeds 3,000 $MTCO_2e/yr$, then the impact is considered significant, and mitigation measures would be required to reduce emissions below the threshold.

4.2 GHG Emissions ($MTCO_2e/yr$) – Construction

Greenhouse gas (GHG) emissions are estimated for on-site off-site construction activity using CalEEMod.

Table 12 shows the project's construction related GHG emissions, including equipment and worker vehicle emissions for all phases of construction. Construction emissions are amortized over 30 years and added to the long-term operational emissions, pursuant to SCAQMD recommendations.

Table 13
Construction Greenhouse Gas Emissions

Activity	Emissions ($MTC0_2e$)[1]		
	On-site	Off-site	Total
Demolition	22.70	2.55	25.25
Site Preparation	1.88	0.09	1.97
Grading	4.47	2.37	6.84
Building Construction	164.55	41.43	205.98
Paving	4.51	0.74	5.25
Architectural Coating	0.61	0.30	0.90
Total	198.72	47.48	246.19
Amortized over 30 years[2]	**6.62**	**1.58**	**8.21**

[1] $MTCO_2e$ = metric tons of carbon dioxide equivalents (includes carbon dioxide, methane, nitrous oxide, and/or hydrofluorocarbon).

[2] The emissions are amortized over 30 years and added to the operational emissions, pursuant to SCAQMD recommendations.

Because impacts from construction-related activities occur over a relatively short period of time, they contribute to a relatively small portion of the overall lifetime project GHG emissions, and GHG emissions reduction measures for construction equipment are relatively limited. Therefore, the SCAQMD recommends that construction emissions be amortized over a 30-year project lifetime and added to the overall project operational emissions[2]. In doing so, construction GHG emissions are included in the overall contribution of the project, as further discussed in the following section.

4.3 GHG Emissions ($MTCO_2e/yr$) – Operation

GHG emissions are estimated for on-site and off-site operational activity using CalEEMod. Table 13 shows the project's operational GHG emissions, including those resulting from mobile, area, energy, water, waste, and refrigerant sources. Operational emissions include amortized construction emissions, pursuant to SCAQMD recommendations.

CalEEMod emissions outputs are provided in Appendix A.

Table 14
Operational Greenhouse Gas Emissions

Activity	Annual GHG Emissions ($MTCO_2e$)[1]
Mobile Source	228.31
Area Source	8.97
Energy Source	56.80
Water	4.25
Waste	8.06
Refrigerant	0.06
Construction (30-year amortization)	8.21
Total Annual Emissions	**314.66**
SCAQMD Tier 3 Significance Threshold	3,000 MTCO2e/year
Exceed Tier 3 Threshold?	**No**

[1] $MTCO_2e$ = metric tons of carbon dioxide equivalents

[2] SCAQMD. Interim CEQA GHG Significance Thresholds. Page 3-10. 2008

As shown in Table 13, the proposed project's GHG emissions are not expected to exceed the SCAQMD GHG emissions threshold of 3,000 $MTCO_2e$. Therefore, the project impact from GHG emissions would be less than significant.

4.4 Summary of Greenhouse Gas Impacts

The following section evaluates the potential significance of project greenhouse gas impacts according to CEQA criteria.

Table 15
CEQA GHG Impact Criteria

GHG Impact Criteria	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?			X	

6.0 Conclusion

RK ENGINEERING GROUP, INC. has completed this Air Quality and Greenhouse Gas Analysis for the proposed Buaro Street Residential Project. Based upon this review, the proposed project's impact from air quality and GHG emissions is considered less than significant. If you have any questions regarding this study, or would like further review, please do not hesitate to contact us at (949) 474-0809 or be@rkengineer.com.

Sincerely,

RK ENGINEERING GROUP, INC.

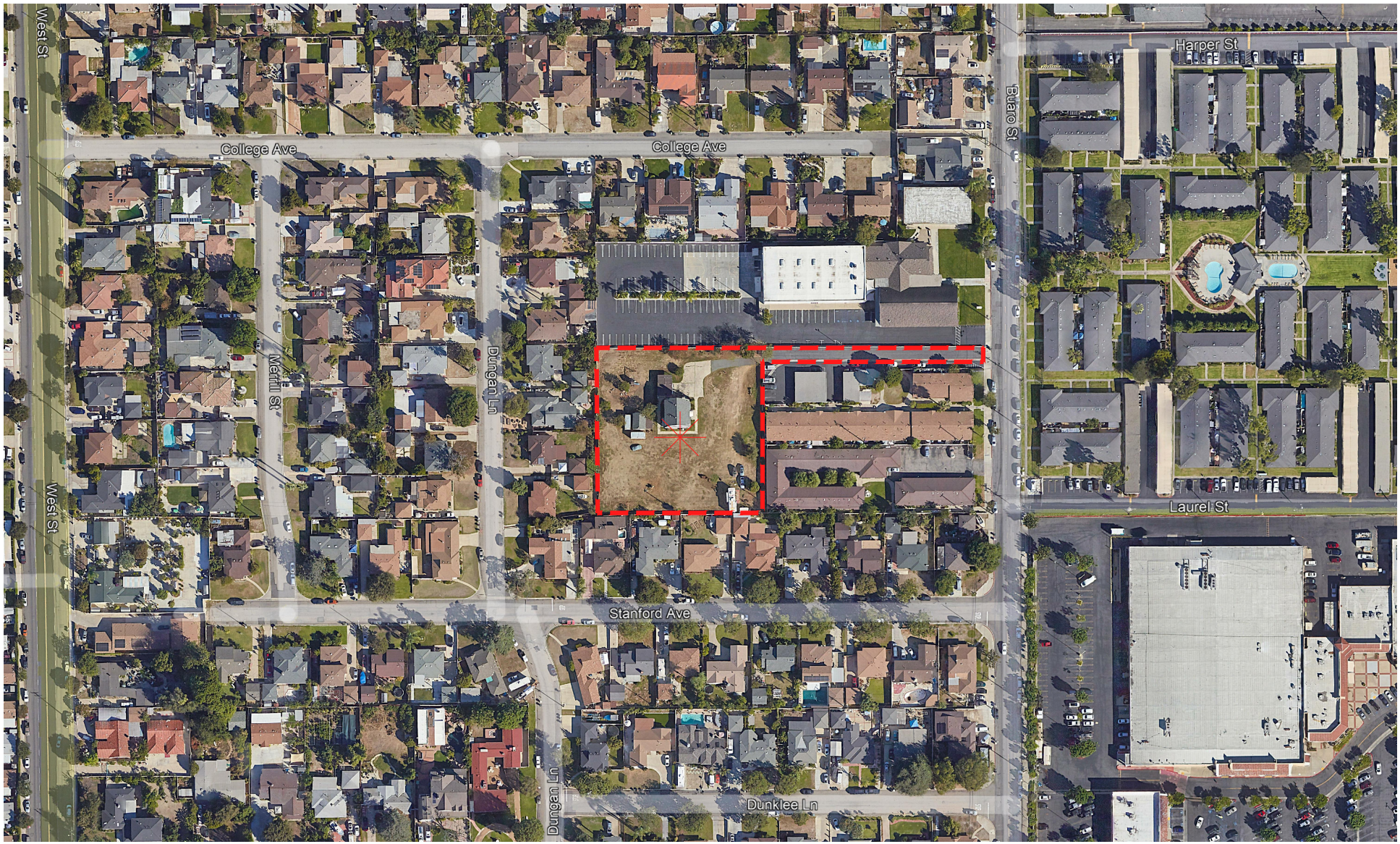
Bryan Estrada, AICP, PTP
Principal

Becca Morrison
Environmental Specialist

Exhibits

Exhibit A

Location Map



Legend:

= Project Site Boundary

= Project Site

N

Exhibit B

Site Plan

N

RK engineering group, inc.

Appendices

Appendix A

CalEEMod Emissions Outputs

Buaro Street Residential Project Custom Report

Table of Contents

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Buaro Street Residential Project
Construction Start Date	8/1/2024
Operational Year	2025
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	1.80
Precipitation (days)	18.2
Location	33.778445584226844, -117.92084494134448
County	Orange
City	Garden Grove
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	5829
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.21

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description

Condo/Townhouse High Rise	35.0	Dwelling Unit	0.86	49,000	14,433	0.00	104	—
Parking Lot	67.0	Space	0.54	0.00	0.00	0.00	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.12	31.5	17.3	16.8	0.03	0.76	3.18	3.94	0.70	1.45	2.14	—	3,707	3,707	0.19	0.20	2.89	3,775
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.48	1.23	9.68	11.5	0.02	0.37	0.36	0.73	0.34	0.09	0.43	—	2,247	2,247	0.08	0.04	0.04	2,263
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.47	1.26	3.31	3.93	0.01	0.13	0.14	0.28	0.12	0.04	0.17	—	766	766	0.03	0.01	0.23	771
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.09	0.23	0.60	0.72	< 0.005	0.02	0.03	0.05	0.02	0.01	0.03	—	127	127	< 0.005	< 0.005	0.04	128

2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	2.12	1.71	17.3	16.8	0.03	0.76	3.18	3.94	0.70	1.45	2.14	—	3,707	3,707	0.19	0.20	2.89	3,775
2025	1.39	31.5	9.16	11.5	0.02	0.33	0.36	0.69	0.30	0.09	0.39	—	2,255	2,255	0.08	0.04	1.59	2,272
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.48	1.23	9.68	11.5	0.02	0.37	0.36	0.73	0.34	0.09	0.43	—	2,247	2,247	0.08	0.04	0.04	2,263
2025	1.39	1.16	9.17	11.3	0.02	0.33	0.36	0.69	0.30	0.09	0.39	—	2,239	2,239	0.08	0.04	0.04	2,254
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.47	0.39	3.31	3.77	0.01	0.13	0.14	0.28	0.12	0.04	0.17	—	711	711	0.03	0.01	0.20	716
2025	0.47	1.26	3.13	3.93	0.01	0.11	0.12	0.24	0.10	0.03	0.13	—	766	766	0.03	0.01	0.23	771
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.09	0.07	0.60	0.69	< 0.005	0.02	0.03	0.05	0.02	0.01	0.03	—	118	118	< 0.005	< 0.005	0.03	119
2025	0.09	0.23	0.57	0.72	< 0.005	0.02	0.02	0.04	0.02	0.01	0.02	—	127	127	< 0.005	< 0.005	0.04	128

2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.07	2.10	1.17	8.13	0.02	0.06	1.31	1.37	0.06	0.33	0.40	16.4	2,499	2,516	1.75	0.06	5.72	2,583
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.88	1.92	1.19	5.79	0.02	0.06	1.31	1.37	0.06	0.33	0.39	16.4	2,437	2,454	1.76	0.06	0.49	2,517

Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.94	2.00	0.67	7.04	0.01	0.02	1.29	1.31	0.02	0.33	0.35	16.4	1,770	1,786	1.74	0.06	2.67	1,851
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.17	0.36	0.12	1.28	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	2.72	293	296	0.29	0.01	0.44	306

2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.81	0.74	0.47	5.86	0.01	0.01	1.31	1.32	0.01	0.33	0.34	—	1,400	1,400	0.07	0.05	5.37	1,422
Area	0.26	1.35	0.60	2.23	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	742	742	0.01	< 0.005	—	743
Energy	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	342	342	0.02	< 0.005	—	343
Water	—	—	—	—	—	—	—	—	—	—	—	2.52	14.8	17.3	0.26	0.01	—	25.7
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.35	0.35
Total	1.07	2.10	1.17	8.13	0.02	0.06	1.31	1.37	0.06	0.33	0.40	16.4	2,499	2,516	1.75	0.06	5.72	2,583
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.80	0.74	0.51	5.50	0.01	0.01	1.31	1.32	0.01	0.33	0.34	—	1,344	1,344	0.07	0.05	0.14	1,362
Area	0.07	1.17	0.58	0.25	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	737	737	0.01	< 0.005	—	738
Energy	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	342	342	0.02	< 0.005	—	343
Water	—	—	—	—	—	—	—	—	—	—	—	2.52	14.8	17.3	0.26	0.01	—	25.7
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.35	0.35

Total	0.88	1.92	1.19	5.79	0.02	0.06	1.31	1.37	0.06	0.33	0.39	16.4	2,437	2,454	1.76	0.06	0.49	2,517
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.80	0.73	0.52	5.62	0.01	0.01	1.29	1.30	0.01	0.33	0.34	—	1,359	1,359	0.07	0.05	2.32	1,379
Area	0.13	1.26	0.05	1.37	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	54.1	54.1	< 0.005	< 0.005	—	54.2
Energy	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	342	342	0.02	< 0.005	—	343
Water	—	—	—	—	—	—	—	—	—	—	—	2.52	14.8	17.3	0.26	0.01	—	25.7
Waste	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.35	0.35
Total	0.94	2.00	0.67	7.04	0.01	0.02	1.29	1.31	0.02	0.33	0.35	16.4	1,770	1,786	1.74	0.06	2.67	1,851
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.15	0.13	0.09	1.03	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	225	225	0.01	0.01	0.38	228
Area	0.02	0.23	0.01	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.96	8.96	< 0.005	< 0.005	—	8.97
Energy	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	56.6	56.6	< 0.005	< 0.005	—	56.8
Water	—	—	—	—	—	—	—	—	—	—	—	0.42	2.45	2.87	0.04	< 0.005	—	4.25
Waste	—	—	—	—	—	—	—	—	—	—	—	2.30	0.00	2.30	0.23	0.00	—	8.06
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	0.17	0.36	0.12	1.28	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	2.72	293	296	0.29	0.01	0.44	306

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	0.08	0.08	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.11	0.09	0.85	0.88	< 0.005	0.04	—	0.04	0.03	—	0.03	—	137	137	0.01	< 0.005	—	137
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.16	0.16	< 0.005	0.01	—	0.01	0.01	—	0.01	—	22.6	22.6	< 0.005	< 0.005	—	22.7
Demolition	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.05	0.05	0.75	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	169	169	< 0.005	0.01	0.69	172
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.01	< 0.005	0.14	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	110	110	0.01	0.02	0.23	116

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.95	8.95	< 0.005	< 0.005	0.02	9.07
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.03	6.03	< 0.005	< 0.005	0.01	6.33
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.48	1.48	< 0.005	< 0.005	< 0.005	1.50
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	1.00	1.00	< 0.005	< 0.005	< 0.005	1.05

3.3. Site Preparation (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.70	1.43	13.7	12.9	0.02	0.65	—	0.65	0.59	—	0.59	—	2,064	2,064	0.08	0.02	—	2,071
Dust From Material Movement	—	—	—	—	—	—	2.44	2.44	—	1.17	1.17	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.07	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	11.3	11.3	< 0.005	< 0.005	—	11.3
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	0.01	0.01	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.87	1.87	< 0.005	< 0.005	—	1.88
Dust From Material Movement	—	—	—	—	—	—	< 0.005	< 0.005	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.45	0.00	0.00	0.10	0.10	0.00	0.02	0.02	—	102	102	< 0.005	< 0.005	0.42	103
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.54	0.54	< 0.005	< 0.005	< 0.005	0.54
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.09	0.09	< 0.005	< 0.005	< 0.005	0.09
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.5. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	2.76	2.76	—	1.34	1.34	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.17	0.17	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.9	26.9	< 0.005	< 0.005	—	27.0
Dust From Material Movement	—	—	—	—	—	—	0.03	0.03	—	0.01	0.01	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.45	4.45	< 0.005	< 0.005	—	4.47
Dust From Material Movement	—	—	—	—	—	—	0.01	0.01	—	< 0.005	< 0.005	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04	0.04	0.04	0.60	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	136	136	< 0.005	< 0.005	0.56	138
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.11	0.02	1.38	0.60	0.01	0.01	0.29	0.30	0.01	0.08	0.09	—	1,118	1,118	0.09	0.18	2.33	1,175
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.43	1.43	< 0.005	< 0.005	< 0.005	1.45
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	12.2	12.2	< 0.005	< 0.005	0.01	12.9
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.24	0.24	< 0.005	< 0.005	< 0.005	0.24
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	2.03	2.03	< 0.005	< 0.005	< 0.005	2.13

3.7. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.31	0.25	2.12	2.27	< 0.005	0.08	—	0.08	0.08	—	0.08	—	405	405	0.02	< 0.005	—	407
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.06	0.05	0.39	0.42	< 0.005	0.02	—	0.02	0.01	—	0.01	—	67.1	67.1	< 0.005	< 0.005	—	67.3
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.10	1.52	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	342	342	< 0.005	0.01	1.40	347
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	121	121	0.01	0.02	0.33	127
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.11	0.09	0.11	1.31	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	325	325	0.01	0.01	0.04	329
Vendor	0.01	< 0.005	0.13	0.07	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	121	121	0.01	0.02	0.01	126
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.31	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	74.1	74.1	< 0.005	< 0.005	0.14	75.1
Vendor	< 0.005	< 0.005	0.03	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	27.3	27.3	< 0.005	< 0.005	0.03	28.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.06	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	12.3	12.3	< 0.005	< 0.005	0.02	12.4
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	4.52	4.52	< 0.005	< 0.005	0.01	4.71
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.9. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.42	0.35	2.91	3.26	0.01	0.11	—	0.11	0.10	—	0.10	—	585	585	0.02	< 0.005	—	587
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.08	0.06	0.53	0.59	< 0.005	0.02	—	0.02	0.02	—	0.02	—	96.9	96.9	< 0.005	< 0.005	—	97.2
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.09	1.41	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	335	335	< 0.005	0.01	1.27	339
Vendor	0.01	< 0.005	0.12	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	119	119	0.01	0.02	0.32	125
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.10	0.09	0.10	1.22	0.00	0.00	0.33	0.33	0.00	0.08	0.08	—	318	318	< 0.005	0.01	0.03	322

Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	119	119	0.01	0.02	0.01	124
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.41	0.00	0.00	0.11	0.11	0.00	0.02	0.02	—	105	105	< 0.005	< 0.005	0.18	106
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	38.8	38.8	< 0.005	0.01	0.05	40.5
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.08	0.00	0.00	0.02	0.02	0.00	< 0.005	< 0.005	—	17.4	17.4	< 0.005	< 0.005	0.03	17.6
Vendor	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	6.42	6.42	< 0.005	< 0.005	0.01	6.70
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.11. Paving (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.59	0.49	4.63	6.50	0.01	0.20	—	0.20	0.19	—	0.19	—	992	992	0.04	0.01	—	995
Paving	—	0.14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.02	0.01	0.13	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.50	4.50	< 0.005	< 0.005	—	4.51
Paving	—	< 0.005	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.04	0.70	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	166	166	< 0.005	0.01	0.63	168
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.39	4.39	< 0.005	< 0.005	0.01	4.44
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.73	0.73	< 0.005	< 0.005	< 0.005	0.74
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

3.13. Architectural Coating (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.15	0.13	0.88	1.14	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architectural Coatings	—	31.3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	3.66	3.66	< 0.005	< 0.005	—	3.67
Architectural Coatings	—	0.86	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	< 0.005	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.61	0.61	< 0.005	< 0.005	—	0.61
Architectural Coatings	—	0.16	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Onsite truck	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.02	0.02	0.28	0.00	0.00	0.07	0.07	0.00	0.02	0.02	—	66.9	66.9	< 0.005	< 0.005	0.25	67.9
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.79
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.29	0.29	< 0.005	< 0.005	< 0.005	0.30
Vendor	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Hauling	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.81	0.74	0.47	5.86	0.01	0.01	1.31	1.32	0.01	0.33	0.34	—	1,400	1,400	0.07	0.05	5.37	1,422
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.81	0.74	0.47	5.86	0.01	0.01	1.31	1.32	0.01	0.33	0.34	—	1,400	1,400	0.07	0.05	5.37	1,422
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.80	0.74	0.51	5.50	0.01	0.01	1.31	1.32	0.01	0.33	0.34	—	1,344	1,344	0.07	0.05	0.14	1,362
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.80	0.74	0.51	5.50	0.01	0.01	1.31	1.32	0.01	0.33	0.34	—	1,344	1,344	0.07	0.05	0.14	1,362
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.15	0.13	0.09	1.03	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	225	225	0.01	0.01	0.38	228
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	0.00	0.00	0.00	0.00
Total	0.15	0.13	0.09	1.03	< 0.005	< 0.005	0.24	0.24	< 0.005	0.06	0.06	—	225	225	0.01	0.01	0.38	228

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	187	187	0.01	< 0.005	—	188
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	30.3	30.3	< 0.005	< 0.005	—	30.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	217	217	0.01	< 0.005	—	218
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	187	187	0.01	< 0.005	—	188
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	30.3	30.3	< 0.005	< 0.005	—	30.4
Total	—	—	—	—	—	—	—	—	—	—	—	—	217	217	0.01	< 0.005	—	218
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	31.0	31.0	< 0.005	< 0.005	—	31.1
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	5.02	5.02	< 0.005	< 0.005	—	5.04
Total	—	—	—	—	—	—	—	—	—	—	—	—	36.0	36.0	< 0.005	< 0.005	—	36.1

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	125	125	0.01	< 0.005	—	125
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	125	125	0.01	< 0.005	—	125
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	125	125	0.01	< 0.005	—	125
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	0.01	0.01	0.10	0.04	< 0.005	0.01	—	0.01	0.01	—	0.01	—	125	125	0.01	< 0.005	—	125
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.6	20.6	< 0.005	< 0.005	—	20.7
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	—	0.00	0.00	—	0.00	—	0.00	0.00	0.00	0.00	—	0.00
Total	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	20.6	20.6	< 0.005	< 0.005	—	20.7

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.07	0.03	0.58	0.25	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	737	737	0.01	< 0.005	—	738
Consumer Products	—	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.19	0.18	0.02	1.98	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	5.31	5.31	< 0.005	< 0.005	—	5.33
Total	0.26	1.35	0.60	2.23	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	742	742	0.01	< 0.005	—	743
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.07	0.03	0.58	0.25	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	737	737	0.01	< 0.005	—	738
Consumer Products	—	1.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.09	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.07	1.17	0.58	0.25	< 0.005	0.05	—	0.05	0.05	—	0.05	0.00	737	737	0.01	< 0.005	—	738
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	< 0.005	< 0.005	0.01	< 0.005	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.36	8.36	< 0.005	< 0.005	—	8.37
Consumer Products	—	0.19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architectural	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.02	0.02	< 0.005	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	0.60	0.60	< 0.005	< 0.005	—	0.60
Total	0.02	0.23	0.01	0.25	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	8.96	8.96	< 0.005	< 0.005	—	8.97

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	2.52	14.8	17.3	0.26	0.01	—	25.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.52	14.8	17.3	0.26	0.01	—	25.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	2.52	14.8	17.3	0.26	0.01	—	25.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.52	14.8	17.3	0.26	0.01	—	25.7

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	0.42	2.45	2.87	0.04	< 0.005	—	4.25
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	0.42	2.45	2.87	0.04	< 0.005	—	4.25

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00

Total	—	—	—	—	—	—	—	—	—	—	—	13.9	0.00	13.9	1.39	0.00	—	48.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	2.30	0.00	2.30	0.23	0.00	—	8.06
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00	0.00	0.00	0.00	0.00	—	0.00
Total	—	—	—	—	—	—	—	—	—	—	—	2.30	0.00	2.30	0.23	0.00	—	8.06

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.35	0.35
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.35	0.35
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.35	0.35
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.35	0.35
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/T High Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.06	0.06

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	8/1/2024	8/29/2024	5.00	20.0	—
Site Preparation	Site Preparation	8/30/2024	9/1/2024	5.00	2.00	—
Grading	Grading	9/2/2024	9/7/2024	5.00	4.00	—
Building Construction	Building Construction	9/8/2024	6/15/2025	5.00	200	—
Paving	Paving	6/16/2025	6/30/2025	5.00	10.0	—
Architectural Coating	Architectural Coating	7/1/2025	7/15/2025	5.00	10.0	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Site Preparation	Graders	Diesel	Average	1.00	8.00	148	0.41

Site Preparation	Rubber Tired Dozers	Diesel	Average	1.00	7.00	367	0.40
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT

Demolition	Hauling	1.55	20.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	—	—	—	—
Site Preparation	Worker	7.50	18.5	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2	HHDT,MHDT
Site Preparation	Hauling	0.00	20.0	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	15.8	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	25.2	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	3.74	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	5.04	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	99,225	33,075	0.00	0.00	1,424

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	2,612	—
Site Preparation	0.00	0.00	1.88	0.00	—
Grading	500	0.00	4.00	0.00	—
Paving	0.00	0.00	0.00	0.00	0.54

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Land Use	Area Paved (acres)	% Asphalt
Condo/Townhouse High Rise	—	0%
Parking Lot	0.54	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Condo/Townhouse High Rise	243	243	243	88,659	1,856	1,856	1,856	677,367
Parking Lot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Condo/Townhouse High Rise	—
Wood Fireplaces	0

Gas Fireplaces	35
Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
99225	33,075	0.00	0.00	1,424

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00
Summer Days	day/yr	250

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse High Rise	128,304	532	0.0330	0.0040	388,740
Parking Lot	20,794	532	0.0330	0.0040	0.00

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse High Rise	1,313,398	228,625
Parking Lot	0.00	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse High Rise	25.8	—
Parking Lot	0.00	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse High Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Condo/Townhouse High Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor

5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)

5.17. User Defined

Equipment Type	Fuel Type

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

Screen	Justification
Land Use	Project consists of constructing 35 3-story townhome dwelling units and approximately 0.54 acres of onsite paved surfaces.
Operations: Vehicle Data	Trip generation rates are adjusted based on the Buaro Street Residential Project Trip Generation & VMT Screening Analysis, City of Garden Grove, prepared by RK.
Operations: Fleet Mix	Fleet mix is adjusted to reflect a total of 2% heavy trucks (GVWR > 10,000 lbs.).
Operations: Hearths	Per SCAQMD Rule 445, no wood-burning devices shall be allowed.

April 17, 2024

Mr. Matt Ashton
ASHTON 3, LLC.
5 Hoya Street
Rancho Mission Viejo, CA 92694

Subject: Buaro Street Residential Project Noise Impact Study, City of Garden Grove

Dear Mr. Ashton:

1.0 Introduction

RK ENGINEERING GROUP, INC. (RK) is pleased to provide this noise impact study for the proposed Buaro Street Residential Project (hereinafter referred to as "project").

The purpose of this study is to evaluate the noise impact of the project pursuant to the California Environmental Quality Act (CEQA), the City of Garden Grove General Plan Noise Element, and the City of Garden Grove Municipal Code Chapter 8.47 – Noise Control. This study analyzes the potential construction and operational noise impacts from the project.

1.1 Project Description

The project site is located at 12701 Buaro Street, in the City of Garden Grove. The project site is currently occupied by one (1) existing single-family home. The existing single-family home is currently vacant.

The proposed project consists of demolishing the existing single-family home and constructing thirty-five (35) three-story residential townhomes on the approximately 1.4-acre site. The project proposes to construct a six (6) foot tall split-face block property line wall along the west, south, and east boundaries of the project site. The project will construct a new concrete masonry unit (CMU) block wall along each property line where none currently exists.

A project site location map is provided in Exhibit A. The project's site plan, provided by WILLIAM HEZMALHALCH ARCHITECTS, is provided in Exhibit B.

1.2 Sensitive Receptors

There are several noise sensitive receptors adjacent to the proposed project site, including:

Receptor-1 Existing Village Bible Church located approximately 0 feet (~0 meters) north of the northern boundary of the proposed project site, south of College Avenue.

Receptor-2 Existing single-family residential land uses located approximately 146 feet (~45 meters) north of the northern boundary of the proposed project site, south of College Avenue.

Receptor-3 Existing multi-family residential land uses located approximately 0 feet (~0 meters) east of the eastern boundary of the proposed project site, west of Buaro Street.

Receptor-4 Existing single-family residential land uses located approximately 0 feet (~0 meters) north of the northern boundary of the proposed project site, north of Stanford Avenue.

Receptor-5 Existing single-family residential land uses located approximately 0 feet (~0 meters) west of the western boundary of the project site, east of Dungan Lane.

1.3 Project Design Features

The following design features include several standard rules and requirements, best practices, and building code requirements regarding noise impacts. Design features are assumed to be integrated into the project design and required as part of City standard conditions of approval of the project.

DF-1 The project shall comply with the City of Garden Grove Municipal Code requirements. All construction will take place during daytime hours (7:00 a.m. to 10:00 p.m.).

DF-2 All construction equipment shall be equipped with mufflers and other suitable noise attenuation devices (e.g., engine shields).

DF-3 Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than five (5) minutes.

DF-4 Construction of the project will not include any impact pile driving or the use of vibratory rollers.

DF-5 The proposed six (6) foot tall split-face block property line wall along the west, south, and east boundaries of the project site should be constructed during the initial phases of construction.

DF-6 All HVAC equipment shall be shielded from the line of sight of adjacent properties behind parapet walls and/or ground-level noise barrier walls.

2.0 Regulatory Setting

The proposed project is located in the City of Garden Grove and is subject to state and local regulations.

2.1 State Regulations

The State of California has established noise insulation standards as outlined in Title 24 of the Building Standards Code which in some cases requires acoustical analyses to outline exterior noise levels and to ensure interior noise levels do not exceed the interior threshold.

Noise insulation design standards for residential dwellings are established in the 2019 California Building Code, Title 24, Part 2, Volume 1, Section 1206 Sound Transmission. The City is required by the State Housing Law to adopt these State codes as minimum performance standards. The City may enact stricter noise standards throughout the city or on a case-by-case basis if deemed necessary. In brief, the Title 24 noise standards require the following for allowable interior noise levels:

1. Interior noise levels due to exterior sources must not exceed a community noise equivalent level (CNEL) or a day-night level (LDN) of 45 dBA, in any habitable room.

2.2 City of Garden Grove Noise Regulations

The proposed project is located in the City of Garden Grove and is subject to the standards and regulations established by the City of Garden Grove General Plan Noise Element and Municipal Code Chapter 8.47 – Noise Control, as discussed below.

A copy of the City of Garden Grove Municipal Code Chapter 8.47 is provided in Appendix A.

General Plan Noise Standards

The City of Garden Grove General Plan establishes planning criteria for determining a development's noise/land use compatibility based on the community noise equivalent level (CNEL). CNEL noise levels are typically used to evaluate mobile noise source impacts such as those from roadways.

Table 1 shows the City of Garden Grove noise/land use compatibility standards for the land uses on and adjacent to the proposed project site, as prescribed in the General Plan.

Table 1
City of Garden Grove Noise/Land Use Compatibility Standards[1]

Land Use Category	Community Noise Exposure[2] (dBA CNEL)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential – Low Density, Single-Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	75 – 85
Residential – Multiple Family	50 – 65	60 – 70	70 – 75	70 – 85

[1] Source: City of Garden Grove General Plan Noise Element, Table 7-1: Noise and Land Use Compatibility Matrix.

[2] Notes:

Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Normally Unacceptable: New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

Clearly Unacceptable: New construction or development should generally not be undertaken.

In addition to the above noise/land use compatibility guidelines, the General Plan is also implemented through the stationary noise thresholds prescribed in the Municipal Code, as

described in the section below. For the purposes of this analysis, the noise levels listed in Table 1 are used to evaluate the project's noise/land use compatibility, and the noise levels listed in Table 2 are used to evaluate the project's consistency with established plans, policies, and programs for noise control within the City.

Municipal Code Noise Standards

The City of Garden Grove Municipal Code Chapter 8.47 – Noise Control establishes ambient base noise levels intended to be utilized as stationary noise level thresholds within the City. Per the Municipal Code, any noise level is permitted that does not exceed either the ambient base noise levels listed in Table 2 below or the actual measured ambient noise level by 5 dBA, as measured at the property line of the noise generation property.

Table 2 shows the ambient base noise levels established in the Municipal Code and utilized by the City as the basis for determining excessive noise levels. The associated Municipal Code policies are listed below.

Table 2
City of Garden Grove Stationary Noise Source Standards[1]

Land Use Designation		Time of Day	Noise Standard (dBA Leq)
Sensitive Uses	Residential Use	7:00 a.m. – 10:00 p.m.	55.0
		10:00 p.m. – 7:00 a.m.	50.0

[1] Source: City of Garden Grove Municipal Code Section 8.47.040 – Ambient Base Noise Levels.

A. Noise disturbance criteria. It shall be unlawful for any person to willfully make, continue, or cause to be made or continued, any loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness.

B. The criteria that shall be utilized in determining whether a violation of the provisions of this section exists shall include, but not be limited to, the following:

1. The level of the noise.
2. The frequency of occurrence of the noise.
3. Whether the nature of the noise is usual or unusual.
4. The level and intensity of the background noise, if any.
5. The proximity of the noise to residential sleeping facilities.

6. The nature and zoning of the area within which the noise emanates.
7. The density of the inhabitation of the area within which the noise is received.
8. The time of day or night the noise occurs.
9. The duration of the noise.

C. Duration of the noise. The following criteria shall be used whenever the noise level exceeds:

1. The noise standard for a cumulative period of more than 30 minutes in any hour;
2. The noise standard plus five dBA for a cumulative period of more than 15 minutes in any hour;
3. The noise standard plus 10 dBA for a cumulative period of more than five minutes in any hour;
4. The noise standard plus 15 dBA for a cumulative period of more than one minute in any hour; or
5. The noise standard plus 20 dBA for any period of time.

D. In the event the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

Per the Municipal Code, it shall be unlawful for any person within a residential area, or within a radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of 10:00 p.m. of one day and 7:00 a.m. of the next day in such a manner that a person of normal sensitiveness, as determined utilizing the criteria established in Section 8.47.050(B), is caused discomfort or annoyance unless such operations are of an emergency nature.

3.0 Existing Noise Environment

The existing noise environment for the project site and surrounding areas has been established based on short-term noise measurement data collected by RK. The project setting is residential, and the primary sources of environmental noise impacting the project site are roadway noise from adjacent streets and general residential noise.

RK conducted the sound level measurements in accordance with Caltrans technical noise specifications. All measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (ANSI S1.4: Specification for Sound Level Meter, 1983).

Piccolo-II Type 2 integrating-averaging level meters were used to conduct noise measurements at the project site and property boundaries.

The Leq, Lmin, Lmax, L2, L8, L25, and L50 statistical data[1] were recorded over the measurement time intervals and the information was utilized to define the noise characteristics for the project. The following gives a brief description of the procedures for sound level measurements:

- Microphones for sound level meters were placed five (5) feet above the ground for long-term noise measurements;
- Sound level meters were calibrated before each measurement;
- Following the calibration of equipment, a windscreen was placed over the microphone;
- Frequency weighting was set on "A" and slow response; and
- Temperature and sky conditions were observed and documented.

Noise measurements were taken on January 24th and 25th, 2024. Measurements were taken at each of the following noise monitoring locations for a duration of one hour during an afternoon peak hour, nighttime hour, and morning peak hour.

Noise monitoring locations were selected based on the proximity and location of adjacent sensitive receptors. Exhibit C graphically illustrates the location of the noise measurements.

- **Noise Monitoring Location 1 (L-1)** was taken along the northern boundary of the project site, approximately 355 feet west of the centerline of Buaro Street.

- **Noise Monitoring Location 2 (L-2)** was taken within the project site, approximately 536 feet west of the centerline of Buaro Street.

[1] Leq: the steady sound pressure level which, over a given period of time, has the same total energy as the actual fluctuating noise.
Lmin: the minimum time-weighted sound level measured over a given period of time.
Lmax: the maximum time-weighted sound level measured over a given period of time.
L(n): the A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 is the sound level exceeded 10 percent of the sample time.

- **Noise Monitoring Location 3 (L-3)** was taken near the eastern boundary of the project site, approximately 350 feet west of the centerline of Buaro Street.

Noise measurements were conducted at the above-selected locations to determine the existing ambient noise environment at the project site and nearby sensitive receptors. Ambient noise sources during the measurement period consisted of roadway noise from adjacent streets and general residential activity.

Results of the noise measurements are shown in Tables 3 through 5. Appendix B includes photographs, field sheets, and measured noise data.

Table 3
Short-Term Noise Measurement Results – L-1

Date	Start Time	End Time	Leq	Lmax	Lmin	L2	L8	L25	L50
1/24/24	5:00 PM	6:00 PM	55.5	70.5	51.8	59.7	57.1	55.6	54.8
1/24/24	10:00 PM	11:00 PM	57.0	71.9	47.4	63.4	60.8	58.9	52.5
1/25/24	7:00 AM	8:00 AM	56.3	69.4	43.0	60.4	58.7	57.2	55.9

Table 4
Short-Term Noise Measurement Results – L-2

Date	Start Time	End Time	Leq	Lmax	Lmin	L2	L8	L25	L50
1/24/24	5:00 PM	6:00 PM	49.8	62.6	46.0	53.4	51.5	50.1	49.3
1/24/24	10:00 PM	11:00 PM	53.4	72.1	44.3	59.2	56.2	54.6	48.4
1/25/24	7:00 AM	8:00 AM	51.6	62.6	40.8	55.6	54.2	52.7	51.1

Table 5
Short-Term Noise Measurement Results – L-3

Date	Start Time	End Time	Leq	Lmax	Lmin	L2	L8	L25	L50
1/24/24	5:00 PM	6:00 PM	50.2	67.2	45.7	55.2	51.8	50.4	49.3
1/24/24	10:00 PM	11:00 PM	49.1	69.8	39.8	53.4	51.4	48.9	43.7
1/25/24	7:00 AM	8:00 AM	47.2	58.7	40.0	51.8	49.2	47.8	46.6

As shown in Tables 3 through 5, daytime noise levels at the project site and adjacent sensitive receptors range from 47.2 dBA Leq to 56.3 dBA Leq and from 58.7 dBA Lmax to 70.5 dBA Lmax. Nighttime noise levels at the project site and adjacent sensitive receptors range from 49.1 dBA Leq to 57.0 dBA Leq and from 69.8 dBA Lmax to 72.1 dBA Lmax.

4.0 Noise Impact Analysis

This assessment analyzes the anticipated noise levels generated by the project and compares them to standards established in the City of Garden Grove General Plan and Municipal Code.

According to City standards, any noise level which doesn't surpass either the base ambient noise levels listed in Table 2 of this report or the actual measured ambient noise level by 5 dBA, as measured at the property line of the noise generation property. As shown in Section 3.0 above, the measured ambient noise levels at the project site and nearby sensitive receptors vary throughout the day, ranging from falling within the base ambient noise levels specified in the Municipal Code to exceeding them. Therefore, to be conservative, this analysis evaluates noise levels using the base ambient noise levels outlined in the Municipal Code for residential areas.

4.1 Stationary Source Noise Impacts

The proposed project consists of developing thirty-five (35) residential townhomes. Residential land uses are typically considered compatible with other residential uses and are not generally categorized as generating loud, unnecessary, or unusual noise that disturbs the peace or quiet of a neighborhood, or that cause discomfort or annoyance to any person of normal sensitiveness. In particular, residential land uses typically generate substantially less noise during the noise-sensitive nighttime hours.

The main source of potential stationary noise from the project will be HVAC equipment. In order to ensure that the project complies with the City's stationary noise standards, future on-site HVAC noise is assessed compared with the City's thresholds.

HVAC noise was projected using a computer program that replicates the FHWA Noise Prediction Model (FHWA-RD-77-108). The FHWA model arrives at the predicted noise level through a series of adjustments to a reference energy noise level. For HVAC noise, a referenced noise level of 75 dBA Leq at a distance of 1 foot was applied to the model.

The referenced noise level used for the analysis is indicative of the noise level generated by a typical HVAC unit at the noise source location. To estimate noise level impacts at the surrounding residential receptor locations, the above referenced noise level is input into the FHWA model and projected from the nearest potential HVAC location to the nearest adjacent sensitive receptor, at a distance of approximately 10 feet. The model projections take into account the noise attenuation effects from distance, local topography, ground effects, and physical barriers to arrive at the predicted noise level at the receptor.

Tables 6 and 7 show the project-related stationary noise impacts during the daytime and nighttime, respectively. Stationary noise calculation worksheets are provided in Appendix C.

Table 6
Stationary Noise Impact Analysis – Daytime

Noise Source	Receptor Distance from Noise Source (feet)	Noise Level at Receptor	
		dBA Leq	dBA Lmax
HVAC[1]	10.0	49.3	49.3
Noise Level Threshold[2]		55.0	75.0
Noise Level Exceeds Threshold (?)		**No**	

[1] Noise level is representative of a single unit.
[2] Noise level thresholds are determined using the Municipal Code baseline ambient noise levels of 55.0 dBA Leq and 75.0 dBA Lmax.

Table 7
Stationary Noise Impact Analysis – Nighttime

Noise Source	Receptor Distance from Noise Source (feet)	Noise Level at Receptor	
		dBA Leq	dBA Lmax
HVAC[1]	10.0	49.3	49.3
Noise Level Threshold		50.0	70.0
Noise Level Exceeds Threshold (?)		**No**	

[1] Noise level is representative of a single unit.
2 Noise level thresholds are determined using the Municipal Code baseline ambient noise levels of 50.0 dBA Leq and 70.0 dBA Lmax.

As shown in Tables 6 and 7, noise levels generated by the project are not expected to exceed the City's noise standards at any off-site sensitive receptor location. **Hence, the project impact from stationary noise will be less than significant.**

4.2 Mobile Source Noise Impacts

4.2.1 Roadway Noise

The main source of roadway noise in the vicinity of the project site is activity along the adjacent local streets, including Buaro Street, Stanford Avenue, Dungan Lane, and College Avenue. Per the General Plan Circulation Element, local residential streets have a capacity of 2,500 vehicles per day and 200 to 300 vehicles per hour.

The project is expected to generate approximately 243 net daily trips[2]. Per California Department of Transportation (Caltrans) guidance, a doubling of traffic volume along a roadway would be required to increase ambient noise levels by 3 dBA or more[3]. It should be noted that an increase in noise levels by 3 dBA or more are typically considered significant, as a 3 dBA difference is generally the point at which the human ear will perceive a difference in noise level[4].

[2] Source: *Buaro Street Residential Project Trip Generation & VMT Screening Analysis, City of Garden Grove.*
[3] Source: *Technical Noise Supplement to the Traffic Noise Analysis Protocol*, California Department of Transportation (Caltrans), September 2013.
[4] Source: *Technical Noise Analysis Protocol for New Highway Construction, Reconstruction, and Retrofit Barrier Projects*, California Department of Transportation (Caltrans), April 2020.

Based on the adjacent streets' roadway capacity of 2,500 vehicles per day, the 243 net daily trips generated by the proposed project will not double the amount of traffic along the adjacent streets, and the associated increase in noise will be below 3 dBA. **Therefore, the increase in roadway noise levels as a result of the project will be less than significant.**

4.2.2 Airport Noise

The Fullerton Municipal Airport, located in Fullerton, California, is the nearest airport to the proposed project site, at a distance of approximately 7 miles, and is located outside of the airport area of influence. **Therefore, the project will have no impact on airport-adjacent land uses.**

4.3 Construction Noise and Vibration Impacts

The proposed project's temporary construction noise and vibration impacts have been assessed. The degree of construction noise will vary depending on the type of construction activity taking place and the location of the activity relative to the surrounding properties.

During the construction period, the construction contractors will be required to comply with the City of Garden Grove Municipal Code Section 8.47.060(D), which states that it shall be unlawful for any person within a residential area, or within a radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of 10:00 p.m. of one day and 7:00 a.m. of the next day in such a manner that a person of normal sensitiveness, as determined utilizing the criteria established in Section 8.47.050(B), is caused discomfort or annoyance unless such operations are of an emergency nature.

No project-related construction will occur outside of daytime hours (7:00 a.m. to 10:00 p.m.). The proposed project's potential construction noise impacts have been evaluated using the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (2006) criteria. The FTA provides criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 90 dBA Leq for a 1-hour period. In compliance with the City's Municipal Code, no construction activity will occur during the noise-sensitive nighttime hours.

Construction phasing and equipment usage assumptions are referenced from the *Buaro Street Residential Project Air Quality and Greenhouse Gas Analysis, City of Garden Grove*, performed by RK.

4.3.1 Construction Noise

In accordance with the FTA Transit Noise and Vibration Impact Assessment criteria, this analysis utilizes the Federal Highway Administration (FHWA) Roadway Construction Noise Model, together with several key construction parameters, to estimate future construction noise levels during each phase of construction. Consistent with the FTA General Assessment methodology, the following assumptions have been utilized in the construction noise model:

- Noise emission level ($L_{emission}$) – Determine the emission level at 50 feet according to noise from typical construction equipment.
- Usage factor (Adj_{Usage}) – Assume a usage factor of one (1). This assumes a time period of one-hour with full power operation.
- Distance (D) – Assume that all equipment operates at the center of the project, or centerline for guideway or highway construction projects.
- Ground effect (G) – G equals zero (0) assuming free-field conditions and ignoring ground effects.
- The $L_{eq.equip}$ is determined only for the two noisiest pieces of equipment expected to be used in each phase of construction. The equipment noise levels are summed for each phase of construction using decibel addition.

Noise levels were projected from the center of potential construction activities to the closest project property line, at a distance of approximately 115 feet. While some construction activity may occur closer than 115 feet from the nearest property line, noise levels are based on an average distance from the center of the site per Federal Transit Administration (FTA) General Assessment recommendations.

In accordance with FTA General Assessment methodology, construction noise impacts are projected based on the average noise level during one hour of construction equipment operation, and the associated significance threshold of 90.0 dBA Leq(1-hour) for residential exposure is utilized.

Table 11 shows the expected noise impacts during all phases of construction, including demolition, site preparation, grading, building construction, paving, and architectural coating.

Table 8
Project Construction Noise Levels – at 115 Feet

Phase	Equipment	Quantity	Equipment Noise Level at 115 ft (dBA Leq)	Combined Noise Level (dBA Leq)
Demolition	Concrete/Industrial Saws	1	82.4	83.4
	Tractors/Loaders/Backhoes	1	76.8	
Site Preparation	Graders	1	77.8	80.3
	Tractors/Loaders/Backhoes	1	76.8	
Grading	Graders	1	77.8	80.3
	Tractors/Loaders/Backhoes	1	76.8	
Building Construction	Tractors/Loaders/Backhoes	1	76.8	78.4
	Cranes	1	73.4	
Paving	Tractors/Loaders/Backhoes	1	76.8	78.2
	Rollers	1	72.8	
Architectural Coating	Air Compressors	1	70.5	70.5
Worst Case Construction Phase Noise Level (dBA Leq)				83.4
FTA Daytime General Assessment Construction Noise Criteria (dBA Leq)[1, 2]				**90.0**
Noise level exceeds FTA criteria?				No

[1] Source: *Transit Noise and Vibration Impact Assessment Manual, Section 7 Noise and Vibration During Construction*, by the Federal Transit Administration.
[2] Per FTA General Assessment methodology, noise impacts are assessed based on the average construction noise levels over a period of one hour. Hence, the one-hour residential daytime threshold of

The project is expected to generate a temporary maximum noise level of 83.3 dBA. Based on the above table, the project's construction-related noise levels will not exceed the FTA General Assessment Construction Noise Criteria threshold.

Therefore, the project's impact from construction-related noise would be less than significant.

4.3.2 Construction Vibration

The following construction vibration assessment is based on the methodology set forth within the *Caltrans Transportation and Construction Induced Vibration Guidance Manual*. The vibration impacts from heavy truck loading and bulldozer activity is analyzed.

All vibratory activity is analyzed as a continuous and/or frequent event and is required to comply with the applicable guidance thresholds criteria. It is expected that vibration levels will be highest during the paving phase of construction. No impact pile driving or vibratory roller use is expected as part of this project.

Construction vibration impacts are compared with the vibration thresholds established by the *Caltrans Transportation and Construction Induced Vibration Guidance Manual.* The vibration thresholds for annoyance potential and damage potential are provided in Tables 12 and 13, respectively.

Table 9
Vibration Annoyance Potential Criteria

Human Response	PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.90	0.10
Severe	2.00	0.40

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Table 10
Vibration Damage Potential Threshold Criteria

Structure and Condition	PPV (in/sec)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings ruin ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Vibratory impacts were calculated from the nearest expected area of equipment use to the nearest adjacent receptors and structures using the reference vibration levels, soil conditions and the reference equation *PPV= PPV ref (25/D)^n (in/sec)* (from Caltrans Manual) where:

PPV = reference measurement at 25 feet from vibration source
D = distance from equipment to property line
n= vibration attenuation rate through ground (n=1.1 was utilized for this study)

Table 14 shows the project's construction related vibration analysis at the nearest structures to the nearest expected areas of equipment use.

Table 11
Construction Vibration Impact Analysis

Construction Activity	Distance to Nearest Structure (ft)	Calculated Vibration Level - PPV (in/sec)	Damage Potential
Large Bulldozer	10	0.244	Fragile Buildings
Loaded Trucks		0.208	Fragile Buildings

As shown in Table 14, the worst-case vibration levels resulting from project construction have the potential to impact fragile buildings. No known fragile buildings are located within the vicinity of the proposed project site, and all structures surrounding the project site are "new structures". **Therefore, the construction vibration impact will be less than significant.**

Construction vibration calculation worksheets are provided in Appendix D.

4.4 Summary of Project Impacts

The following section summarizes the project's effect on noise per the CEQA Guidelines Appendix G Checklist Form.

Table 15
CEQA Noise Impact Criteria

Noise Impact Criteria	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant Impact	No Impact
Would the project result in?				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

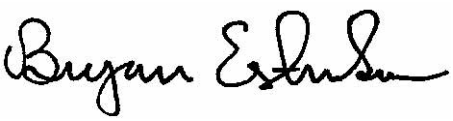
5.0 Conclusion

Based upon this review, the Buaro Street Residential Project would not result in exposure of persons to or generation of noise in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Additionally, the project would not result in a substantial permanent or temporary increase in ambient noise levels.

The project-related noise impacts are considered less than significant.

If you have any questions regarding this study, or would like further review, please do not hesitate to contact us at (949) 474-0809.

Sincerely,
RK ENGINEERING GROUP, INC.



Bryan Estrada, AICP, PTP
Principal

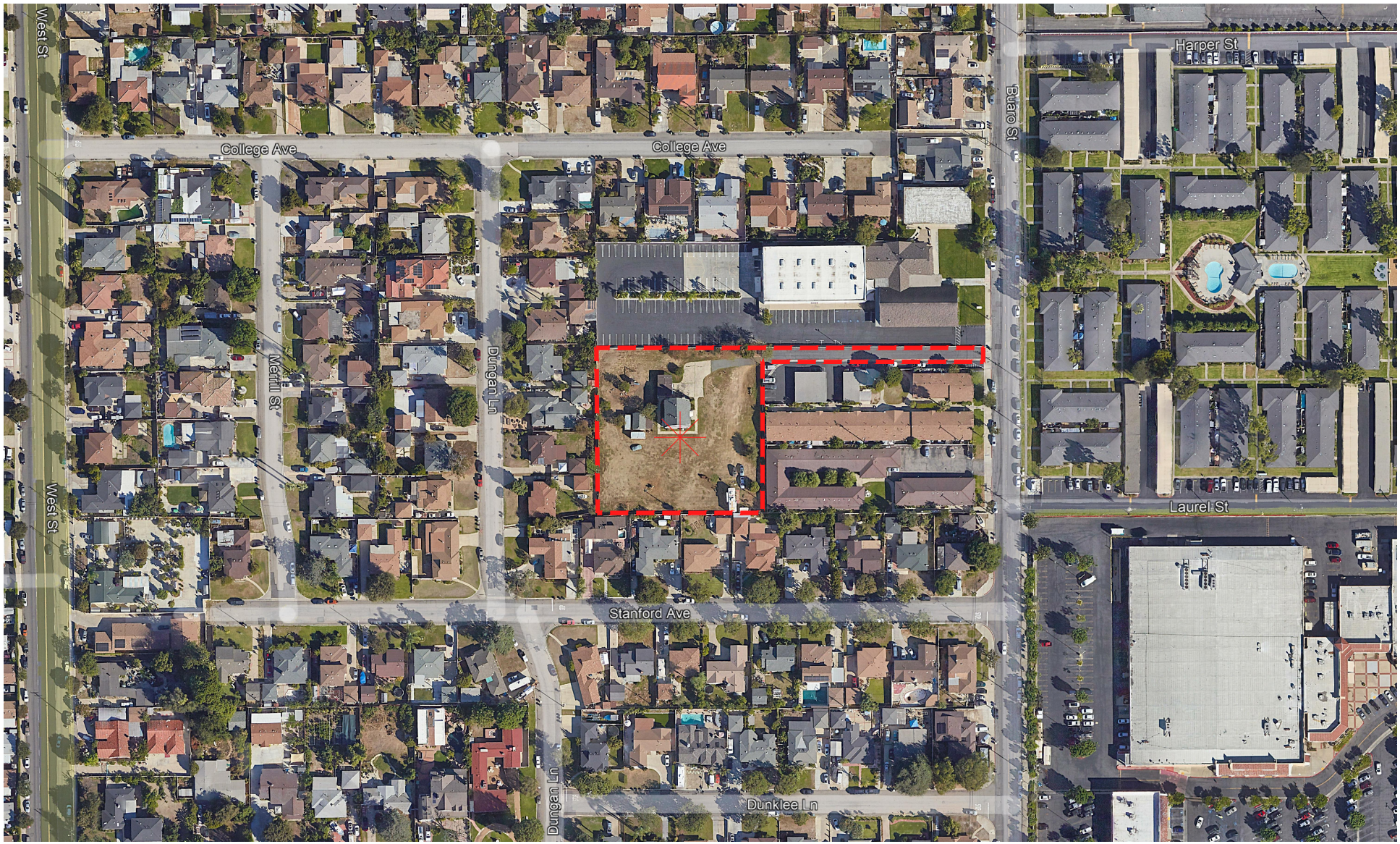
Becca Morrison
Environmental Specialist

Attachments

Exhibits

Exhibit A

Location Map



Legend:

= Project Site Boundary

= Project Site

N

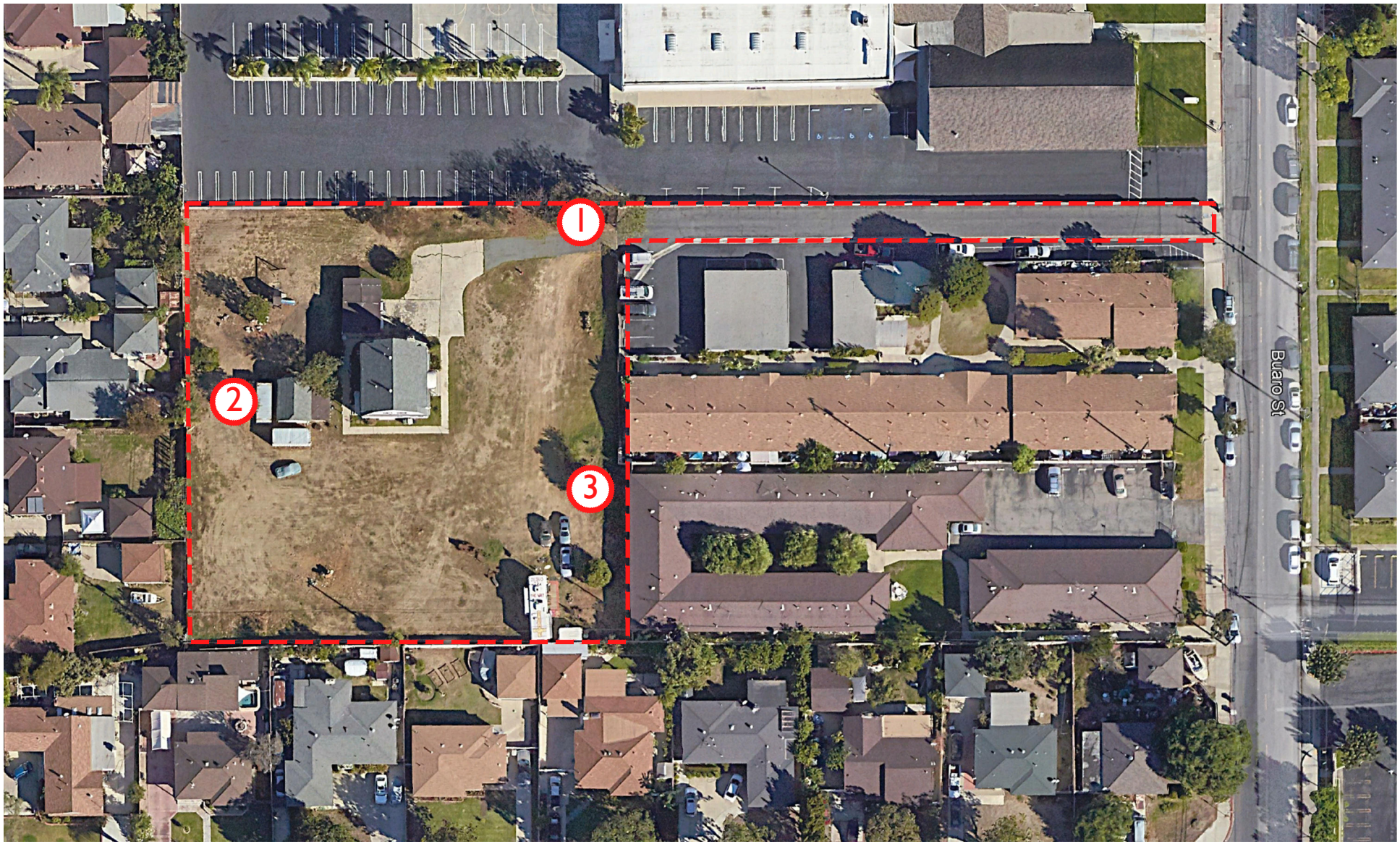
RK engineering group, inc.

Exhibit B

Site Plan

Exhibit C

Noise Monitoring Locations



Legend:

= Project Site Boundary

= Noise Monitoring Location

N

RK engineering group, inc.

Appendices

Appendix A

City of Garden Grove
Municipal Code Chapter 8.47 – Noise Control

City of Garden Grove, CA
Tuesday, January 23, 2024

Title 8. Peace, Safety and Morals

Chapter 8.47. NOISE CONTROL

Note: Prior ordinance history: Ord. Nos. 1949, 1950, and 2258.

§ 8.47.020. Definitions.

The following words, phrases, and terms as used in this chapter shall have the meaning as indicated below:

"Actual measured ambient noise level" shall mean that noise level existing in the general area of the noise problem, excluding the noise generated by the noise source being evaluated.

"Ambient base noise level" shall mean the maximum loudness level normally found to be acceptable for given land uses and that serves as the basis for determining loudness noise violations pursuant to the provisions of Section **8.48.040** of this chapter.

"Ambient noise level" shall mean the all-encompassing background noise associated with a given environment, being usually a composite of sounds from many sources near and far.

"Commercial use" shall mean any enterprise whose principal endeavor is the sale of goods and/or services.

"Decibel (dB)" shall mean a unit that denotes the ratio between two quantities that are proportional to power: the number of decibels corresponding to the ratio of two amounts of power is 10 times the logarithm to the base 10 of this ratio. The commonly used unit for measuring sound pressure levels.

"Emergency" means operations made necessary to restore property to a safe condition following a public calamity, or work required to protect persons or property from an imminent exposure to danger or work by private or public utilities when restoring utility service.

"Industrial use" means any facility or operations involved in the manufacturing, repairing, testing, processing, warehousing, wholesaling, researching, and treatment of products.

"Institutional use" means an establishment maintained and operated by a society, church, corporation, individual, foundation, or public agency for the purpose of providing religious, charitable, social, educational, fraternal, or similar services.

"Noise" means any sound that exceeds the appropriate actual or presumed ambient noise level, that annoys or tends to disturb humans, or that causes or tends to cause an adverse psychological or physiological effect on humans of normal sensitiveness.

"Office-professional use" means any enterprise engaged in providing business or professional services.

"Residential use" means any structure utilized principally for human habitation, excluding hotels, motels, and recreational vehicle parks.

"Sound amplifying equipment" means any device for the amplification of the human voice, music, or any other sound and does not include standard automobile radios when used and heard only by the occupants of the vehicle in which the automobile radio is installed or devices on authorized emergency vehicles or horns or other warning devices on any vehicle used only for traffic safety purposes.

"Sound level in decibels (dB)" means the sound measured utilizing the A-weighting scale and the slow needle response by a sound level meter.

"Sound level meter" means an instrument meeting American National Standard Institutes Standard S1.4-1971 for Type 1 or Type 2 sound level meters or an equivalent standard.
(2660 § 2, 2005; 2802 § 1, 2011)

§ 8.47.030. Noise Level Measurement.

All noise level measurements made pursuant to the provisions of this chapter shall be performed using a sound level meter as defined in Section **8.47.020**, using a fast needle response, utilizing the dB(A) scale.
(2660 § 2, 2005; 2802 § 1, 2011)

§ 8.47.040. Ambient Base Noise Levels.

The ambient base noise levels contained in the following chart shall be utilized as the basis for determining noise levels in excess of those allowed by this chapter unless the actual measured ambient noise level occurring at the same time as the noise under review is being investigated exceeds the ambient base noise level contained in the chart. When the actual measured ambient noise level exceeds the ambient base noise level, the actual measured ambient noise level shall be utilized as the basis for determining whether or not the subject noise exceeds the level allowed by this section. In situations where two adjoining properties exist within two different use designations, the most restrictive ambient base noise level will apply. This section permits any noise level that does not exceed either the ambient base noise level or the actual measured ambient noise level by 5 dB(A), as measured at the property line of the noise generation property.

USE CATEGORIES	USE DESIGNATIONS	AMBIENT BASE NOISE LEVELS	TIME OF DAY
Sensitive	Residential Use	55 dB(A) 50 dB(A)	7:00 a.m.—10:00 p.m. 10:00 p.m.—7:00 a.m.
Conditionally Sensitive	Institutional Use Office-Professional Use Hotels & Motels	65 dB(A) 65 dB(A) 65 dB(A)	Any Time Any Time Any Time
Non-Sensitive	Commercial Uses Commercial/ Industrial Uses within 150 feet of Residential Industrial Use	70 dB(A) 65 dB(A) 50 dB(A) 70 dB(A)	Any Time 7:00 a.m.—10:00 p.m. 10:00 p.m.—7:00 a.m. Any Time

(2660 § 2, 2005; 2802 § 1, 2011)

§ 8.47.050. General Noise Regulation.

A. Noise disturbance criteria. It shall be unlawful for any person to willfully make, continue, or cause to be made or continued, any loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness.

B. The criteria that shall be utilized in determining whether a violation of the provisions of this section exists shall include, but not be limited to, the following:

1. The level of the noise.
2. The frequency of occurrence of the noise.
3. Whether the nature of the noise is usual or unusual.
4. The level and intensity of the background noise, if any.
5. The proximity of the noise to residential sleeping facilities.
6. The nature and zoning of the area within which the noise emanates.
7. The density of the inhabitation of the area within which the noise is received.
8. The time of day or night the noise occurs.

9. The duration of the noise.

C. Duration of noise. The following criteria shall be used whenever the noise level exceeds:

1. The noise standard for a cumulative period of more than 30 minutes in any hour;

2. The noise standard plus five dB(A) for a cumulative period of more than 15 minutes in any hour;

3. The noise standard plus 10 dB(A) for a cumulative period of more than five minutes in any hour;

4. The noise standard plus 15 dB(A) for a cumulative period of more than one minute in any hour; or

5. The noise standard plus 20 dB(A) for any period of time.

D. In the event the ambient noise level exceeds any of the first four noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

(2660 § 2, 2005; 2802 § 1, 2011)

§ 8.47.060. Special Noise Sources.

A. Radios, television sets, and similar devices.

1. Use restricted. It shall be unlawful for any person within any residential area of the City to use or operate any radio receiving set, musical instrument, stereo equipment, television set, or other machine or device for the producing or reproducing of sound between the hours of 10:00 p.m. of one day and 7:00 a.m. of the following day in such a manner as to disturb the peace, quiet, and comfort of any person of normal sensitiveness residing in the area, as determined utilizing the criteria established in Section **8.47.050(A)**.

2. Prima facie violation. Any noise level exceeding the ambient base level at the property line of any property (or, if a condominium or apartment house, within any adjoining apartment) by more than five decibels shall be deemed to be prima facie evidence of a violation of the provisions of this section.

B. Musical instruments—use restricted. It shall be unlawful for any person to use any drum or other instrument or device of any kind for the purpose of attracting attention by the creation of noise within the City. This section shall not apply to any person who is a participant in a duly licensed parade or who has been otherwise duly authorized to engage in such conduct.

C. Machinery, equipment, fans, and air conditioning. It shall be unlawful for any person to operate any machinery, equipment, pump, fan, air conditioning apparatus, or similar mechanical device in any manner so as to create any noise that would cause the noise level at the property line of any property to exceed either the ambient base noise level or the actual measured ambient noise level by more than five decibels.

D. Construction of buildings and projects. It shall be unlawful for any person within a residential area, or within a radius of 500 feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects, or to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or any other construction type device between the hours of 10:00 p.m. of one day and 7:00 a.m. of the next day in such a manner that a person of normal sensitiveness, as determined utilizing the criteria established in Section **8.47.050(B)**, is caused discomfort or annoyance unless such operations are of an emergency nature.

E. Vehicle repairs. It shall be unlawful for any person within any residential area of the City to repair, rebuild, or test any motor vehicle in such a manner that a person of normal sensitiveness residing in the area is caused discomfort or annoyance, as determined utilizing the criteria established in Section **8.47.050**, unless such operations are of an emergency nature.

F. Motor driven vehicles. It shall be unlawful for any person to operate any motor driven vehicle within the City in such a manner that a person of normal sensitiveness residing in the area is caused discomfort or annoyance, as determined utilizing the criteria established in Section **8.47.050(B)**, unless such operations are of an emergency nature; provided, however, any such vehicle that is operated upon any public highway, street, or right-of-way shall be excluded from the provisions of this section.

G. Amplified sound.

1. Purpose. While recognizing the constitutional rights of freedom of speech and assembly, the City nevertheless feels obligated to reasonably regulate the use of sound amplifying equipment in order to

protect the rights of the citizens of the City to privacy and freedom from excessively loud and unnecessary noise.

2. Registration. It shall be unlawful for any person, other than personnel of law enforcement or governmental agencies, to install, use, or operate within the City a loudspeaker or sound amplifying equipment mounted upon any vehicle for the purposes of warnings, giving instructions, directions, talks, addresses, lectures, or transmitting music to any persons or assemblages of persons without first filing a registration statement at least seven days prior to the date on which the sound amplifying equipment is intended to be used and obtaining approval from the Zoning Administrator.

3. Approval. The Zoning Administrator shall return to the applicant an approved copy of the registration statement unless he or she finds that:

   a. The conditions of the motor vehicle movement are such that use of the equipment would constitute a detriment to traffic safety; or

   b. The conditions of pedestrian movement are such that use of the equipment would constitute a detriment to traffic safety.

4. Disapproval. In the event the registration statement is disapproved, the Zoning Administrator shall endorse upon the statement the reason for disapproval and return it to the applicant.

5. Appeals. Any decision by the Zoning Administrator may be appealed to the City Council within seven days of action of the Zoning Administrator by filing a notice of appeal with the City Clerk.

H. Waste haulers/commercial sweepers and leaf blowers. It shall be unlawful for any person within any commercial, industrial, or office complex area of the City to operate any refuse compacting, processing or collection vehicle, parking lot sweeper or leaf blower within 150 feet of residential property between the hours of 10:00 p.m. of one day and 7:00 a.m. of the following day.

I. Loading/unloading. It shall be unlawful for any person in any commercial or industrial area of the City that abuts or is located adjacent to any residential property between the hours of 10:00 p.m. of one day and 7:00 a.m. of the following day to load or unload any vehicle, or operate any dollies, carts, forklifts, or other wheeled equipment that causes any noise that disturbs the peace or quiet of the residential neighborhood.

(2660 § 2, 2005; 2802 § 1, 2011)

§ 8.47.070. Exemptions.

A. Emergency activities. The provisions of this chapter shall not preclude the operation, maintenance, and repair of equipment, apparatus, or facilities of essential public services, including those of governmental agencies and public utilities providing those activities are of an emergency nature or are necessary to maintain the health, safety, and welfare of the citizenry.

B. Community activities. Community events, as described in Section **8.08.060** of the Municipal Code, outdoor gatherings, school bands, dances, shows, and athletic events are hereby exempted from the provisions of this chapter provided such activities are conducted pursuant to a duly authorized license or permit.

C. State and federal preemptions. Motor vehicle and aircraft operations and any other activity whose regulation has been preempted by state or federal law is hereby exempted from the provisions of this chapter.

(2660 § 2, 2005; 2802 § 1, 2011)

§ 8.47.080. Abatement.

The City Manager or his or her designee and his or her duly authorized representatives are hereby directed to enforce the provisions of this chapter by requiring that the alleged offender correct violations and achieve compliance with the provisions of this chapter within a reasonable period of time.

A. The City Manager or his or her designee shall have the power and duty to enforce the following noise control provisions of this Code: Section **8.47.050**, Section **8.47.060(A)(2)**, **(C)**, **(H)**, and **(I)**.

B. The Police Department shall have the power and duty to enforce the following noise control provisions of this Code: Section **8.47.060** (A)(1), (B), (E), (F), (G)(1) and (2).

C. The Building Official shall have the power and duty to enforce the following noise control provisions of this Code: Section **8.47.060(D)**.

(2660 § 2, 2005; 2802 § 1, 2011)

Appendix B

Field Data and Photos

Field Sheet

Project: Buaro Street Residential Project
Engineer: B. Morrison
Date: 1/24/24, 1/25/24
JN: 2948-2023-02

Measurement Address: 12701 Buaro Street
City: Garden Grove, CA
Site No.: 1

Sound Level Meter:
Piccolo II
Serial # P0222082204
P0222082205
P0221010801

Calibrator:
BSWA
Serial # 500732

Calibration Record:

	Input, dB/	Time
1	94.0	2:28 p.m.
2	94.0	2:29 p.m.
3	94.0	2:32 p.m.
4	/	/
5	/	/

Conditions:

Temp:	63 Deg. F.
Windspeed:	3 m.p.h
Direction:	Northwest
Skies:	Overcast

Meter Settings:
☑ A-WTD ☐ C-WTD
☐ LINEAR ☐ IMPULSE
☑ SLOW ☐ FAST
☐ 1/1 OCT ☐ 1/3 OCT
☑ _60_ MINUTE INTERVALS
☑ L(N) PERCENTILE VALUES

Notes:
Measurements were taken at each Noise Monitoring Location for a duration of one hour during an afternoon peak hour, nighttime hour, and morning peak hour. The primary sources of ambient noise affecting the project site included roadway noise from adjacent streets and general residential noise.

Measurement Type:
☐ Long-term
☑ Short-term

		Date	Start Time	Stop Time	Leq	Lmax	Lmin	L2	L8	L25	L50
Interval	1	1/24/24	5:00 PM	6:00 PM	55.5	70.5	51.8	59.7	57.1	55.6	54.8
		1/24/24	10:00 PM	11:00 PM	57.0	71.9	47.4	63.4	60.8	58.9	52.5
		1/25/24	7:00 AM	8:00 AM	56.3	69.4	43.0	60.4	58.7	57.2	55.9
		Comments: Noise Monitoring Location 1 (L-1) was taken along the northern boundary of the project site, approximately 355 feet west of the centerline of Buaro Street.									
	2	1/24/24	5:00 PM	6:00 PM	49.8	62.6	46.0	53.4	51.5	50.1	49.3
		1/24/24	10:00 PM	11:00 PM	53.4	72.1	44.3	59.2	56.2	54.6	48.4
		1/25/24	7:00 AM	8:00 AM	51.6	62.6	40.8	55.6	54.2	52.7	51.1
		Comments: Noise Monitoring Location 2 (L-2) was taken within the project stie, approximtely 536 feet west of the centerline of Buaro Street.									
	3	1/24/24	5:00 PM	6:00 PM	50.2	67.2	45.7	55.2	51.8	50.4	49.3
		1/24/24	10:00 PM	11:00 PM	49.1	69.8	39.8	53.4	51.4	48.9	43.7
		1/25/24	7:00 AM	8:00 AM	47.2	58.7	40.0	51.8	49.2	47.8	46.6
		Comments: Noise Monitoring Location 3 (L-3) was taken near the eastern boundary of the project site, approximately 350 feet west of the centerline of Buaro Street.									

1 = Noise Monitoring Location

RK engineering group, inc.

Field Sheet - Photos

Project: Buaro Street Residential Project	**Engineer:** B. Morrison	**Date:**	1/24/24, 1/25/24
		JN:	2948-2023-02
Measurement Address: 12701 Buaro Street	**City:** Garden Grove, CA	**Location No.:**	1

RK engineering group, inc.

Field Sheet - Photos

Project: Buaro Street Residential Project	**Engineer:** B. Morrison	**Date:**	1/24/24, 1/25/24
		JN:	2948-2023-02
Measurement Address: 12701 Buaro Street	**City:** Garden Grove, CA	**Location No.:**	2

RK engineering group, inc.

Field Sheet - Photos

Project: Buaro Street Residential Project	**Engineer:** B. Morrison	**Date:**	1/24/24, 1/25/24
		JN:	2948-2023-02
Measurement Address: 12701 Buaro Street	**City:** Garden Grove, CA	**Location No.:**	3

RK engineering group, inc.

Appendix C

Stationary Noise
Calculation Worksheets

NOISE BARRIER CALCULATIONS - BASED UPON FHWA - RD-77-108

PROJECT:	Buaro Street Residential Project	JOB #:	2948-2023-02
SOURCE:	HVAC	DATE:	1/23/2024
LOCATION:	Nearest adjacent receptor	BY:	B. Morrison

NOISE INPUT DATA

OBS DIST=	10.0			
DT WALL=	10.0			
DT W/OB=	0.0			
HTH WALL=	10.0	********		
BARRIER =	0.0	(0=WALL,1=BERM)		
OBS HTH=	5.0			
NOISE HTH=	3.0		BARRIER+	
OBS EL =	0.0		TOPO SHIELDING =	-15.70
NOISE EL =	0.0		NOISE HTH EL=	3.0
DROP-OFF=	10.0	(20 = 6 dBA PER DOUBLING OF DISTANCE)		

NOISE OUTPUT DATA (dBA)

	DIST (FT)	Leq	Lmax	L2	L8	L25	L50
REF LEVEL	1	75.0	75.0	75.0	75.0	75.0	75.0
PROJ LEVEL	10	65.0	65.0	65.0	65.0	65.0	65.0
SHIELDING	10	-15.7	-15.7	-15.7	-15.7	-15.7	-15.7
ADJ LEVEL	10	***49.3***	***49.3***	***49.3***	***49.3***	***49.3***	***49.3***

NOISE LEVEL REDUCTION DUE TO DISTANCE = -10

Appendix D

Construction Noise and Vibration
Calculation Worksheets

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/29/2024
Case Description: Buaro Street Residential Project

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Demolition	Residential	47.2	47.2	47.2

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	100		89.6	115	0
Tractor	No	100	84		115	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Concrete Saw		82.4	82.4
Tractor		76.8	76.8
	Total	82.4	83.4

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/29/2024
Case Description: Buaro Street Residential Project

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site Preparation	Residential	47.2	47.2	47.2

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	100	85		115	0
Tractor	No	100	84		115	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Grader		77.8	77.8
Tractor		76.8	76.8
	Total	77.8	80.3

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/29/2024
Case Description: Buaro Street Residential Project

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Grading	Residential	47.2	47.2	47.2

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	100	85		115	0
Tractor	No	100	84		115	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Grader		77.8	77.8
Tractor		76.8	76.8
	Total	77.8	80.3

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/29/2024
Case Description: Buaro Street Residential Project

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Building Construction	Residential	47.2	47.2	47.2

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	100	84		115	0
Crane	No	100		80.6	115	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Tractor		76.8	76.8
Crane		73.4	73.4
	Total	76.8	78.4

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/29/2024
Case Description: Buaro Street Residential Project

		---- Receptor #1 ----		
		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Paving	Residential	47.2	47.2	47.2

Description	Impact Device	Usage(%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	100	84		115	0
Roller	No	100		80	115	0

Results

		Calculated (dBA)	
Equipment		*Lmax	Leq
Tractor		76.8	76.8
Roller		72.8	72.8
	Total	76.8	78.2

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 1/29/2024
Case Description: Buaro Street Residential Project

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Architectural Coating	Residential	47.2	47.2	47.2

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	100		77.7	115	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Compressor (air)		70.5	70.5
	Total	70.5	70.5

*Calculated Lmax is the Loudest value.

VIBRATION IMPACTS FROM CONSTRUCTION AND OPERATIONS

PROJECT:	Buaro Street Residential Project	JOB #:	2948-2023-02
ACTIVITY:	Vibration Impact Study	DATE:	1/24/2024
LOCATION:	Nearest adjacent structures	ENGINEER:	B. Morrison

VIBRATION INPUT/OUTPUT DATA

OTHER CONSTRUCTION EQUIPMENT

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.200 in/sec**

Equipment Type =	2	Large Bulldozer
PPV_{ref} =	0.089	Reference PPV at 25 ft.
D =	12.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

EQUIPMENT PPV REFERENCE LEVELS

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

VIBRATION IMPACTS FROM CONSTRUCTION AND OPERATIONS

PROJECT:	Buaro Street Residential Project	JOB #:	2948-2023-02
ACTIVITY:	Vibration Impact Study	DATE:	1/24/2024
LOCATION:	Nearest adjacent structures	ENGINEER:	B. Morrison

VIBRATION INPUT/OUTPUT DATA

OTHER CONSTRUCTION EQUIPMENT

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.170 in/sec**

Equipment Type =	4	Loaded Trucks
PPV_{ref} =	0.076	Reference PPV at 25 ft.
D =	12.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

EQUIPMENT PPV REFERENCE LEVELS

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

Attachment 7: Water Quality

Memorandum

C&V CONSULTING, INC.

To:	CITY OF GARDEN GROVE		
Date:	April 16, 2024		
From:	SARAH MCMASTERS	**cc:**	
Project:	TTM 19314 12701 BUARO STREET	**Proj#:**	ASHT-003
Re:	WATER QUALITY IMPACTS		

The proposed project site consists of one parcel with an area of approximately 1.41 acres. It is located at 12701 Buaro Street (APN: 231-383-48). The site is bounded by a church and associated parking lot paving to the north, Buaro Street and residential buildings to the east, and single-family residences to the west and south. The proposed development shares an access driveway with the parcel to the east. The site is currently occupied by one (1) two story single family structure, a detached single story structure, and a large lawn area surround the structures. All existing onsite structures will be demolished prior to the construction of the proposed development. The site is relatively flat with no pronounced high points or low points. Surface runoff drains by sheet flow to the southwest corner of the site.

The project proposes 6 residential buildings with the construction of 35 units with private garages, private drive aisles, sidewalks, and common landscaped areas. Currently the site consists of 70% pervious area and 30% impervious area. The proposed development is estimated to consist of 30% pervious area and 70% impervious area based on the land use and density. During final engineering, impervious and pervious areas will be calculated more precisely and calculations revised. The proposed site is graded to surface flow into three inlets onsite that route storm water to an underground infiltration trench for water quality treatment. The infiltration trench is designed to retain the design stormwater capture volume required for water quality purposes which in turn also limits peak discharge to pre development flow rates

	Existing vs. Proposed Conditions			
	Pervious		**Impervious**	
	Area (acres)	**Percentage (%)**	**Area (acres)**	**Percentage (%)**
Existing Conditions	0.98	70	0.43	30
Proposed Conditions	0.42	30	0.99	70

Hydrology and Water Quality Impacts

	Potentially Significant Impacts	**Less than Significant with Mitigation Impact**	**Less than Significant Impact**	**No Impact**
a) Violate any water quality standards or waste discharge requirements?			X	
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			X	

9830 Irvine Center Drive, Irvine, California 92618
Office: 949.9I6.3800

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?			X	
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map		X		
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?		X		
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?		X		
j) Inundation by seiche, tsunami, or mudflow?			X	

Discussion: The discussion below is based on the Preliminary Hydrology Report and the Preliminary Water Quality Management Plan (PWQMP), prepared by C & V Consulting, Inc. The PWQMP is a site-specific post-construction water quality management program intended to comply with the requirements of the local National Pollutant Discharge Elimination System (NPDES) Stormwater Program. It proposes to address pollutants of concern of the proposed project through the implementation of applicable Best Management Practices (BMPs).

a. Violate any water quality standards or waste discharge requirements?

Less than Significant Impact. Federal and state regulations and programs are designed to protect and enhance water quality, such as the Clean Water Act, the Porter-Cologne Water Quality Control Act, the NPDES Program, the Municipal Stormwater Permitting Program, and the Water Quality Control Plan for the Santa Ana River Basin. The proposed project would be required to comply with these requirements, in addition to the water quality requirements of the City of Garden Grove Municipal Code, Garden Grove Sanitary District, and the Garden Grove Public Works Water Service Division.

Pursuant to the Clean Water Act, the discharge of pollutants to waters of the U.S. from any point source is unlawful, unless the discharge is in compliance with a NPDES permit. Municipal and industrial stormwater discharges are also regulated under the NPDES program. The California State Water Resources Board maintains the California NPDES program through the Regional Water Quality Control Boards.

Construction activities that disturb one acre of land or more must apply for coverage under the State Water Resources Control Board General Construction Activity Stormwater Permit. To obtain coverage, a SWPPP must be prepared describing BMPs for erosion and sediment controls (i.e., short repeat cycles of irrigation water timing, use of mulch in planter areas), runoff water quality monitoring, waste disposal requirements, post-construction control measures and non-stormwater management controls must be prepared. The proposed project, which will disturb approximately 4.05 acres of land, would be required to obtain coverage under the General Construction Activity Stormwater Permit and a Stormwater Pollution Prevention Plan (SWPPP) would be required. Construction activities for the proposed project would include activities such as clearing and grading that would expose surface soils and could result in sediment and runoff in downstream receiving

waters along with other miscellaneous waste. The control of construction-related pollutants, however, would be achieved through the implementation of BMPs identified in the SWPPP as required by the General Construction Activity Stormwater Permit.

According to the Preliminary Hydrology Report and the PWQMP, the existing site consists of approximately 30 percent of impervious area. The site is predominantly flat and drainage surface flows towards Dungan Lane via a concrete channel at the southwest corner of the site. Runoff continues south to Stanford Avenue where it turns west and enters an Orange County Flood Control Facility. Runoff from the site eventually enters the East Garden Grove Wintersburg Channel where it discharges into Bolsa Bay and then ultimately discharges into the Pacific Ocean.

Preliminarily the proposed development will consist of 70% impervious area and 30% pervious area. During final engineering, surface areas will be calculated again to confirm calculations, water quality, and hydraulic facility sizing. Water Quality Requirements and the increase in peak discharge flow rates will be addressed through the onsite stormwater system. Surface drainage will be collected by proposed curb-inlet catch basins and another storm drain inlet within the proposed drive aisles which will be equipped with catch basin insert filters for pretreatment. Stormwater will be conveyed to a proposed infiltration system for treatment and retention of the entire Design Capture Volume (DCV). The proposed infiltration system will provide enough storage to statically retain the DCV, and the underlying infiltrating surface area is sized to ensure the DCV will infiltrate entirely within a maximum drawdown of 48 hours. During storm events that produce a greater runoff volume than the DCV, runoff will overflow out of the infiltration gallery via grated bubbler outlet. In the event the storm drain system becomes clogged, stormwater will pond near the catch basin at the southwest corner of the site and eventually surface flow overland to the existing gutter near the southwest corner of the site.

Although impervious surfaces would be increased with implementation of the proposed project, no alteration of a course or stream would occur. Furthermore, the Preliminary Hydrology Report and the PWQMP prepared for the proposed project would ensure compliance with the NPDES Stormwater Program and include BMPs that would ensure no substantial alteration of the existing drainage pattern at the project site would occur. The underground detention/ infiltration system is designed to mitigate the proposed development's peak discharge to that of the predevelopment peak discharge rate while also satisfying city, county, and state water quality requirements. The proposed improvements will not increase the risk of flooding or exceed the capacity of the existing downstream storm drain facilities.

According to the Geotechnical Investigation by Geocon West, Inc dated May 5, 2022 historical groundwater levels are approximately 15 feet below the ground surface. Borings were taken onsite and groundwater was encountered at approximately 28.2 feet below the existing ground surface. The Geotech report states that the soils at 5-10 feet below the ground surface are conductive to infiltration and that infiltration of stormwater will not negatively impact the ground water levels.

The summary of the water quality calculations is shown in the table below.

Design Capture Volume Sizing (Taken from Worksheet B of WQMP)				
BMP Area (ac)	**Imperviousness**	**C (Runoff Coefficient)**	**Design Capture Storm Depth (d)**	**Runoff Volume *[CxdxAx43560x(1/12)]***
1.41 ac	0.70	0.68	0.8"	2,766.3

The proposed drainage will be collected using roof downspouts, catch basins, and storm drain that will convey flows to the underground detention/ infiltration system. The catch basins and storm drain inlet will be equipped with a filter for pre-treatment purposes. Area drains will collect runoff in landscaped areas and the landscaping will provide pre-treatment for those flows.

Also, the PWQMP incorporates non-structural and structural source control BMPs, as defined in the Orange County Drainage Area Management Plan (DAMP). For example, the non-structural BMPs proposed for source control and reduction/elimination of pollutants include providing educational environmental awareness materials to all employees and contractors during the initial hiring and orientation process, and annually thereafter; providing restrictions to all employees,

contractors, etc. on certain activities conducted on the project site, such as vehicle washing, maintenance or repair outside of designated areas, hosing down of paved areas, and keeping dumpster lids open; maintaining common area landscape with efficient landscape and irrigation practices; and implementing trash management and litter control procedures to reduce pollution of drainage water. The structural BMPs include providing storm drain system labeling and signage on grate and drain inlets to alert the public to the destination of pollutants discharged into storm water; and using efficient irrigation systems and landscape design to minimize the runoff of excess irrigation water into the storm drain system.

The incorporation of BMPs prescribed in the WQMP would minimize impervious areas in addition to reducing potential pollutants that enter the surface flows as a result of the proposed development, to the maximum extent practicable, as required by the Regional Water Quality Control Board. Prior to the commencement of grading and construction activities, a final WQMP would be prepared. With implementation of the SWPPP, WQMP, and BMPs, the construction and operation of the proposed project would not violate any water quality standards or waste discharge requirements, provide substantial additional sources of polluted runoff or otherwise substantially degrade water quality, nor would it substantially alter the existing drainage pattern of the project site or area. Therefore, impacts would be less than significant.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or lowering of the local groundwater table level?

Less than Significant Impact. The City's sources of water supply consist of groundwater and imported surface water. In the recent past the City has received its water supply from its groundwater wells that access the Orange County Groundwater Basin and from imported water from the Metropolitan Water District of Southern California (Metropolitan).

According to the Geotechnical Investigation by Geocon West, Inc dated May 5, 2022 historical groundwater levels are approximately 15 feet below the ground surface. Borings were taken onsite and groundwater was encountered at approximately 28.2 feet below the existing ground surface. The Geotech report states that the soils at 5-10 feet below the ground surface are conductive to infiltration and that infiltration of stormwater will not negatively impact the ground water levels.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
Less than Significant Impact. According to the Preliminary Hydrology Report and the PWQMP, the existing project site is developed. The site is predominantly flat and drainage surface flows towards a concrete channel at the southwest corner of the site. The proposed condition maintains this drainage pattern with a proposed overflow catch basin that discharges site flows to the same concrete channel where it will follow the same pattern as runoff currently follows in the pre-developed condition. The site currently receives offsite runon from the apartment complex to the east. In the post developed condition, offsite runon will be routed separately from onsite flows through a concrete channel that will discharge into the concrete channel on the southwest corner of the site. There will be no co-mingling of these offsite flows with onsite flows so water quality treatment nor peak discharge mitigation is required. Pre and post development discharge rates are shown in the table below.

Existing Conditions	Area (ac)	Q_2 (cfs)	Q_{10} (cfs)	Q_{25} (cfs)	Q_{100} (cfs)
DMA X-1	0.21	0.31	0.55	0.66	0.85
DMA X-2	1.20	-	0.49	0.78	1.25
Total	1.41	0.31	1.04	1.44	2.09

Proposed Conditions	Area (ac)	Q_2 (cfs)	Q_{10} (cfs)	Q_{25} (cfs)	Q_{100} (cfs)
DMA A-1	0.29	0.41	0.74	0.88	1.13
DMA A-2	0.50	0.49	0.95	1.17	1.52
DMA A-3	0.62	0.68	1.31	1.59	2.06
Total	1.41	1.57	3.00	3.64	4.72
Total After Mitigation	1.41				0.54

Offsite Runon (not co-mingled with onsite)	0.75	0.85	1.67	2.04	2.66

In the Post developed condition, there is an increase in peak flows due to the increase in impervious area. The onsite detention/ infiltration system is sized to detain 10,270 cft of runoff and to infiltrate 35,287.9 cf in 48 hours. This detention/ infiltration system mitigates the increase in peak flow during the 100 year storm event to 0.54 cfs which is substantially lower than the pre-developed peak discharge flow rate of 2.09 cfs.

During construction/soil disturbance activities, the project will obtain coverage under the General Construction Activity Stormwater Permit and an Erosion Control Plan (ECP) and SWPPP will be developed to minimize erosion, sedimentation and siltation from these activities. Therefore, impacts would be less than significant.

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

Less than Significant Impact. According to the Preliminary Hydrology Report and the PWQMP, the existing project site is developed. The site is predominantly flat and drainage surface flows towards Dungan Lane via a concrete channel at the southwest corner of the site. Runoff continues south to Stanford Avenue where it turns west and enters an Orange County Flood Control Facility. Runoff from the site eventually enters the East Garden Grove Wintersburg Channel where it discharges into Bolsa Bay and then ultimately discharges into the Pacific Ocean. The proposed condition maintains this drainage pattern.

Since the onsite detention/ infiltration system is sized for water quality and hydrology purposes, the proposed 100-year peak flow rate of 0.54 cfs is substantially lower than the existing 100-year peak flow rate of 2.09 cfs. The proposed improvements will not increase the risk of flooding or exceed the capacity of any downstream stormwater facilities. Therefore, impacts would be less than significant.

e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less than Significant Impact. As mentioned in the previous responses above, the proposed condition maintains the drainage pattern with a proposed overflow catch basin that discharges to the existing concrete channel at the southwest corner of

the site. Runoff will follow existing drainage patterns. The proposed infiltration/ detention system will mitigate peak discharge flow rates during the 100 year storm event to 0.54 cfs which is substantially lower than the pre-developed peak discharge rate of 2.09 cfs during the 100 year storm event.

The proposed use for the site multi family residential and the expected land use pollutants may include suspended solids, sediment, nutrients, heavy metals, pathogens, pesticides, oil and grease, toxic organic compounds, and trash and debris. The project proposes catch basin filter inserts and an infiltration BMP to mitigate the expected pollutants. The proposed drainage will be collected using roof downspouts, catch basins, and storm drain that will convey flows to the catch basins and the infiltration BMPs. Once the infiltration/ detention system is at capacity, runoff will overflow in the proposed catch basin and through the existing concrete channel and out to Dungan Lane. Therefore, impacts would be less than significant.

f. Otherwise substantially degrade water quality?
Less than Significant Impact. As mentioned in the previous response, the proposed use for the site includes multi family residential and the expected land use pollutants may include suspended solids, sediment, nutrients, heavy metals, pathogens, pesticides, oil and grease, toxic organic compounds, and trash and debris. The project proposes catch basin filter inserts and an infiltration BMP to mitigate the expected pollutants. The proposed drainage will be collected using roof downspouts, catch basins, and storm drain that will convey flows to the catch basins and ultimately the infiltration BMP. The catch basins will contain filter inserts to serve as pre-treatment. Once the infiltration/ detention system is at capacity, runoff will overflow in the proposed catch basin and through the existing concrete channel and out to Dungan Lane. Therefore, impacts would be less than significant.

g. Place housing within a 100-year flood hazard area as mapped on the federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
Less than Significant Impact. The project is located in Zone A, V, A99, Areas without Base Flood Elevation according to the Flood Insurance Rate Map (06059C0143J) (FIRM) from the Federal Emergency Management Agency (FEMA). The project proposes to raise the site to be 1' above the flood elevation water surface level. The city has standards and guidelines for residential development within the flood plain which will be met during the development phase, therefore the impact is less than significant.

h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?
Less than Significant Impact. The project is located in Zone A, V, A99, Areas without Base Flood Elevation according to the Flood Insurance Rate Map (06059C0143J) (FIRM) from the Federal Emergency Management Agency (FEMA). The project proposes to raise the site to be 1' above the flood elevation water surface level. The city has standards and guidelines for residential development within the flood plain which will be met during the development phase. The development does not propose to place an y structures that would impede or redirect flood flows, therefore the impact is less than significant.

i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
Less than Significant Impact. The project is located in Zone A, V, A99, Areas without Base Flood Elevation according to the Flood Insurance Rate Map (06059C0143J) (FIRM) from the Federal Emergency Management Agency (FEMA). The project proposes to raise the site to be 1' above the flood elevation water surface level. The city has standards and guidelines for residential development within the flood plain which will be met during the development phase. Flooding will not pose significant injury, loss or death. According to the General Plan Safety Element, the city has stormwater improvements in order to convey a 100-year storm event. The project site is not protected by a levee or dam, therefore failure of either is not applicable. Therefore the impact is less than significant.

j. Inundation by seiche, tsunami, or mudflow?
No Impact. According to the City's Local Hazard Mitigation Plan, tsunami and seiches hazards were excluded from the plan as the City is not on the coast or next to a large body of water. Thus, the proposed project is not located in a tsunami or seiche zone. Additionally, the LHMP, the likelihood of mudslides occurring in the project site area are relatively low due to the land use type and the surrounding topography. Therefore, impacts would be less than significant.

Attachment 8

RESOLUTION NO. 6093-24

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF GARDEN GROVE APPROVING SITE PLAN NO. SP-138-2024 AND TENTATIVE TRACT MAP NO. TT-19314 FOR PROPERTY LOCATED ON THE WEST SIDE OF BUARO STREET, BETWEEN LAMPSON AVENUE AND HARBOR BOULEVARD, AT 12701 BUARO STREET, ASSESSOR'S PARCEL NO. 231-383-48.

BE IT RESOLVED that the Planning Commission of the City of Garden Grove, in a regular session assembled on July 18, 2024, hereby approves Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 for a property located on the west side of Buaro Street, between Lampson Avenue and Harbor Boulevard, Assessor's Parcel No. 231-383-48, subject to the conditions of approval attached hereto as Exhibit "A".

BE IT FURTHER RESOLVED in the matter of Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314, the Planning Commission of the City of Garden Grove does hereby report as follows:

1. The subject case was initiated by Matt Ashton of Ashton3, with authorization from the property owner, RAJO Investments.

2. The applicant is requesting approval of: (1) a Site Plan to construct thirty-five (35) three-story residential condominium units and associated site improvements on an approximately 1.4-acre lot, and (2) Tentative Tract Map to create a one-lot subdivision for the purpose of selling each dwelling unit as a condominium. The proposal includes two (2) affordable housing units for "very-low income" households, qualifying the project for a 25% density bonus, incentives or concessions, waivers or reductions of development standards, and reduced parking pursuant to the State Density Bonus Law and Garden Grove Municipal Code (GGMC) Section 9.60.040 (collectively, the "Density Bonus Law" or "DBL"). The project has been designed to incorporate certain incentives / concessions and waivers and reductions of development standards pursuant to the DBL.

3. The City of Garden Grove Planning Commission hereby determines that the proposed project is categorically exempt from review under the California Environmental Quality Act ("CEQA") pursuant to Section 15332 (In-Fill Development Projects) of the State CEQA Guidelines (14 Cal. Code Regs., Section 15303). As set forth in the Class 32 exemption, the proposed project is: (1) consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations; (2) the proposed development occurs within City limits on a project site of no more than five acres substantially surrounded by urban uses; (3) the project site has no value as habitat for endangered, rare or threatened species; (4) approval of the project would not result in any significant effects relating to traffic, noise, air quality or water quality; and (5) the site can be

adequately served by all required utilities and public services. The project is therefore exempt from CEQA review.

4. The property has a General Plan Land Use designation of LMR (Low Medium Density Residential) and is zoned R-2 (Limited Multiple Residential). The site is currently developed with a vacant single-family home.

5. Existing land use, zoning, and General Plan designation of property in the vicinity of the subject property have been reviewed.

6. Report submitted by the City staff was reviewed.

7. Pursuant to a legal notice, a public hearing was held on July 18, 2024, and all interested persons were given an opportunity to be heard.

8. The Planning Commission gave due and careful consideration to the matter during its meeting on July 18, 2024.

BE IT FURTHER RESOLVED, FOUND AND DETERMINED that the facts and reasons supporting the conclusion of the Planning Commission, as required under Municipal Code Section 9.04.030 are as follows:

FACTS:

The project site is an approximately 61,294 square-foot (1.4 acres) flag lot, located on the west side of Buaro Street, between Lampson Avenue and Harbor Boulevard, at 12701 Buaro Street. The subject site has a General Plan Land Use designation of LMR (Low Medium Density Residential) and is zoned R-2 (Limited Multiple Residential). The property abuts R-1 (Single Family Residential) zoned properties to the west and south. To the north, the property is adjacent to the Village Bible Church, also located in the R-1 zone. To the east and south, the property is adjacent to multiple-family residential uses in the R-2 zone. Further to the east, across Buaro Street, the property is adjacent to residential properties within Planned Unit Development No. PUD-121-98.

The subject site is currently improved with an unoccupied two-story single-family residence that was originally constructed in 1921. The existing structure has not been identified as a part of any historical record. Due to numerous break-in activity on the property, the building has most recently been "red-tagged" by the City's Building and Safety Division. As of this writing, the applicant has applied for a permit for the demolition of the building. Consequently, all existing site improvements would be demolished to accommodate the proposed project.

The applicant is proposing thirty-five (35) attached condominium units, and associated site features, including drive aisles, walkways, and recreation areas. With the inclusion of two (2) affordable housing units for "very-low income" households,

pursuant to the State Density Bonus Law, the project qualifies for a density bonus of 25% of the base density, reduced parking ratios, and the following incentive/concession and ten (10) waivers/reductions of development standards set forth in the Garden Grove Municipal Code:

1. An incentive/concession to reduce the stepback at the second and third floors adjacent to R-1 properties from the required twenty feet (20'-0") and forty feet (40'-0"), respectively, to ten feet (10'-0") at the rear and side property lines (GGMC Sections 9.12.040.020.A and 9.12.040.050.A.3);
2. A reduction of the required minimum front setback requirements for the first, second, and third floors, to maintain a minimum ten-foot (10'-0") setback for all floors (Section 9.12.040.020.A);
3. A reduction of the required minimum separation distance between vehicular accessways and residential units from five feet (5'-0") to a minimum one-foot nine inches (1'-9") (Section 9.12.040.050.A.2.e);
4. A reduction of the required additional two-foot (2'-0") separation between buildings that feature a shared walkway, within the separation area, to four inches (0'-4") (Section 9.12.040.050.A.2.i);
5. A waiver/reduction of the required minimum depth for unit covered entry from three feet (3'-0") to a one-foot (1'-0") deep "eyebrow" awning (Section 9.12.040.050.G.1);
6. A reduction of the required minimum width for an active recreation area from thirty feet (30'-0") to twenty-five feet (25'-0") wide (Section 9.12.040.050.J.7.b);
7. A reduction of the minimum active recreation area required for a property of this size from 2,500 square feet to 920 square feet (Section 9.12.040.050.J.7.c);
8. A waiver to deviate from the minimum amenity requirements for Active Common Open Space/Recreation areas (Section 9.12.040.050.J.7.d);
9. A reduction of the required minimum combined usable private and common open space per unit from 300 square feet to 163 square feet (Section 9.12.040.050.J.2);
10. A waiver to deviate from the minimum amenity requirements for Passive Common Open Space areas (Section 9.12.040.050.J.11); and
11. A waiver to deviate from the requirement to provide shared trash enclosures for developments with more than five (5) units to instead allow three (3) trash carts per individual unit (Section 9.12.040.260.B.2).

An Affordable Housing Regulatory Agreement consistent with the State Density Bonus Law (DBL) and Section 9.60.050 of the Garden Grove Municipal Code would be recorded to ensure affordability of the very-low income units for the initial occupants.

FINDINGS AND REASONS:

SITE PLAN (HOUSING DEVELOPMENTS)

1. The proposed development project is consistent, in compliance, and in conformity with the applicable, objective standards, provisions, conditions or requirements of the General Plan, Title 9, and other applicable ordinances or policies of the City.

   The proposed project includes construction of a three-story, thirty-five (35) unit residential apartment complex that includes two (2) affordable housing units for "very-low income" households, along with associated site improvements. The subject site has a General Plan Land Use designation of LMR (Low Medium Density Residential) and is zoned R-2 (Limited Multiple Residential). The LMR Land Use Designation is intended to allow smaller scale multiple-family housing, and is a transition between the detached single-family area and the higher density multiple-family areas. The LMR is implemented, in part, by the R-2 zone, which allows residential developments with densities of up to twenty-one (21) units per acre. Pursuant to the Density Bonus Law, the project is entitled to a density bonus of 25%, reduced parking ratios, one (1) incentive or concession, and waivers or modifications of development standards. With the exception of the increased density, reduced parking ratios, and development standards required to be waived or modified pursuant to the Density Bonus Law, the proposed project complies with all applicable objective development standards and provisions of the General Plan and Municipal Code. The project has also been reviewed by the Public Works Department, and either complies with, or has been conditioned to meet, all applicable Public Works design requirements. The proposed Project is also consistent with the goals and policies of the General Plan, including the following:

   Policy LU-1.3: Support the production of housing citywide that is affordable to lower- and moderate-income households consistent with the policies and targets set forth in the Housing Element. As proposed, the subject project would include two (2) "very-low income" residential units. The inclusion of these units would contribute to meeting the City's Regional Housing Needs Allocation (RHNA), as well as the Housing Element policies encouraging the development of lower-income residential units.

   Goal LU-2: Stable, well-maintained residential neighborhoods in Garden Grove. The subject site is currently developed with a vacant single-family home. The existing structure has been "red-tagged" by the City's Building and Safety Division, and is therefore unsuitable for habitation. The proposed project would rid the City of the maintenance issues associated with the upkeep of the existing building and site. As proposed, the project would ensure the proper upkeep of the subject site, which could be a benefit to the

neighborhood as a whole. In addition, the project would enhance the driveway approach from Buaro Street, which is shared by the adjacent multiple-family development.

Policy LU-2.4: Assure that the type and intensity of land use shall be consistent with that of the immediate neighborhood. The adjacent properties consist of single-family residential dwellings, multiple-family residential developments, and a religious facility. The proposed a thirty-five (35) unit project was reviewed and determined to be within the allowed density under the DBL, and in compliance with the R-2 zone development standards of the Municipal Code, with the exception of the requested concessions and waivers. Thus, the development would be consistent with the type and intensity of land use of the immediate neighborhood.

Policy LU-3.2: Support development of multi-family housing that provides a diversity of densities, types, and prices that meet the needs of all household income levels. The proposed project is a thirty-five (35) unit residential condominium development that includes thirty-three (33) "above-moderate income" residential units, and two (2) "very-low income" residential units. The inclusion of the two (2) affordable units for "very-low income" households qualifies the project for a density bonus of 25% of the base density. The project is proposing a 17% Density Bonus, resulting in five (5) additional units above the maximum base density permitted in the R-2 zone, for a total of thirty-five (35) units. Thus, the project would be within the maximum residential density allowed under the DBL.

Policy LU-3.3: Encourage developers to build housing projects at or above maximum allowable densities. The subject project is allowed a maximum base density of twenty-one (21) units per acre, which yields thirty (30) units for a 1.4-acre lot. With the inclusion of two (2) affordable units for "very-low income" households, the project is providing 7% of its density for affordable housing. Thus, it is entitled to a density bonus of 25%. The project is proposing a 17% Density Bonus, resulting in five (5) additional units above the maximum base density permitted in the R-2 zone, for a total of thirty-five (35) units. Through the DBL, the project would exceed the base density allowed in the R-2 zone.

Goal LU-4: Uses compatible with one another. The project is located in a neighborhood that consists of both single-family and multi-family residential developments. The properties abutting the project site are zoned R-1 (Single Family Residential), and R-2 (Limited Multiple Residential), and have a Low Density Residential and Low Medium Density Residential General Plan land use designations. Surrounding uses include single-family and multiple-family residential developments, a religious facility, and commercial uses closer to the intersection of Buaro Street and Harbor Boulevard. Therefore, the

proposed housing project would be consistent with the development pattern of the surrounding residential uses.

Policy LU-4.1: Locate higher-density residential uses within proximity of commercial uses to encourage pedestrian traffic, and to provide a consumer base for commercial uses. With the flag lot design of the property, the larger, rear portion of the property containing the residential units would be connected to the street frontage along Buaro Street with an internal sidewalk. Approximately 200 feet to the south is a commercial center at the intersection of Buaro Street and Harbor Boulevard. Providing the aforementioned internal sidewalk system could encourage new residents to walk to the nearby commercial uses.

Policy H-2.1: Preserve and expand the City's supply of affordable rental and ownership housing for lower-income households. As proposed, the subject project would include two (2) "very-low income" residential units. With the associated Tentative Tract Map, the units provided through the project would be sold as condominiums. The inclusion of the two (2) "very-low income" condominiums helps increase the City's stock of affordable for-sale residential units. An Affordable Housing Regulatory Agreement consistent with the DBL and Section 9.60.050 of the Garden Grove Municipal Code would be recorded to ensure affordability of the very-low income units for the initial occupant of said units.

Policy H-2.3: Provide density bonuses and other financial and regulatory incentives to facilitate the development of affordable housing. The proposed project includes two (2) affordable units for "very-low income" households. To facilitate the development, the applicant is requesting Density Bonus Law allowances for a 25% density bonus, one (1) incentive/concession, and ten (10) waivers or reductions of development standards to deviate from the R-2 zone development standards. In addition to the density bonus, incentives/concessions and waivers/reductions of development standards, the project is allowed to use the DBL reduced parking ratios. The granting of all of the aforementioned incentives is needed to facilitate the construction of the proposed development and to support the creation of more affordable housing units in the City. Furthermore, the Project will contribute to meeting the City's Regional Housing Needs Allocation (RHNA).

Policy H-3.7: Encourage infill housing development that is compatible in character with established residential neighborhoods. The subject property is surrounded on all sides by urban land uses, including single-family residential dwellings, multiple-family residential developments, and a religious facility. All existing on-site improvements would be demolished to accommodate the thirty-five (35) residential units and associated site improvements proposed by the subject project. The proposed project would provide a transition between the lower density single-family residential uses to the west and south

with the higher-density residential uses to the east. Therefore, the infill project would be consistent with the character of these surrounding uses.

2. The provisions of the California Environmental Quality Act have been complied with.

   The proposed development is exempt from the California Environmental Quality Act ("CEQA"), pursuant to Section 15332 (In-Fill Development Projects) of the CEQA Guidelines (14 Cal. Code Regs., Section 15303). As set forth in the Class 32 exemption, the proposed project is: (1) consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations; (2) the proposed development occurs within City limits on a project site of no more than five acres substantially surrounded by urban uses; (3) the project site has no value as habitat for endangered, rare or threatened species; (4) approval of the project would not result in any significant effects relating to traffic, noise, air quality or water quality; and (5) the site can be adequately served by all required utilities and public services. Therefore, the provisions of the California Environmental Quality Act have been complied with.

3. The proposed development project will not have specific, adverse impacts, as defined in subdivision (j)(1)(A) of Government Code Section 65589.5, on public health and safety without any feasible method to satisfactorily mitigate or avoid the specific adverse impact, other than the disapproval of the proposed project.

   The proposed thirty-five (35) unit residential development will not have specific, adverse impacts on the public health and safety. The proposed project is at a density allowed pursuant to the DBL, is compatible with surrounding uses, is similar in scale to the adjoining neighborhood, and is consistent with the land use type and intensity in the immediate neighborhood.

TENTATIVE TRACT MAP

1. That the proposed map is consistent with the General Plan.

   The proposed project includes construction of a three-story, thirty-five (35) unit residential apartment complex that includes two (2) affordable housing units for "very-low income" households, along with associated site improvements. The proposed Tentative Tract Map No. TT-19314 would create a one-lot subdivision for the purpose of selling the thirty-five (35) units as residential condominium units. The subject site has a General Plan Land Use designation of Low Medium Density Residential (LMR) and is zoned R-2 (Limited Multiple Residential). The LMR Land Use Designation is intended to allow smaller scale multiple-family housing, and is a transition between the detached single-family area and the higher density multiple-family areas. The

proposed project is also consistent with goals and policies of the City's General Plan, including the following:

Policy LU-2.2: Strive to provide a diverse mix of housing types, along with uniformly high standards of residential property maintenance to preserve residents' real estate values and their high quality of life. The proposed development of thirty-five (35) for-sale units will add to the mix of diverse housing types in the immediate neighborhood. The proposed development will ensure maintenance of all common areas, such as the private drive areas, the common recreation area, and perimeter landscaping, which will be the responsibility of the Homeowner's Association to ensure proper maintenance that preserves the residents' real estate values. Furthermore, the project will contribute to meeting the City's Regional Housing Needs Allocation (RHNA), as well as the Housing Element policies.

Policy LU-2.4: Assure that the type and intensity of land use shall be consistent with that of the immediate neighborhood. The site is located within a residential neighborhood, characterized by R-1 (Single-Family Residential) zoned properties to the west and south. To the north, the property is adjacent to the Village Bible Church, also located in the R-1 zone. To the east, the property is adjacent to multiple-family residential uses in the R-2 zone. Further to the east, across Buaro Street, the property is adjacent to residential properties within Planned Unit Development No. PUD-121-98, which is implemented by the R-3 standards of the Code. The R-2 zone is intended to provide a transition between lower density, single-family detached residences and higher-density residential or non-residential uses. Surrounding uses include single-family and multiple-family residential developments, a religious facility, and commercial uses centered along the intersection of Buaro Street and Harbor Boulevard. Therefore, the project would meet the intent of the zoning by providing a transition between the adjacent R-1 properties and the multiple-family and commercial uses in the vicinity.

Goal LU-4: The City seeks to develop uses that are compatible with one another. The project is located in a neighborhood that consists of both single-family and multi-family residential developments. The properties in the direct vicinity of the project site are zoned R-1 (Single Family Residential), and R-2 (Limited Multiple Residential), and have a Low Density Residential and Low Medium Density Residential General Plan land use designations. Surrounding uses include single-family and multiple-family residential developments, religious centers, and commercial uses centered along the intersection of Buaro Street and Harbor Boulevard. Thus, the project is similar both in land use intensity and physical scale of the adjoining residential neighborhood. Therefore, the proposed housing project would be consistent with the development pattern of the surrounding residential uses.

Policy LU-4.1: Locate higher-density residential uses within proximity of commercial uses to encourage pedestrian traffic, and to provide a consumer base for commercial uses. The site is located within a residential neighborhood characterized, with nearby access to commercial uses at the intersection of Buaro Street and Garden Grove Boulevard. The construction of the new residential units would increase the local population and add to the consumer base for commercial services within the immediate neighborhood.

2. That the design and improvement of the proposed subdivision is consistent with the General Plan.

   The subject site has a General Plan land use designation of LMR (Low Medium Density Residential). The applicant is requesting Tentative Tract Map No. TT-19314 approval to create a one-lot subdivision for the purpose of developing the site with thirty-five (35) for-sale residential condominium units. The LMR land use designation is intended to allow smaller scale multiple-family housing, and is a transition between the detached single-family residential and the higher density multiple-family areas. The proposed project is consistent with this intent, as there are single-family developments to the west and south, and multiple-family developments to the east. With the approval of Site Plan No. SP-138-2024, the proposed Tentative Tract Map No. TT-19314 is in conformance with the City's General Plan, the City's Subdivision Ordinance, the Municipal Code requirements, and the State's Subdivision Map Act.

3. That the site is physically suitable for the proposed type of development.

   The site is physically suitable for the type of development proposed by the developer and complies with the LMR General Plan land use designation. The 1.4-acre site would consist of thirty-five (35) three-story units, as requested pursuant to the State Density Bonus Law. The residential Planned Unit Development has been designed in a manner that would be compatible with the surrounding neighborhood. As designed, the site would be able to accommodate thirty-five (35) units, along with associated circulation, parking, landscaping, recreation areas, setbacks, and other design features. Therefore, the property is sufficient in size to accommodate the proposed development.

4. That the requirements of the California Environmental Quality Act have been satisfied.

   The proposed development is exempt from the California Environmental Quality Act ("CEQA"), pursuant to Section 15332 (In-Fill Development Projects) of the CEQA Guidelines (14 Cal. Code Regs., Section 15303). As set forth in the Class 32 exemption, the proposed project is: (1) consistent with the applicable general plan designation and all applicable general plan policies as well as with applicable zoning designation and regulations; (2) the proposed development occurs within City limits on a project site of no more than five

acres substantially surrounded by urban uses; (3) the project site has no value as habitat for endangered, rare or threatened species; (4) approval of the project would not result in any significant effects relating to traffic, noise, air quality or water quality; and (5) the site can be adequately served by all required utilities and public services. Therefore, the provisions of the California Environmental Quality Act have been complied with.

5. That the site is physically suitable for the proposed density of the development.

The R-2 zoning allows a residential density up to twenty-one (21) units per acre. The subject site is approximately 1.4 acres. With the inclusion of the density bonus for a total of thirty-five (35) units provided, the proposed residential density on-site would be twenty-five (25) units per acre. Under the DBL, the project qualifies for one (1) incentive/concession, in addition to waivers or reductions of development standards. As proposed, with the inclusion of one (1) incentive/concession and ten (10) waivers/modifications of development standards, the site design is able to accommodate the thirty-five (35) units, along with parking, landscaping, recreation areas, setbacks, and other development standards of the R-2 zone. Therefore, the property is physically suitable for the proposed density of the development.

6. That the design of the subdivision and the proposed improvements are not likely to cause serious public health problems.

The design of the residential subdivision and the proposed improvements are not likely to cause serious public health problems. Additionally, certain conditions of approval will be in place to further safeguard public health. The proposed subdivision has been designed to comply with the intent of the LMR General Plan land use designation, and the R-2 (Limited Multiple Residential) zoning. City Departments, including the Traffic Division, Water Division, Engineering Division and the Planning Services Division, and the Orange County Fire Authority (OCFA) have reviewed the proposed development and have applied conditions of approval to minimize potential impacts that the project may have on the community, including public health.

7. That the design of the subdivision and the proposed improvements will not conflict with easements of record or easements established by court judgment acquired by the public at large for access through or use of property within the proposed subdivision; or, if such easements exist, that alternate easements for access or for use will be provided, and that these will be substantially equivalent to the ones previously acquired by the public.

The design of the residential subdivision and the proposed improvements will not conflict with easements of record, or easements established by court judgment acquired by the public at large for access through or use of property

within the proposed subdivision. The project has been designed to avoid development over existing easements.

8. That the design and improvement of the proposed subdivision are suitable for the uses proposed, and the subdivision can be developed in compliance with the applicable zoning regulations.

   The applicant is proposing thirty-five (35) attached condominium units, across six (6) buildings. Other site features, including drive aisles, walkways, and recreation areas would be shared amongst the entire development. The proposed subdivision has been specifically designed to accommodate the thirty-five (35) residential units on the subject property, and to create a one-lot subdivision for the purpose of selling each unit as a condominium. With the inclusion of two (2) affordable housing units for "very-low income" households, pursuant to the Density Bonus Law, the project qualifies for a density bonus of 25% of the base density, reduced parking ratio, and one (1) concession and ten (10) waivers/modification of development standards set forth in the R-2 zone. With the exception of the concession and waivers, the project complies with the development standards of the Municipal Code.

9. That the design of the subdivision provides, to the extent feasible, for future passive or natural heating and cooling opportunities in the subdivision.

   To the extent feasible, the project has been designed in accordance with Government Code Section 66473.1, such as to allow for passive or natural heating opportunities in the subdivision design, to encourage the orientation of structures to take advantage of shade and prevailing breezes, to allow solar access for passive heating and opportunities for placement of shade trees and other vegetation for cooling.

10. That the design, density and configuration of the subdivision strikes a balance between the effect of the subdivision on the housing needs of the region and of public service needs that the character of the subdivision is compatible with the design of existing structures.

    The proposed Tentative Tract Map No. TT-19314 would create a one-lot subdivision to sell each of the thirty-five (35) proposed residential units as a condominiums. The project has been reviewed in relation to the housing needs and goals of the City, and is compatible with the existing developments in the immediate vicinity. The proposed development will increase the number of residential units, and further the goals of the Housing Element of the General Plan. The proposed subdivision would allow for the sale of each proposed residential unit.

11. That the lot sizes of the subdivision are substantially the same as the lot sizes within the general area.

    The proposed Tentative Tract Map No. TT-19314 would create a one-lot subdivision to sell each of the thirty-five (35) proposed residential units as a condominiums. The proposed subdivision would allow for the sale of each proposed residential unit. The proposed units are approximately the same size as the multiple-family developments to the east of the project site, and meet the minimum size requirements of the Municipal Code.

12. The subject property is not located within a state responsibility area or a very high fire hazard severity zone, the proposed subdivision is served by local fire suppression services, and the proposed subdivision meets applicable design, location, and ingress-egress requirements.

    The subject property is not located within a state responsibility area or a very high fire hazard severity zone. The Orange County Fire Authority (OCFA) has reviewed the proposed subdivision, and found that the project will be adequately served by local fire suppression services, and the proposed subdivision meets applicable design, location, and ingress-egress requirements. Furthermore, the project has been conditioned to comply with all OCFA requirements relating to fire suppression services, and emergency access.

13. The discharge of waste from the proposed subdivision into the existing sewer system will not result in violation of existing requirements prescribed by the California Regional Water Quality Control Board. The conditions of approval for on and off-site improvements will ensure permitted capacity of the public sewer system is not exceeded.

    The Water Services Division has reviewed the project, and found that there is sufficient sewer capacity to support the project. So long as the project adheres to the Conditions of Approval, as recommended, the Water Services Division does not anticipate that the discharge of waste from the proposed subdivision will result in any violation of California Regional Water Quality Control Board requirements.

INCORPORATION OF FACTS AND FINDINGS SET FORTH IN STAFF REPORT

In addition to the foregoing, the Planning Commission incorporates herein by this reference, the facts and findings set forth in the staff report.

BE IT FURTHER RESOLVED that the Planning Commission does conclude:

1. The Site Plan and Tentative Tract Map possess characteristics that would justify the request in accordance with Municipal Code Section 9.60.020

(Review of Housing Development Projects) and Section 9.40.060 (Tentative Maps – Findings Required).

2. In order to fulfill the purpose and intent of the Municipal Code and thereby promote the health, safety, and general welfare, the attached Conditions of Approval (Exhibit "A") shall apply to Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314.

EXHIBIT "A"

Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314

12701 Buaro Street

CONDITIONS OF APPROVAL

General Conditions

1. The applicant and each owner of the property shall execute, and the applicant shall record a "Notice of Agreement with Conditions of Approval and Discretionary Permit of Approval," as prepared by the City Attorney's Office, on the property. Proof of such recordation is required within 30 days of the approval.

2. All Conditions of Approval set forth herein shall be binding on and enforceable against each of the following, and whenever used herein, the term "applicant" shall mean and refer to each of the following: the project applicant, Ashton 3, owner and developer of the project, RAJO Investments, and the future owner(s) and tenants(s) of the property, and each of their respective successors and assigns. All conditions of approval are required to be adhered to for the life of the project, regardless of property ownership. Except for minor modifications authorized to be approved by the Community Development Director pursuant to Condition No. 4, any changes of the Conditions of Approval require approval by the appropriate City hearing body.

3. Site Plan No. SP-138-2024 authorizes the development of a thirty-five (35) unit, residential condominium project, as depicted on the plans submitted by the applicant and made a part of the record of the July 18, 2024, Planning Commission proceedings, subject to these Conditions of Approval. Tentative Tract Map No. TT-19314 authorizes the creation of a one-lot subdivision for the purpose of selling each unit as condominium, as depicted on the tentative tract map submitted by the applicant and made a part of the record, of the July 18, 2024, Planning Commission proceedings, subject to these Conditions of Approval. Approval of this Site Plan and Tentative Tract Map shall not be construed to mean any waiver of applicable and appropriate zoning and other regulations, and wherein not otherwise specified, all requirements of the City of Garden Grove Municipal Code shall apply.

4. The approved site plan and floor plan are an integral part of the decision approving this Site Plan and Tentative Tract Map. Minor modifications to the approved Site Plan, and/or these Conditions of Approval may be approved by the Community Development Department Director, in his or her discretion. Proposed modifications to the approved project and/or these Conditions of Approval that would result in the intensification of the project, or create impacts that have not been previously addressed and which are determined by the Community Development Department Director not to be minor in nature

shall be subject to approval of new and/or amended land use entitlements by the applicable City hearing body.

5. All conditions of approval shall be implemented at the applicant's expense, except where specified in the individual condition.

Engineering Division

6. A geotechnical study prepared by a registered geotechnical engineer must be submitted to the City, and approved by the City Engineer prior to the issuance of any grading or building permits. The report shall analyze the liquefaction potential of the site and make recommendations. The report shall analyze sub-surface issues related to the past uses of the site, including sub-surface tanks and basement and septic facilities. Any soil or groundwater contamination shall be remediated prior to the issuance of a building permit per the requirements of the Orange County Health Department and the mitigation requirements of governing regulatory requirements. The report shall make recommendations for foundations and pavement structural section design of interior streets and parking spaces. The report shall also test and analyze soil conditions for LID (Low Impact Development) principles and the implementation of water quality for storm water runoff, including potential infiltration alternatives, soil compaction, saturation, permeability and groundwater levels. The applicant shall implement the recommendations identified in the geotechnical study / report.

7. Prior to the issuance of any grading or building permits, the applicant shall submit to the City for review and approval a final design Water Quality Management Plan (WQMP) that:

    a. Addresses required mitigation Site Design Best Management Practices (BMPs) based upon the latest Santa Ana Regional Water Quality Control Board (SARWQCB) approved Drainage Area Management Plan (DAMP) as identified in the geotechnical report recommendations and findings, including, but not limited to, infiltration minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas as required by the latest adopted County of Orange Technical Guidance Document (TGD).

    b. BMP's shall be sized per the requirements of the latest Technical Guidance Documents.

    c. Incorporates the applicable Routine Source Control BMPs as defined in the DAMP.

d. Incorporates structural and Treatment Control BMPs as defined in the DAMP.

e. Generally describes the long-term operation and maintenance requirements for the Treatment Control BMPs.

f. Identifies the entity that will be responsible for long-term operation and maintenance of the Treatment Control BMPs.

g. Describes the mechanism for funding the long-term operation and maintenance of the Treatment Control BMPs.

h. Provides a hydrological analysis with scaled map as well as hydrologic and hydraulic calculations to size storm drains per the Orange County RDMD standards.

8. Parkway culverts shall be designed per City of Garden Grove Standard Plan B-209. Storm drain lateral pipe connections to city maintained storm drains within City right-of-way shall be RCP with a minimum diameter of eighteen inches (1'-6").

9. Grading and street improvement plans prepared by a registered Civil Engineer are required. As required under Section 107 of the California Building Code (CBC), the grading plan shall be based on a current survey of the site, including a boundary survey, topography on adjacent properties up to thirty feet (30'-0") outside the boundary, and designed to preclude cross-lot drainage. Minimum grades shall be 0.50% for concrete flow lines and 1.25% for asphalt. The grading plan shall also include water and sewer improvements. The grading plan shall include a coordinated utility plan showing all existing utility facilities, easements and proposed utility facilities. All on-site improvements shall be tied by horizontal dimensional control to the property boundary as established by survey. A minimum uninterrupted twenty-foot (20'-0") wide throat access to the site is required from the street for multiple-family residential projects, and shall meet the requirements of the California Fire Code throughout the site. Vehicle maneuvering, as demonstrated by AutoTurn along private streets and access ways, shall be demonstrated on the grading plan. Street improvement plans shall conform to all format and design requirements of the City Standard Drawings & Specifications.

10. All vehicular access drives to the site shall be provided in locations approved by the City Traffic Engineer per Traffic Engineering Policy TE-17.

11. The applicant shall coordinate with the Planning Services Division and Orange County Fire Authority to identify proper emergency vehicle access to the site, and shall provide the Engineering Division a copy of the approval letters upon first submittal of the grading and street improvement plans.

12. The applicant shall complete the following for the tract map:

    a. Prior to recordation of a tract map, the surveyor/engineer preparing the map shall tie the boundary of the map into the Horizontal Control System established by the County Surveyor in a manner described in Sections 7-9-330 and 7-9-337 of the Orange County Subdivision Code and Orange County Subdivision Manual, Subarticle 18. The surveyor/engineer shall submit record information to the City on AutoCAD DWG format.

    b. Prior to recordation of a tract map, the surveyor/engineer preparing the map shall submit to the County Surveyor a digital graphics file of said map in a manner described in Sections 7-9-330 and 7-9-337 of the Orange County Subdivision Code and Orange County Subdivision Manual, Subarticle 18. The surveyor/engineer shall submit record information to the City on AutoCAD DWG format.

    c. Prior to issuance of a grading permit, the applicant shall submit to the Engineering Division an updated title report along with copies of the recorded instruments listed in the title report, reference maps used to prepare legal description and the plat for review and approval of the tract map.

    d. All subdivision mapping shall be concurrently reviewed by the City Engineering Division and the County of Orange Survey Department. The applicant shall forward all plan check comments received from the County of Orange Survey Department to the City of Garden Grove's Engineering Division upon receipt from the county.

    e. Prior to submittal of the Final Map to the City of Garden Grove and the County of Orange for first review, the applicant shall work with the Planning Services Division and the Engineering Division to determine any minor modifications needed to the Tentative Map to serve as guidance in the preparation of the Final Map. An updated Title Report shall be required as part of this modification review.

    f. Easements needed to incorporate drainage runoff and conveyance of sewage systems or other service utilities across, or through, adjacent properties shall be addressed on the Final Map.

    g. Reference to the Final Map shall be clearly and specifically addressed and illustrated with exhibits in the Covenants, Conditions and Restrictions (CC&R's) to be recorded on the property to support the function and maintenance of all easements and encumbrances identified on the Final Map.

13. The grading plan shall depict an accessibility route for the ADA pathway in conformance with the requirements of the Department of Justice standards, latest edition, and Section 1110A of the California Building Code.

14. Any new or required block walls and/or retaining walls shall be shown on the grading plans, both in plan-view and cross-sections. Cross-sections shall show vertical and horizontal relations of improvements (existing and proposed) on both sides of property lines. Required wall heights shall be measured vertically from the highest adjacent finished grade. Block walls shall be designed in accordance to City of Garden Grove Standard B-504, B-505, B-506, and B-508, or designed by a professional registered engineer. In addition, the following shall apply:

    a. The color and material of all proposed block walls, columns, and wrought iron fencing shall be approved by the Planning Services Division prior to installation.

    b. Openings for drainage through walls shall be shown in section details and approved by the City Engineer. Cross-lot drainage is not allowed.

15. The applicant shall remove any existing substandard driveway approaches, curbs, sidewalks, ADA ramps, pavement sections, and construct Buaro Street frontage improvements as identified below. All sidewalk, signage, and lighting improvements installed within the public rights-of-way shall be maintained by the applicant (and/or homeowner's association, once formed), and shall require the approval of the City Engineer, Street Division.

    a. The existing substandard driveway on Buaro Street shall be removed and replaced with a new driveway approach in accordance with Garden Grove Standard B-121.

    b. The applicant shall cold mill (grind) existing asphalt pavement three-inch (0'-3") uniform depth and replace with three inches (0'-3") of fiber-reinforced asphalt surface course from the edge of the westerly gutter to the easterly along the newly constructed driveway approach on Buaro Street per City specification and the direction of the City Engineer.

    c. The applicant is prohibited from installing any vehicle access gate at the main entrance of the project on Buaro Street.

    d. The applicant shall locate all existing public utilities across the property frontage and within the property boundary of the project prior to commencement of grading operation and mobilization.

e. Street signs shall be installed as required and approved by the City Traffic Engineer.

16. Any proposed new landscaping in public right-of-way shall be approved by Planning Services Division and maintained by the applicant and/or homeowner's association for the life of the project.

17. Driveway widths shall be in accordance with City's Traffic Engineering Policy TE-8 (Driveway Opening Policy).

18. Sight Distance Standards shall be in accordance with City's Traffic Engineering Policy TE-13. All structures and walls shall be designed to ensure proper vision clearance for cars entering or leaving the driveway and parking areas. No structure, wall or fence shall cause an exceedance of the applicable site distance standards set forth in City Traffic Engineering Policy TE-13.

19. The Site Plan shall comply with the completed Development Review and Comment Sheet prepared pursuant to City's Traffic Engineering Policy TE-17 and provided to the applicant.

20. Private Property Tow Away Sign Design shall be in accordance with City's Traffic Engineering Policy TE-19.

21. No Parking Fire Lane Sign Design shall be in accordance with City's Traffic Engineering Policy TE-20.

22. Layout of the parking lot shall be in accordance with City Standard B-311.

23. Except as authorized pursuant to the approved Site Plan pursuant to the State Density Bonus Law, off-street parking requirements for residential uses shall be in accordance with the parking provisions in Chapter 9.12 of the Garden Grove Municipal Code and the City of Garden Grove's Traffic Policies and Procedures TE-17 Development Review and Comments Sheet.

24. The applicant shall be subject to Traffic Mitigation Fees (Garden Grove City Council Resolution 9401-16), In-Lieu Park Fees, Drainage Facilities Fees, Water Assessment Fees, and other applicable mitigation fees identified in Chapter 9.44 of the Garden Grove Municipal Code, along with all other applicable fees duly adopted by the City.

25. In accordance to City of Garden Grove Municipal Code (Chapter 9.48.030), the applicant is required to underground all existing and proposed on-site and off-site utility facilities fronting the project which the developer is developing or redeveloping. All existing improvements and utilities shall be shown as part of the grading submittal package in the topography section.

26. A separate street permit is required for work performed within the public right-of-way.

27. Grading fees shall be calculated based on the current fee schedule at the time of permit issuance.

28. The applicant shall identify a temporary parking site(s) for construction crew and construction trailers office staff prior to issuance of a grading permit. No construction parking is allowed on local streets. Construction vehicles should be parked off traveled roadways in a designated parking area. Parking areas, whether on-site or off-site, shall be included and covered by the erosion control plans and the Storm Water Pollution Prevention Plan (SWPPP).

29. Prior to issuance of a grading permit, the applicant shall submit and obtain approval of a work-site traffic control plan for all the proposed improvements within public right-of-way, which shall be subject to the review and approval of the City Traffic Engineer.

30. Prior to the issuance of any grading or building permits for projects that will result in soil disturbance of one acre or more of land, the applicant shall demonstrate that coverage has been obtained under California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for City review on request. The assigned WDID number must appear on the cover sheet of the project grading plan.

31. The applicant shall coordinate with City's Public Works Department (Engineering, Water Services, and Streets Division) to set appointments for preconstruction inspections for all of the on-site and off-site improvements, prior to commencement of grading operation and mobilization.

32. In accordance with the Orange County Storm Water Program manual, the applicant and/or its contractors shall provide dumpsters on-site during construction unless an Encroachment Permit is obtained for placement in street.

33. The applicant and its contractor shall be responsible for protecting all existing horizontal and vertical survey controls, monuments, ties (centerline and corner) and benchmarks located within the limits of the project. If any of the above require removal; relocation or resetting, the contractor shall, prior to any construction work, and under the supervision of a California licensed Land Surveyor, establish sufficient temporary ties and benchmarks to enable the

points to be reset after completion of construction. Any ties, monuments and bench marks disturbed during construction shall be reset per Orange County Surveyor Standards after construction. The applicant and their contractor shall also re-set the tie monuments where curb or curb ramps are removed and replaced, or new ramps are installed. The applicant and their contractor shall be liable for, at his/her expense, any resurvey required due to his/her negligence in protecting existing ties, monuments, benchmarks or any such horizontal and vertical controls. Temporary Benchmarks shall not be used for Vertical control. Benchmarks shall be to the National Geodetic Vertical Datum (NGVD).

34. Heavy construction truck traffic and hauling trips, and any required lane closures shall occur outside peak travel periods. Peak travel periods are considered to be from 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.

35. Prior to grading or building permit closeout and/or the issuance of a certificate of use or a certificate of occupancy, the applicant shall:

    a. Demonstrate that all structural best management practices (BMPs) described in the Project WQMP have been constructed and installed in conformance with approved plans and specifications.

    b. Demonstrate that the applicant is prepared to implement and maintain all non-structural BMPs described in the Project WQMP.

    c. Demonstrate that an adequate number of copies of the approved Project WQMP are available on-site.

    d. Submit for review and approval by the City an Operations and Maintenance (O&M) Plan for all structural BMPs.

36. Final Tentative Tract Map No. TT-19314 shall be approved by the City and recorded by the applicant prior to issuance of any grading and/or building permits for the proposed development.

Water Services Division

37. New water service installations two inches (0'-2") and smaller may be installed by the City of Garden Grove at owner's/developer's expense. Installation shall be scheduled upon payment of applicable fees, unless otherwise noted. Fire services and larger water services three inches (0'-3") and larger shall be installed by the applicant's contractor per City Standards.

38. Water meters shall be located within the City right-of-way or within a dedicated waterline easement. Fire services and large water services three inches (0'-3") and larger, shall be installed by a contractor with a Class A or C-34

license, per City water standards, and inspected by an approved Public Works inspection.

39. If a large meter serving multiple units is proposed, a Reduced Pressure Principle Device (RPPD) backflow prevention device shall be installed for meter protection. The landscape system shall also have RPPD device. Any carbonation dispensing equipment shall have a RPPD device. Installation shall be per City Standards and shall be tested by a certified backflow device tester immediately after installation. Cross-connection inspector shall be notified for inspection after the installation is completed. Owner shall have RPPD device tested once a year thereafter by a certified backflow device tester and the test results to be submitted to the Public Works Department, Water Services Division. Property owner must open a water account upon installation of RPPD device.

40. It shall be the responsibility of applicant to abandon any existing private water well(s) per Orange County Health Department requirements. Abandonment(s) shall be inspected by Orange County Health Department inspector after permits have been obtained.

41. A composite utility site plan shall be included in the grading plan, which shall be submitted to both the Engineering Division and Water Services Division for review and approval.

42. If a water system is proposed within the private streets, the water system shall be constructed per City Standards by the developer, and dedicated to the City. Said dedication shall be shown on the final tract map or by another instrument prepared at applicant's expense and approved by the City Attorney. Bonding shall be required.

43. There shall be a minimum fifteen-foot (15'-0") clearance of building footings from a water main. Clearances less than fifteen feet (15'-0") shall be reviewed and approved by Water Services Division.

44. There shall be no structures or utilities built on, or crossing, any water or sewer main easements.

45. New utilities shall have a minimum five-foot (5'-0") horizontal, and a minimum one-foot (1'-0") vertical clearance from water main and appurtenances.

46. There shall be a minimum clearance from sewer main and water main of ten feet (10'-0") from outside of pipe to outside of pipe.

47. Any new or existing water valve located within new concrete driveway or sidewalk construction shall be reconstructed per City Standard B-753.

48. If a fire sprinkler system is required, and individual meters are proposed, the meter and service for the new units shall be installed per City Standard B-719, which specifies a residential fire sprinkler connection (RFSC) on the backside of the meter. If a different size individual meters are proposed, the engineer for the project shall design a similar manifold system that splits the domestic and fire lines right after the meter. The manifold is to be the same size as, or greater than, the meter.

49. An existing fire-service vault is located to the north of project driveway, within the public right-of-way in the sidewalk along Buaro Street. The applicant shall verify to whom the fire-service belongs to, which properties it services, and (i) whether it can be abandoned, or (ii) whether it is used by other properties and an easement between property owners is needed. Applicant shall provide the City with this information prior to the issuance of any grading or building permits. If proposing to abandon, the applicant shall remove the tee and gate valve at the water main, as well as the vault, single-check valve, and piping inside the vault.

50. Any dedicated fire-service or private fire hydrant lateral shall have above-ground backflow device with a double-check valve assembly. The device shall be tested immediately after installation, and once a year thereafter by a certified backflow device tester, and the results to be submitted to the Public Works Department, Water Services Division. The device shall be on private property, and is the responsibility of the property owner. The above-ground assembly shall be screened from public view as required by GGMC Section 9.12.040.10.G.

51. Any dedicated fire service for the development is to tie in to the twelve-inch (1'-0") water main within Buaro Street.

52. Water meters and boxes shall be installed by City forces upon payment of applicable fees, and after new water system, including water services, pass all bacteriological and pressure tests.

53. No permanent structures, trees or deep-rooted plants shall be placed over any sewer main or water main.

54. The location and number of fire hydrants shall be as required by Water Services Division and the Orange County Fire Authority (OCFA).

55. The applicant shall abandon any existing unused sewer lateral(s) at street right-of-way on the property owner's side. The sewer pipe shall be capped with an expansion sewer plug and encased in concrete. Only one (1) sewer connection per lot is allowed.

56. The applicant shall install a new private sewer main with clean-out at the right-of-way line and laterals on-site. The sewer main connection in public right-of-way shall be a minimum six-inch (0'-6") diameter, extra strength VCP with wedgelock joints and inspected by the Garden Grove Sanitary District (GGSD). All on-site sewer and appurtenances to be installed per the California Plumbing Code, and inspected by the Building Services Division.

57. All perpendicular crossings of the sewer, including laterals, shall maintain a minimum vertical separation of twelve inches (1'-0") below the water main, outer diameter to outer diameter. All exceptions to the above require a variance from the State Water Resources Control Board.

58. If a water main is exposed during the installation of a sewer lateral, a twenty-foot (20'-0") section of the water main shall be replaced with twenty feet (20'-0") of PVC C-900 DR-14 Class 305 water pipe, size in kind, and centered at the crossing.

Orange County Fire Authority

59. The applicant shall comply with all applicable Orange County Fire Authority (OCFA) requirements, including but not limited to OCFA Guideline B-01 (Fire Master Plans for Commercial and Residential Development) and the OCFA approved Fire Master Plan for the project.

Building and Safety Division

60. All work shall comply with the latest edition of the California Building Standards Code (CBC) at time of permit application.
61. The project shall be subject to CBC Chapter 11A multiple-family access regulations.

62. Common use areas shall comply with the latest edition of CBC Chapter 11A.

63. At least one of the proposed "affordable" units shall comply with CBC Section 1102A.3.1.

Planning Services Division

64. The driveway portion of the project site from Buaro Street also provides access to apartment units located on the adjacent property to the east of the project site located at 12711 Buaro Street (the "adjacent site"), and both properties are subject to that certain Amended & Restated Easement Agreement, dated November 15, 2023, and recorded on January 16, 2024 in the Official Records of Orange County as Document No. 2024000008471 (the "Easement Agreement"), pursuant to which the owner of the project site has granted a perpetual easement to the owner of the adjacent site for ingress and egress

on, over, and across the driveway portion of the project site and has agreed to maintain the easement area, install "no parking – tow away zone" signs, not impede or obstruct the easement area and its use by the tenants and/or manager of the adjacent site, and to undertake additional specified obligations with respect to the easement area. The applicant shall not materially alter the easement area described in the Easement Agreement or allow the Easement Agreement to be substantively amended or terminated without the prior written approval of the City of Garden Grove Community Development Director, and said obligation shall be memorialized in the Covenants, Conditions, and Restrictions (CC&R's) or another document acceptable to the City that is recorded against the project site prior to occupancy. The location and alignment (including widths) of the easement area depicted in the Easement Agreement shall be shown and described on the final map in a manner approved by the City Engineer. The Amended & Restated Easement Agreement shall be tied to the map through reference, details, and exhibits to be included in the CC&R's for the project.

65. The applicant shall submit detailed plans showing the proposed location of utilities and mechanical equipment to the Community Development Department, Planning Services Division for review and approval prior to submitting plans into the Building and Safety Division Plan Check process. The project shall also be subject to the following:

    a. Above-ground utility equipment (e.g. electrical, gas, telephone, cable TV) shall not be located in the street setback, within the common areas, or any parking areas, and such equipment shall be screened by densely planted and maintained landscaped hedges or a fence or wall. Ground-mounted equipment shall not exceed the maximum allowable height for a wall, fence, or hedge.

    b. Roof-mounted mechanical equipment shall be screened by parapet walls, rooftop architectural features such as a tower equal to the height of the equipment, or low walls surrounding the equipment and shall be painted to match the color of the building materials.

    c. No exterior piping, plumbing, or mechanical ductwork shall be permitted on any exterior façade and/or be visible from any public right-of-way or adjoining property. Roof rain gutters are permitted. The rain gutters shall follow the natural architecture lines of the building.

66. All landscaping shall be consistent with the landscape requirements of Title 9 of the Municipal Code. The developer shall submit a complete landscape plan governing the entire development. The landscape irrigation plans shall include type, size, location and quantity of all plant material. The landscape plan shall include irrigation plans and staking and planting specifications. All landscape irrigation shall comply with the City's Landscape Ordinance and associated

Water Efficiency Guidelines. The landscape plan is also subject to the following:

a. A complete, permanent, automatic remote control irrigation system shall be provided for all landscaping areas shown on the plan. The sprinklers shall be of drip or micro-spray system sprinkler heads for water conservation.

b. Forty percent (40%) of the trees on the site shall consist of minimum size twenty-four inch (2'-0") box, and the remaining 60 percent (60%) shall be of minimum size fifteen (15) gallons. These trees shall be incorporated into the landscaped frontages of all streets. Where clinging vines are considered for covering walls, drought-tolerant species shall be used.

c. All landscape areas, including the areas located within the public rights-of-way along Buaro Street that abuts the subject property, are the responsibility of the applicant/property owner(s).

d. Trees planted within ten feet (10'-0") of any public right of-way shall be planted in a root barrier shield. All landscaping along street frontages adjacent to driveways shall be of the low-height variety to ensure safe sight clearance. All trees planted on the subject property, whether for screening the project from the neighboring lots or for aesthetic or selling/marketing purposes, shall have an irrigation system installed in order maintain the trees.

e. All trees shall be double-staked in accordance with City standards.

f. The landscape treatment along the street frontage, including the area designated as public right of way, shall incorporate the landscape area between the sidewalk and the development wall with groundcover, shrubs and bushes, and trees that highlight the project's entrance as well as enhance the exterior appearance along Buaro Street. The plant material for the entrance shall be the type to inhibit graffiti such as vines and dense growing shrubs and bushes, and shall be maintained.

g. Fifty percent (50%) of all required shrubs shall be a minimum size of five (5) gallons at time of planting.

h. Live groundcover shall be planted and maintained where shrubbery is not sufficient to cover exposed soil. Mulch may be used in place of groundcover where groundcover will not grow or where groundcover will cause harm to other plants, but not more than thirty percent (30%) of the groundcover area shall have the mulch substitute.

i. Groundcover plants shall be planted at a density and spacing necessary for them to become well established and provide surface coverage within eighteen (18) months of planting.

j. The landscape plan shall incorporate and maintain for the life of the project those means and methods to address water run-off also identified as Low Impact Development provisions, which address water run-off. This is to also to be inclusive of any application of Water Quality Management Plans (WQMP), Drainage Area Management Plans (DAMP) and any other water conservation measures applicable to this type of development.

k. The irrigation system shall comply with all applicable provisions of the City's Water Conservation Ordinance, the City's Municipal Code landscape provisions, and all applicable State regulations.

l. All above-ground utilities (e.g. water backflow devices, electrical transformers, irrigation equipment) shall be shown on the landscaping plan in order to ensure proper landscape screening will be provided.

67. Permitted hours and days of construction and grading shall be as follows, and all work shall be comply with the noise regulations set forth in Chapter 8.47 of the City of Garden Grove Municipal Code:

a. Monday through Friday – not before 7:00 a.m. and not after 5:00 p.m.

b. Saturday – not before 8:00 a.m. and not after 5:00 p.m. All construction activity on Saturday shall be limited to interior construction only.

c. Sunday and Federal Holidays – no construction shall occur.

68. Each unit shall be provided with an air conditioning condensing unit and/or system so that there are no wall-mounted, or window mounted units. If units are located on the roof, an architectural design of the roof areas shall be done to effectively screen such units from adjacent properties and the public right of-way.

69. Mailboxes shall be provided and installed by the applicant. The local postmaster shall approve the design and location.

70. Each unit shall be provided with washer and dryer hook-ups.

71. The applicant shall install screening/canopy trees evenly spaced along the south property line for privacy purposes. Trees shall be of a sufficient height to block any direct views to adjacent properties.

72. Construction activities shall adhere to SCAQMD Rule 403 (Fugitive Dust) that includes dust minimization measures, the use of electricity from power poles rather than diesel or gasoline powered generators, and the use methanol, natural gas, propane or butane vehicles instead of gasoline or diesel powered equipment, where feasible. Also, use of solar, low emission water heaters, and low sodium parking lot lights, shall be required to ensure compliance with Title 24.

73. The applicant shall prepare Covenants, Conditions, and Restrictions (CC&R's) for review and approval by the City Attorney's office and Community Development Department prior to the issuance of building permits. Unless otherwise approved by the Community Development Director and City Attorney, the approved CC&R's shall be recorded at the same time that the subdivision map is recorded and two copies (a hard copy and an electronic copy) of the recorded CC&R's shall be provided to the Planning Services Division. The CC&R's shall include the following stipulations and/or provisions:

    a. All units shall maintain the ability to park two cars within the garages at all times. Unless otherwise permitted by State Law, garages shall not be converted to any other use.

    b. There shall be no business activities, day care, or garage sales conducted within or from the garages.

    c. Parking spaces in the garages shall be made available to the occupants of the unit at all times.

    d. Residents shall not park or store vehicles anywhere on the site except within the designated parking spaces in the garages. However, the one (1) unassigned, open guest parking space may be utilized by residents or guests for temporary parking. Any issues arising from the use, application, or restriction of said open parking space shall be at the resolve of the Homeowner's Association.

    e. All graffiti vandalism shall be abated within the premises. Best management practices shall be implemented to prevent and abate graffiti vandalism within the premises throughout the life of the project, including, but not limited to, timely removal of all graffiti, the use of graffiti resistant coatings and surfaces, the installation of vegetation screening of frequent graffiti sites, and the installation of signage, lighting, and/or security cameras, an necessary. Graffiti shall be

removed/eliminated as soon as reasonably possible after it is discovered, but not later than 72 hours after discovery.

f. Each residence shall be utilized as one (1) dwelling unit. No portion of any residence shall be utilized or rented as a separate dwelling unit.

g. The CC&R's shall include provisions providing the owners or tenants a means of contacting persons responsible for site maintenance, repairs, trash pick-up, and other related matters for a development of this type. This shall also include scheduling of maintenance of such items as the recreation area(s), landscape area maintenance, etc. This also includes ensuring tree overhangs do not block or hinder any vehicles such as street sweepers, trash trucks, fire trucks, etc., from maneuvering around the site.

h. Storage of boats, recreational vehicles, or commercial vehicles on the property is prohibited.

i. The CC&R's shall include stipulations that maintenance of the private drive aisles, storm drain, sewer system, common landscaped areas and open space areas within the interior of the development, and the landscape setback areas outside the development walls adjacent to Buaro Street is the responsibility of the Homeowner's Association.

j. Each unit shall have and maintain a minimum of 150 cubic feet of storage space, which may be provided in the garage parking areas, and typical closet space within the unit shall not count toward satisfying this requirement.

k. All recreation areas, landscaping along the front and side yards of each unit, the project site entryway, landscaped areas in all common areas, and any landscaping within the public right-of-way shall be maintained for the life of the project and maintenance provisions approved by the City shall be included in the CC&R's.

l. The common recreation areas, as identified on the approved site plan, shall be equipped with barbecues, outdoor dining tables, and other amenities consistent with the approved site plan and Garden Grove Municipal Code for the life of the project, and all such amenities shall be subject to review by the Planning Services Division, and Building and Safety Division.

m. There shall be no parking allowed along the private street, except within the designated parking areas. All curbs not designated as parking areas shall be painted red. The applicant shall post "No Parking" signs along the drive aisle.

n. The maintenance of the private street(s), storm drains, sewer system, and open space areas is the responsibility of the applicant and property owner(s) and/or the Homeowner's Association, including the common recreation areas, and the common landscape areas.

o. Project CC&R's shall require the maintenance of trees planted along the southern property line for privacy purposes, for the life of the project.

p. The Conditions of Approval for Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 shall be incorporated into the CC&R's, and provisions corresponding to any applicable Conditions of Approval shall be included in the CC&R's.

i. All on-site and off-site easements identified on the Final Map, and as described by descriptions and exhibits, shall be included in the CC&R's, and shall be subject to review approval of the Engineering Division before they are recorded. Information related to the function, operation, maintenance, restrictions, and limitations of the latest REA shall be included in the CC&R's.

q. The following provisions shall be included within the CC&R's (in substantially the same form as below or as otherwise approved by the City Attorney):

i. Compliance with Stormwater Quality Regulations: The Homeowner's Association shall implement, and fund implementation of, the Operation and Maintenance ("O&M") Plan for the Property, which was approved by the City as part of the Water Quality Management Plan ("WQMP") required for development of the Property, and shall operate and maintain the Best Management Practices ("BMPs") described in the O&M Plan for the Property, which includes:

1. Description of all post-construction BMPs (non-structural and structural),

2. Description of the Property owner's(s') responsibilities and required training of persons performing BMP implementation, operation and maintenance,

3. Implementation frequency and operating schedule,

4. Inspection/maintenance frequency and schedule,

5. Specific maintenance activities,

6. Required permits from resource agencies, if any,

7. Forms to be used in documenting implementation, operation and maintenance activities,

8. Recordkeeping requirements.

A copy of the approved O&M Plan is described in the current WQMP for the Project, as it may be amended from time to time according to its terms, which is on file with the City of Garden Grove Community Development Department, and is incorporated herein by this reference. The Committee shall maintain a copy of the current WQMP at a location on the Property.

The Property shall be, and the Homeowner's Association shall ensure that the Property is used and maintained in full compliance with the provisions of the O&M Plan and Chapter 6.40 (Stormwater Quality) of the Garden Grove Municipal Code, as it may be amended. The City shall have the right to inspect the Property for the purpose of verifying compliance with this provision. The City of Garden Grove shall be an intended third-party beneficiary to this provision. The City shall have the right and authority, but not the obligation, to enforce this provision by any legal or equitable means, or by any method available to the Property owners as provided elsewhere in the Declaration, against the Declarant, Homeowner's Association, Owners, their successors and assigns, or other persons in possession of the Property. This provision shall not be amended or terminated without the written approval of the City of Garden Grove Community Development Department.

ii. Enforcement: The City is hereby made a party to this Declaration solely for purposes of enforcing its provisions and the Conditions of Approval of Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314. The City, its agents, departments and employees shall have the unrestricted right and authority, but not the obligation, to enforce the provisions of this Declaration and the Conditions of Approval of Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314. In the enforcement of this Declaration, the City shall not be limited to the procedures or processes described in this Declaration and may use any remedy provided under law or equity, including the City's Municipal Code. The City, its agents, departments and employees may further refuse to issue any building, electrical or plumbing permit that may be in violation of these Declarations or Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 approvals.

However, the City shall not be liable for failing or refusing to enforce the provisions of these Declarations or the Conditions of Approval of Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314. The alternative dispute resolution provisions set forth in Section / Article [SECTION] of this Declaration shall not apply to or legally bind the City.

iii. Assessments: The City may levy special assessments against the properties in connection with its actions to enforce the conditions of this Declaration or Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 approvals, or to abate the violation thereof. The City shall have the same power as the Association to levy special assessments pursuant to the provisions of [SECTION] of this Declaration in the event that it incurs expenses in the enforcement of the conditions of these Declarations or Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 approvals. Notice of intention to make such assessment shall be mailed by the City to the Owner of each affected [LOT/UNIT] affording the Owner thirty (30) days' notice to satisfy or reimburse the City's expenditure. In the event of the failure of any Owner of any affected [LOT/UNIT] to reimburse the City within thirty (30) days, notice of such assessment shall be mailed by the City to said Owner, and said assessment shall thereafter be due as a separate debt to the City within thirty (30) days following the mailing of such notice. Any such delinquent assessment may be and may become a lien upon the interest of the defaulting Owner in the [LOT/UNIT] upon the execution by the City and the recording in the Orange County Recorder's office of a notice of delinquent assessment under the same conditions that the Association could record the same pursuant to the provisions of [SECTION]. The City may foreclose on such notice of delinquent assessment in the same manner and with the same power as the Association could foreclose on such notice pursuant to the provisions of [SECTION]. It is the intent of Declarant, which intent shall be binding upon all of Declarant's successors in interest in the Properties, that the City shall be deemed an interest holder pursuant to the provisions of these Declarations in order to enforce the rights which have been given to the City generally in these Declarations and specifically pursuant to this Section.

iv. Attorney Fees: The City shall be entitled to recover its attorney's fees incurred in connection with its actions to enforce the conditions of these Declarations or Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 approvals, or to abate the violation thereof.

v. Public Safety Access: Police, fire, and other public safety personnel may enter upon any part of the common area for the purpose of enforcing State and Local laws.

vi. Modification/Termination: This Declaration shall not be terminated or substantially amended without the prior written approval of the City of Garden Grove Community Development Department.

74. Should the applicant elect to build the project in more than one phase, then a phasing plan shall be submitted to the Community Development Department prior to releasing units for model purposes. The phasing plan shall include, but not be limited to, a site plan showing the phasing areas, protection of finished units, and protection for related safety issues concerning pedestrians and non-construction vehicles. The perimeter improvements including landscaping, walls, street improvements, and underground utilities, shall be completed in the first phase. The phasing plan shall be approved by the Community Development Department, OCFA, and Public Works Department prior to issuance of building permits. Notwithstanding if the applicant elects to construct the Project in phases, the applicant shall record a single final map, not multiple phased final maps, and the Covenants, Conditions, and Restrictions (CC&R's) shall apply to the entire property covered by the Tentative Tract Map at the time of recordation.

75. All lighting structures shall be placed so as to confine direct rays to the subject property. All exterior lights shall be reviewed and approved by the Planning Services Division. Lighting adjacent to residential properties shall be restricted to low decorative type wall-mounted lights, or a ground lighting system. Lighting shall be provided throughout all private drive aisles and entrances to the development per City standards for street lighting. Lighting in the common areas shall be directed, positioned, or shielded in such manner so as not to unreasonably illuminate the window area of nearby residences.

76. All units shall be equipped with space for the collection and storage of refuse, organic material, and recyclable material. The area for each container shall be a minimum of thirty-eight inches (3'-2") by thirty-eight inches (3'-2"). Trash containers shall be stored within designated storage areas only within the garage parking area. Trash containers shall not encroach into the minimum required interior garage clearances, as depicted in the floor plan. The placement of trash containers for pick-up, and the duration of time prior to and after trash collection of those trash containers, is subject to the requirements of Republic Services and the City of Garden Grove, Environmental Services.

77. Decorative stamped concrete or pavers shall be provided within the front twenty feet (20'-0") for the driveway along Buaro Street. The final design and

configuration shall be shown on the final site plan, grading plan, and landscape plans.

78. Second and third-story windows, on side and rear building sides shall be located to avoid direct views from those windows, balconies, and decks into any immediately opposite windows and private recreation areas of residential dwelling units on adjacent properties. Where second-story and third-story windows are oriented toward an adjacent property's private recreation area, one or more of the following measures shall be provided:

    a. High-windows with a minimum sill height of six feet (6'-0"), as measured from the finished floor.

    b. View-obscuring treatment such as wing walls.

    c. Obscure, opaque, or frosted fixed (non-slider) windows.

79. The applicant shall install screening/canopy trees evenly spaced along the south property line for privacy purposes. Trees shall be of a sufficient height to block any direct views to adjacent properties.

80. All new block walls, and/or retaining wall(s), including existing block walls to remain, if any, shall be shown on the grading plans. Block walls shall be developed to City Standards or designed by a Registered Engineer and shall be measured from on-site finished grade. The applicant shall provide the following:

    a. Decorative masonry walls are required along the north, south, east, and west property lines and shall be constructed to a minimum height of six feet (6'-0"), up to a maximum of seven feet (7'-0"), as measured from highest point of finished grade. Whether new or existing, the block walls shall be decorative and utilize stucco finish, slump stone, decorative CMU, or split face block. Street-facing perimeter walls shall include trailing vines, hedges planted along the base of the exterior face, or other landscaping treatments that deter graffiti.

    b. The applicant shall work with the existing property owners along the project perimeter in designing and constructing the required perimeter block walls. This requirement is to avoid having double-walls and minimize any impact that it might cause to the existing landscaping on the neighbor's side as much as possible. The perimeter block wall shall be constructed and situated entirely within the subject property. In the event that the applicant cannot obtain approval from the property owners, the applicant shall construct the new wall with a decorative cap to be placed between the new and existing walls. The Community Development Director shall be authorized to approve minor alterations

the size and/or location of the landscape planter to accommodate the placement of such walls.

81. During construction, if paleontological or archaeological resources are found, all attempts will be made to preserve in place or leave in an undisturbed state in compliance with applicable law. In the event that fossil specimens or cultural resources are encountered on the site during construction and cannot be preserved in place, the applicant shall contact and retain, at applicant's expense, a qualified paleontologist or archaeologist, as applicable, acceptable to the City to evaluate and determine appropriate treatment for the specimen or resource, and work in the vicinity of the discovery shall halt until appropriate assessment and treatment of the specimen or resource is determined by the paleontologist or archeologist (work can continue elsewhere on the project site). Any mitigation, monitoring, collection, and specimen/resource treatment measures recommended by the paleontologist/archaeologist shall be implemented by the applicant at its own cost.

82. The applicant shall comply with the Migratory Bird Treaty Act (MBTA), and Sections 3503, 3503.5, and 3513 of the California Fish and Game Code, which require the protection of active nests of all bird species prior to the removal of any on-site landscaping, including the removal of existing trees.

83. At applicant's request, applicant has been granted Density Bonus allowances for an increase in density, reduced parking ratios, and the following incentive/concession and ten (10) waivers or modifications of applicable development standards: (1) an incentive/concession to reduce the stepback at the second and third floors adjacent to R-1 properties from the required twenty feet (20'-0") and forty feet (40'-0"), respectively, to ten feet (10'-0") at the rear and side property lines (GGMC Sections 9.12.040.020.A and 9.12.040.050.A.3); (2) a reduction of the required minimum front setback requirements for the first, second floor, and third floor, to maintain a minimum 10'-0" for all floors (Section 9.12.040.020.A); (3) a reduction of the required minimum separation distance between vehicular accessways and residential units from five feet (5'-0") to a minimum one-foot nine inches (1'-9") (Section 9.12.040.050.A.2.e); (4) a reduction of the required additional two-foot (2'-0") separation between buildings that feature a shared walkway within the separation area to four inches (0'-4") (Section 9.12.040.050.A.2.i); (5) a waiver/reduction of the required minimum depth for unit covered entry from three feet (3'-0") to a one-foot (1'-0") deep "eyebrow" awning (Section 9.12.040.050.G.1); (6) a reduction of the required minimum width for an active recreation area from thirty feet (30'-0") to twenty-five feet (25'-0") wide (Section 9.12.040.050.J.7.b); (7) a reduction of the minimum active recreation area required for a property of this size from 2,500 square feet to 920 square feet (Section 9.12.040.050.J.7.c); (8) a waiver to deviate from the minimum amenity requirements for Active Common Open Space/Recreation areas (Section 9.12.040.050.J.7.d);(9) a reduction of the required minimum

combined usable private and common open space per unit from 300 square feet to 163 square feet (Section 9.12.040.050.J.2); (10) a waiver to deviate from the minimum amenity requirements for Passive Common Open Space areas (Section 9.12.040.050.J.11); and (11) a waiver to deviate from the requirement to provide shared trash enclosures for developments with more than five (5) units to instead allow three (3) trash carts per individual unit (Section 9.12.040.260.B.2). In addition, pursuant to paragraph (3) of subdivision (c) of Government Code Section 65915 and subdivision (b) of Government Code Section 66300.6, the applicant is required to replace one lower income "protected unit" demolished in conjunction with the project.

a. To comply with the provisions of Government Code Section 65915 and 66300.6, the applicant has offered to, and shall, reserve at least two (2) dwelling units in the project for initial occupancy by very low-income households. At least one of the reserved very low-income units shall be a three-bedroom (Plan 3) unit. The specific units to be reserved/restricted shall be subject to City approval.

b. The applicant shall verify that the initial buyer(s) of each affordable unit be of the applicable income level and shall require the initial buyer(s) of each affordable unit to occupy the affordable unit at all times until resale of the affordable unit.

c. Pursuant to State law, the Garden Grove Municipal Code, and the City's Density Bonus Agreement Guidelines, the record owner or owners of the subject property shall enter into an affordable housing regulatory agreement with the City, which satisfies the criteria set forth in subdivision (c) of Government Code Section 65915 and Garden Grove Municipal Code Section 9.60.050.

d. The regulatory agreement shall be prepared by the City at the applicant/owner's expense, and the applicant and/or owner shall reimburse the City for the actual fees and costs charged for the services of attorneys and/or other professional third-party consultants engaged by the City to provide consultation, advice, analysis, and/or review and/or preparation of documents in connection with preparation of the regulatory agreement, review of the initial marketing plan required as part of the regulatory agreement, review of annual compliance reports submitted by the owner pursuant to the regulatory agreement, and inspections and audits provided for in the regulatory agreement, and other matters pursuant to GGMC Sections 9.60.050.H and 9.60.060.I.

e. Prior to preparation of the regulatory agreement, applicant and/or property owner shall execute a reimbursement agreement with the City, in a form approved by the City Attorney, and provide a deposit to the City in an amount sufficient to cover the estimated professional fees and

costs to be incurred by the City, as determined by the Department Director, in his or her reasonable discretion. The regulatory agreement shall be approved by the City and recorded prior to final map approval.

f. The regulatory agreement shall remain a senior, non-subordinate covenant and as an encumbrance running with the land for the full term thereof. In no event shall the regulatory agreement be made junior or subordinate to any deed of trust or other documents providing financing for the construction or operation of the project, or any other lien or encumbrance whatsoever for the entire term of the required covenants.

84. Prior to final map approval, the applicant shall submit a signed letter acknowledging receipt of the decision approving Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 and his/her agreement with all conditions of the approval.

85. The applicant shall, as a condition of Project approval, at its sole expense, defend, indemnify and hold harmless the City, its officers, employees, agents and consultants from any claim, action, or proceeding against the City, its officers, agents, employees and/or consultants, which action seeks to set aside, void, annul or otherwise challenge any approval by the City Council, Planning Commission, or other City decision-making body, or City staff action concerning Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314. The applicant shall pay the City's defense costs, including attorney fees and all other litigation related expenses, and shall reimburse the City for court costs, which the City may be required to pay as a result of such defense. The applicant shall further pay any adverse financial award, which may issue against the City including but not limited to any award of attorney fees to a party challenging such project approval. The City shall retain the right to select its counsel of choice in any action referred to herein.

86. In accordance with Garden Grove Municipal Code Sections 9.32.160 and 9.40.070.A, respectively, the rights granted pursuant to Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 shall be valid for a period of two (2) years. Unless a time extension is granted pursuant to Section 9.32.030.D.9 of the Municipal Code, the rights conferred by Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 shall become null and void if the subject development and construction necessary and incidental thereto is not commenced within two (2) years of the expiration of the appeal period and thereafter diligently advanced until completion of the project. In the event construction of the project is commenced, but not diligently advanced until completion, the rights granted pursuant to Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 shall expire if the building permits for the project expire.

87. Prior to issuance of grading permits, a temporary project identification sign shall be erected on the site in a secure and visible manner. The sign shall be conspicuously posted at the site and remain in place until occupancy of the project. The sign shall include the name and address of the development, and the developer's name, address, and a 24-hour emergency telephone number.

88. The Conditions of Approval set forth herein include certain development impact fees and other exactions. Pursuant to Government Code §66020(d), these Conditions of Approval constitute written notice of the amount of such fees. The applicant is hereby notified that the 90-day protest period, commencing from the effective date of approval of Site Plan No. SP-138-2024 and Tentative Tract Map No. TT-19314 has begun.