RESOLUTION NO. 2024-05

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF SANTA ANA APPROVING TENTATIVE TRACT MAP NO. 2024-01 AS CONDITIONED FOR A MIXED-USE DEVELOPMENT AT 101, 111, 115, AND 121 NORTH HARBOR BOULEVARD, 3709 AND 3729 WEST FIRST STREET, AND 114 NORTH FIGUEROA STREET (APNS: 198-182-37 AND 198-182-38)

BE IT RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF SANTA ANA AS FOLLOWS:

Section 1. The Planning Commission of the City of Santa Ana hereby finds, determines, and declares as follows:

A. Charles 'Chuck' Minyard with Primior, Inc. and representing Harbor and First, LLC ("Applicant" and "Property Owner") is requesting approval of Site Plan Review ("SPR") No. 2024-01 and Tentative Tract Map ("TTM") No. 2024-01 to facilitate the construction of a mixed-use development ("Project") known as First Harbor Mixed-Use Development located at 101 North Harbor Boulevard "Project Site").

B. The Project entails, among other improvements; (1) development of the Project Site with a mixed-use building with two subterranean parking levels and nine stories above grade containingn15,182 square feet of leasable commercial space, 1,845 square feet of leasing office space, 181 for-sale residential condominium units, 339 parking spaces, and 40,853 square feet of open space and amenities, (2) approval of SPR No. 2024-01; and (3) approval of Tentative Tract Map ("TTM") No. 2024-01, to be considered by the Planning Commission on March 25, 2024 by way of a separate resolution.

C. The Project Site has a General Plan land use designation of District Center – High ("DC-5") and is located within the Transit Node South ("TNS") district of the Harbor Mixed-Use Transit Corridor Specific Plan ("SP-2").

D. Subdivision requests are governed by Chapter 34 and Chapter 41 of the Santa Ana Municipal Code ("SAMC") and the California Subdivision Map Act ("SMA").

E. Pursuant to Section 34-127 of the SAMC, approval of a TTM application by the Planning Commission is required for projects proposing to create four or more parcels.

F. The City previously certified the Final Environmental Impact Report ("EIR"), adopted a Mitigation Monitoring and Reporting Program, adopted a Statement of Overriding Considerations, and approved the 2014 Harbor

Boulevard Mixed-Use Transit Corridor Plan Environmental Impact Report (EIR) (SCH No. 2013061027) on October 21, 2014 (Resolution No. 2014-069) pursuant to the California Environmental Quality Act ("CEQA").

G. Pursuant to State CEQA Guidelines section 15162, a lead agency shall consider whether additional CEQA review is required when considering a subsequent discretionary approval for a project for which an EIR was certified.

H. The Planning Commission has independently reviewed and considered the previously certified EIR and other documents in the record before it.

I. On March 25, 2024, the Planning Commission of the City of Santa Ana held a duly-noticed public hearing on TTM No. 2024-01.

J. The Planning Commission of the City of Santa Ana determines that the following findings, in accordance with Section 66473.5 and 66474 of the SMA and Section 34-127 of the SAMC, which must be established in order to approve TTM No. 2024-01, have been established:

1. The proposed project and its design and improvements are consistent with the General Plan land use designation and are otherwise consistent with all other Elements of the General Plan.

The Project supports several goals and policies of the General Plan. Specifically, the Project is consistent with Economic Prosperity Element (EP) Policy EP-3.4 which encourages the development of "complete communities" that provide a range of housing, services, amenities, and transportation options that support the retention and attraction of skilled workforce and employment. Goal 1 of the Land Use Element (LU) encourages projects that improve quality of life and respects the existing community. Policy LU-1.2 supports innovative development policies to expand homeownership opportunities at all income levels. Policy LU-1.6 encourages residential mixed-use development, within the City's District Centers, Urban Neighborhoods, and adjacent to high quality transit. Policy LU-2.2 encourages the development of a range of commercial uses to capture a greater share of local spending and that offer a range of employment opportunities. Policy LU-2.5 encourages infill mixed-use development at all ranges of affordability to reduce vehicle miles traveled, improve jobs/housing balance, and promote social interaction. Policy LU-4.7 encourages the development of mixed-income developments with mixed housing types to create inclusive communities and economically diverse neighborhoods. Policy UD-1.1 of the Urban Design Element (UD) requires that all developments feature high quality design, materials, finishes, and

construction. Policy UD-2.2 encourages buffers and other urban design strategies to encourage computability of new development with the scale, bulk, and pattern of existing development. Lastly Policy HE-2.5 of the Housing Element (HE) encourages the creation of higher intensity, mixed-use urban villages and pedestrian-oriented experiences that access and support the office centers, commercial services, and cultural activities within District Centers and Urban Neighborhood designated areas. Policy HE-2.5 supports diverse types, prices, and sizes of housing and Policy HE-2.6 supports excellence in architecture design through the use of materials and colors, building treatments, landscaping, open space, parking, and environmentally sensitive building and design practices.

2. The proposed project conforms to all applicable requirements of the zoning and subdivision codes as well as other applicable City ordinances.

   The Project is consistent with the development standards specified within SP-2, including land use, height, minimum development site area, building frontages, private/common open space, building setbacks, and parking and access. The Project is a mixed-use development that has been well designed to fit within the TNS District. Further, the access and egress for the Project has been thoroughly review by the Public Works Agency for compliance with all applicable regulations.

3. The project site is physically suitable for the type and density of the proposed project.

   The Project Site is physically suitable for the type and density of the Project. There are no physical constraints on the site that would preclude development. The Project Site consists of approximately 1.56 acres of land and is physically suitable for the Project. The lot size, density, width, and lot coverage are consistent with the TNS development standards.

4. The design and improvements of the proposed project will not cause substantial environmental damage or substantially and avoidably injuries to fish or wildlife of their habitat.

   The design and improvements of the Project will not cause substantial environmental damage or substantially and avoidably injure fish and wildlife or their habitat. The Project is located in an urbanized area, and there are no known fish or wildlife populations existing on the Project site. Therefore, the subdivision will not cause any substantial environmental

damage or substantially and avoidably injure fish and wildlife or their habitat.

5. The design or improvements of the proposed project will not cause serious public health problems.

   The design or improvements of the Project will not cause serious health problems. The subdivision will not have any detrimental effects upon the general public. The property will include necessary utilities and infrastructure improvements as required by the SAMC and SMA.

6. The design or improvements of the proposed project will not conflict with easements necessary for public access through or use, of property within the proposed project.

   The design and improvements of the Project will not conflict with easements necessary for public access or use of the property within the Project. In addition, the CC&Rs will ensure reciprocal access rights and maintenance agreements between properties.

Section 2. The Applicant shall indemnify, protect, defend and hold the City and/or any of its officials, officers, employees, agents, departments, agencies, authorized volunteers, and instrumentalities thereof, harmless from any and all claims, demands, lawsuits, writs of mandamus, and other and proceedings (whether legal, equitable, declaratory, administrative or adjudicatory in nature), and alternative dispute resolution procedures (including, but not limited to arbitrations, mediations, and such other procedures), judgments, orders, and decisions (collectively "Actions"), brought against the City and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof, that challenge, attack, or seek to modify, set aside, void, or annul, any action of, or any permit or approval issued by the City and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof (including actions approved by the voters of the City) for or concerning the Project, whether such Actions are brought under the Ralph M. Brown Act, California Environmental Quality Act, the Planning and Zoning Law, the Subdivision Map Act, Code of Civil Procedure sections 1085 or 1094.5, or any other federal, state or local constitution, statute, law, ordinance, charter, rule, regulation, or any decision of a court of competent jurisdiction. It is expressly agreed that the City shall have the right to approve the legal counsel providing the City's defense, and that Applicant shall reimburse the City for any costs and expenses directly and necessarily incurred by the City in the course of the defense. City shall promptly notify the Applicant of any Action brought and City shall cooperate with Applicant in the defense of the Action.

Section 3. The Planning Commission has reviewed and considered the information contained in the certified EIR and all supporting documentation, copies of which are on file at the Planning Department and are incorporated by reference as though set forth fully herein. Based on this review, the Planning Commission finds that any comments received regarding Project have been examined and determined to not

modify the significant conclusions of the EIR. The Planning Commission further finds that no additional feasible mitigation measures within the City's authority are necessary to reduce the environmental impacts of the Project, because all impacts of the Project are either less than significant, will be mitigated to a level of less than significant through compliance with the existing mitigation, or remain significant and unavoidable even with the imposition all of feasible mitigation and all applicable mitigation measures, attached hereto as Exhibit B applied to the certified EIR and will be applied to the Project. Finally, based on the substantial evidence set forth in the record, including but not limited to the certified EIR, the Planning Commission finds that none of the conditions triggering the need for subsequent environmental review have occurred. Specifically, the Planning Commission finds that no subsequent environmental review is required pursuant to State CEQA Guidelines section 15162 because:

a. No substantial changes are proposed by the Project which will require major revisions of the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

b. No substantial changes have occurred with respect to the circumstances under which the Project is being undertaken which will require major revisions of the EIR due to the involvement of new significant, environmental effects or a substantial increase in the severity of previously identified significant effects; and

c. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR was certified, shows that: (i) either the Project will have one or more new significant effects; (ii) significant effects of modifications to the Project examined in the EIR will be substantially more severe; (iii) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the City declined to adopt the measure or alternative; or (iv) mitigation measures or alternatives which are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the City declines to adopt the measure or alternative.

Section 4. The Planning Commission directs staff to file a Notice of Determination with the County Clerk's Office and with the State Clearinghouse within five (5) working days of adoption of this Resolution.

Section 5. This Resolution shall not be effective unless and until the Planning Commission Resolution for Site Plan Review No. 2024-01 is adopted and becomes effective. If said Resolution is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, or otherwise does not go into effect for any reason, then this Resolution shall be null and void and have no further force and effect.

Section 6. The Planning Commission of the City of Santa Ana, after conducting the public hearing, hereby approves TTM No. 2024-01, as conditioned in Exhibit A, attached hereto and incorporated herein for the Project at the Project Site, and as illustrated and attached hereto and incorporated herein as Exhibit B. This decision is based upon the evidence submitted at the above said hearing, which includes, but is not limited to: The Request for Planning Commission Action dated March 25, 2024, and

exhibits attached thereto; and the public testimony, written and oral, all of which are incorporated herein by this reference.

ADOPTED this 25th day of March, 2024 by the following vote:

AYES:	Commissioners:	Carl Benninger, Manuel J. Escamilla, Jennifer Oliva, Bao Pham, Alan Woo (5)
NOES:	Commissioners:	
ABSENT:	Commissioners:	Christopher Leo, Isuri Ramos (2)
ABSTENTIONS:	Commissioners:	

_____
Bao Pham, Chairman

APPROVED AS TO FORM:
Sonia R. Carvalho, City Attorney

By:_____
for Laura Rossini
Chief Assistant City Attorney

CERTIFICATE OF ATTESTATION AND ORIGINALITY

I, NUVIA OCAMPO, Recording Secretary, do hereby attest to and certify the attached Resolution No. 2024-05 to be the original resolution adopted by the Planning Commission of the City of Santa Ana on March 25, 2024.

Date: 3/25/2024

Nuvia Ocampo

Nuvia Ocampo
Recording Secretary
City of Santa Ana

Exhibit A

Conditions for Approval for Tentative Tract Map No. 2024-01

Tentative Tract Map No. 2024-01 is approved subject to compliance, to the reasonable satisfaction of the Planning Manager, with all applicable sections of the Santa Ana Municipal Code, the California Administrative Code, the California Building Standards Code, and all other applicable regulations.

The Applicant shall comply with each and every condition listed in order to exercise the rights conferred by this tentative tract map.

The Applicant shall remain in compliance with all conditions listed below throughout the life of the development Project. Failure to comply with each and every condition may result in the revocation of the tentative tract map.

1. All site improvements shall conform to the Development Project Review (DP) No. 2023-08, and the staff report exhibits incorporated herein by reference.

2. Any amendment to this tentative tract map shall be submitted to the Planning Division for review. At that time, staff will determine if administrative relief is available or if the tentative tract map must be amended.

3. The Project shall comply with all recommendations contained with the technical studies and reports prepared for the Project. All studies and reports shall be finalized by the Applicant and approved by the City of Santa Ana prior to the issuance of any building permits.

4. The Project shall comply with all applicable mitigation measures as identified by the Mitigation Monitoring and Reporting Program of the 2014 Environmental Impact Report (EIR) (SCH No. 2013061027), attached hereto as Exhibit C.

5. The parking management measures as identified by the Parking Study and Parking Management Plan (PMP), attached hereto as Exhibit D, shall be incorporated into the Project and shall apply through the life of the Project. The objectives of the PMP are intended to:

    a. Restrict residents from parking in the guest spaces;

    b. Restrict guests from parking in the reserved resident spaces and require guests to park in designated guest spaces;

    c. Restrict vehicles from exceeding the time restriction on the short term parking;

    d. Allow for the use of “short-term/time restricted” parking spaces allocated to the retail and leasing office for use by residents and resident guests after business hours, as necessary;

e. Develop the framework for parking agreements between the leasing office and the tenants; and

f. Prevent residents, guests, and commercial patrons, from parking in the neighborhood. In the event that documented and sustained street parking issues arise in the adjacent single-family neighborhood after full Project occupancy, the Applicant shall facilitate the establishment of a parking permit district for the neighborhood, including preparation of a petition, gathering property owner signatures, and completing document/analysis as required by the Public Works Agency, at the Applicant's full and sole expense.

6. The Applicant shall submit Covenants, Conditions and Restrictions (CC&Rs) for the Project to the Planning Division for review and approval prior to the Final Map being recorded.

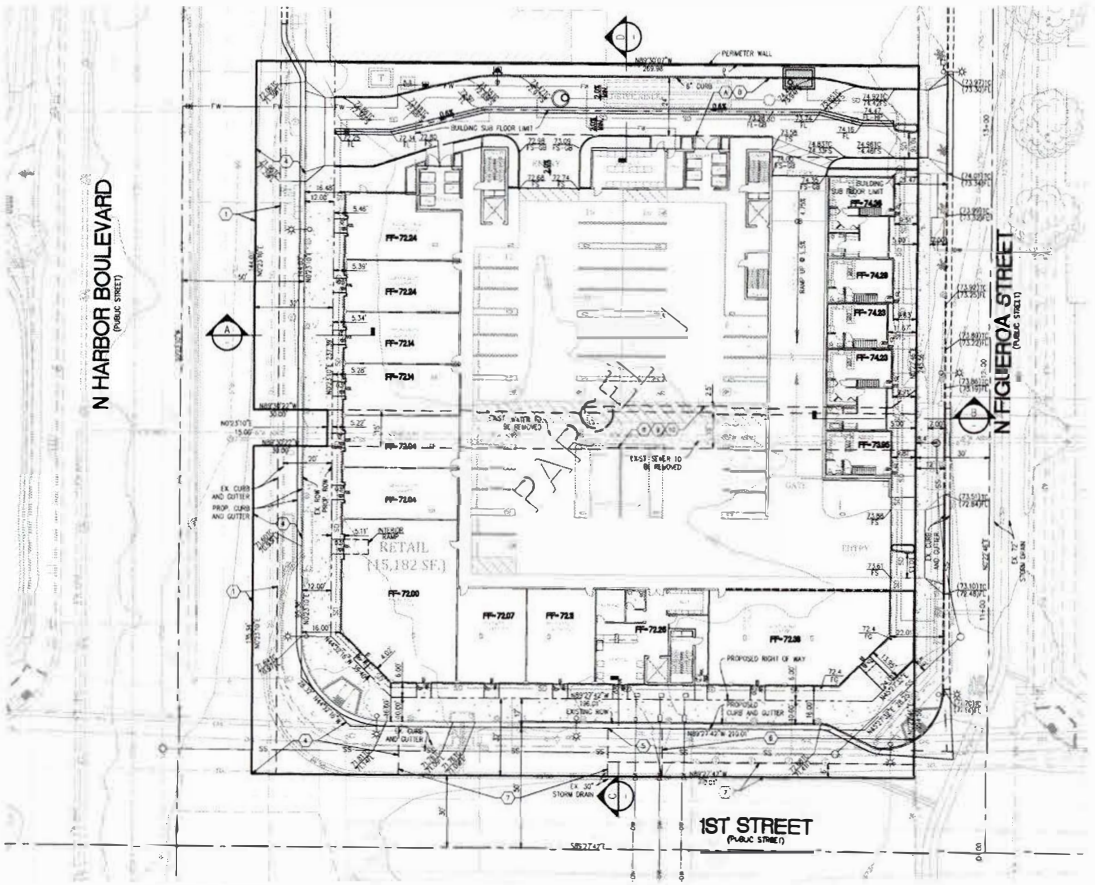
7. The Final Map shall be approved and recorded prior to issuance of Building permits.

8. The Final Map and all improvements required to be made or installed by the subdivider shall be in accordance with the design standards and specifications of the Santa Ana Municipal Code and the requirements of the State Subdivision Map Act.

9. Within 10 days of recordation of the Final Map and CC&Rs, a copy shall be submitted to each of the following departments: Planning Division, Building Division, Public Works Agency and Orange County Fire Authority (OCFA).

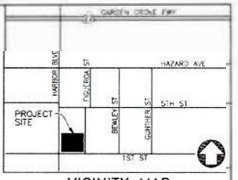
TENTATIVE TRACT MAP NO. 19274

FOR CONDOMINIUM PURPOSES
CITY OF SANTA ANA, COUNTY OF ORANGE,
STATE OF CALIFORNIA

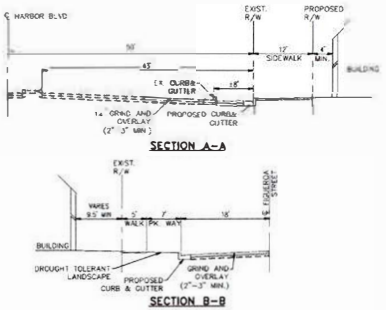


LEGEND

- TRACT BOUNDARY
- PROPOSED RIGHT OF WAY (TO BE DEDICATED TO CITY)
- EXISTING RIGHT OF WAY
- EASEMENT LINE
- PROPOSED STORM DRAIN
- PROPOSED SEWER
- PROPOSED DOMESTIC WATER
- PROPOSED FIRE WATER
- EXISTING SEWER
- EXISTING WATER
- EXISTING GAS LINE
- EXISTING TELEGRAPH LINE
- EXISTING STORM DRAIN



VICINITY MAP
NOT TO SCALE



SHEET INDEX

NOTES

OWNER: HARBOR & FIRST, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY
DEVELOPER: PRIMIOR
CIVIL ENGINEER: ADAMS-STREETER CIVIL ENGINEERS INC. 16755 VON KARMAN AVENUE IRVINE CA 92606 (949) 474-2200
PROJECT ADDRESS: 101 N. HARBOR BLVD. SANTA ANA, CA 92703
APN No.: 398-182-19, 398-182-20, 398-182-21, 398-182-22, 398-182-23
BOUNDARY AREA: BASED UPON MEASURED BEARINGS AND DISTANCES AS SHOWN HEREON, THE AREA IS 1.42 ACRES.

GENERAL NOTES

1. EXISTING LAND USE: DISTRICT CENTER (DC)
2. PROPOSED LAND USE: MIXED USE: RETAIL & FOR CONDOMINIUM PURPOSES
3. ADJACENT LAND USES
   NORTH – AUTO-TIRE STORE
   SOUTH – 1ST STREET
   EAST – WEST FIGUEROA STREET
   WEST – NORTH HARBOR BOULEVARD
4. GENERAL PLAN USE: HIGH DENSITY RESIDENTIAL
5. EXISTING ZONING: SPECIFIC PLAN (SP2)
6. PROPOSED ZONING: SPECIFIC PLAN (SP2)
7. ELECTRICAL SERVICE WILL BE PROVIDED BY SOUTHERN CALIFORNIA EDISON COMPANY. ALL NEW ELECTRICAL SERVICE LINES WILL BE PLACED UNDERGROUND
8. GAS SERVICE WILL BE PROVIDED BY SOUTHERN CALIFORNIA GAS COMPANY
9. TELEPHONE SERVICE WILL BE PROVIDED BY SPECTRUM
10. CABLE T.V. SERVICES WILL BE PROVIDED BY SPECTRUM.
11. DOMESTIC WATER, RECLAIMED WATER AND SEWER SERVICE WILL BE PROVIDED BY THE CITY OF SANTA ANA.
12. THE DEVELOPER WILL COMPLY WITH ENERGY CONSERVATION MEASURES SET FORTH IN TITLE 24 OF THE CALIFORNIA ADMINISTRATIVE CODE
13. THIS PROJECT IS LOCATED IN FLOOD ZONE "X" SHOWN ON FEMA PANEL 06059C0256J EFFECTIVE DATE: 12/03/2009.
14. PROPOSED SEWER FACILITIES: STANDARD LATERAL CONNECTIONS TO EXISTING SEWER SYSTEM SHALL BE IN ACCORDANCE WITH THE CITY OF SANTA ANA'S STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF WATER, SEWER AND RECLAIMED WATER FACILITIES
15. PROPOSED WATER FACILITIES: STANDARD DOMESTIC WATER CONNECTIONS TO EXISTING WATER SYSTEM SHALL BE IN ACCORDANCE WITH THE CITY OF SANTA ANA'S STANDARD SPECIFICATIONS FOR THE CONSTRUCTION OF WATER, SEWER AND RECLAIMED WATER FACILITIES
16. THE DEVELOPER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS FOR THIS TENTATIVE TRACT MAP
17. MAINTENANCE OF ALL LETTERED LOTS AND PARKWAYS SHALL BE THE RESPONSIBILITY OF A HOME OWNER'S ASSOCIATION, PUBLIC AGENCY, OR PRIVATE ENTITY. SEE STATISTICAL SUMMARY AND OWNERSHIP/MAINTENANCE SUMMARY THIS SHEET FOR DETAILED BREAKDOWN
18. A PORTION OF THE PROPOSED STORM DRAIN SYSTEM WITHIN THE LIMITS OF THIS PROJECT WILL BE PRIVATELY OWNED AND MAINTAINED BY HOME OWNER'S ASSOCIATION
19. DRAINAGE OF THIS PROJECT WILL BE CONVEYED BY MEANS OF A STORM DRAIN SYSTEM CONSISTING OF VARYING SIZES OF STORM DRAIN PIPES, ROP, AND AREA DRAINS.
20. EXISTING IRRIGATION LINES WILL BE REMOVED, RELOCATED OR PROTECTED IN PLACE
21. ALL EXISTING EASEMENTS ARE TO REMAIN IN THEIR CURRENT DESIGNATED LOCATIONS UNLESS OTHERWISE NOTED.
22. LOT 1 AND ALL LETTERED LOTS SHOWN ON THIS MAP MAY BE DIVIDED ON THE FINAL MAPS INTO MULTIPLE LOTS FOR PHASING, FINANCING, CONSTRUCTION AND DEDICATION PURPOSES UPON APPROVAL BY THE CITY ENGINEER. ADDITIONAL LETTERED LOTS MAY BE REQUIRED BY OCFA FOR FUEL MODIFICATION PURPOSES.
23. PRIOR TO THE RECORDATION OF A SUBDIVISION MAP, THE APPLICANT SHALL SUBMIT A "BACKBONE" FIRE MASTER PLAN TO THE FIRE CHIEF FOR REVIEW AND APPROVAL. THIS PLAN SHALL INCLUDE THE STREETS AS SHOWN ON THE EXISTING TENTATIVE TRACT MAP (TSTM). THIS PLAN SHALL INCLUDE ALL STREETS, WITH SECTIONS, FIRE HYDRANT LOCATIONS, BLUE PAVEMENT MARKERS, WATER AVAILABILITY FOR FIRE FLOW REPORT, AND ANY GATES PROPOSED ACROSS FIRE DEPARTMENT ACCESS.
24. ALL PROPOSED UTILITIES WILL BE UNDERGROUND
25. SCHOOL DISTRICT IS GARDEN GROVE UNIFIED
26. ALL SIDEWALKS, CURB RETURNS, AND PEDESTRIAN CROSSINGS MUST MEET THE TITLE 24 AND AMERICAN DISABILITIES ACT REQUIREMENTS.
27. NO ATTACHED RESIDENTIAL CONDOMINIUMS ARE PROPOSED
28. STREET TREE REMOVAL WITHIN THE PUBLIC RIGHT-OF-WAY IS SUBJECT TO APPROVAL BY THE ENVIRONMENTAL AND TRANSPORTATION ADVISORY COMMITTEE (TTAC). A LETTER REQUESTING THE REMOVAL OF EXISTING STREET TREE(S) THAT CONFLICT WITH THE PROPOSED IMPROVEMENTS WILL BE PROVIDED TO THE CITY OF SANTA ANA PRIOR TO SITE PLAN APPROVAL.
29. ALL UNITS WITHIN THIS SITE PLAN ARE TO BE RESIDENTIAL CONDOMINIUMS AS DEFINED IN SECTION 1350 OF THE STATE OF CALIFORNIA CIVIL CODE
30. THE BMPS SHOWN ON THE APPROVED SITE PLAN ARE ONLY PRELIMINARY AND WILL BE REVISED OR MODIFIED AS NECESSARY UPON COMPLETION OF THE WQMP PRIOR TO THE ISSUANCE OF THE GRADING PERMIT. THE APPROVED GRADING/UTILITY PLAN SHALL INCORPORATE ALL REQUIRED STRUCTURAL BMPS.

IMPROVEMENT NOTES

1. REPLACE ALL EXISTING STREETLIGHTS AND/OR INSTALL ADDITIONAL NEW STREETLIGHTS ALONG ENTIRE PROPERTY FRONTAGES ON HARBOR BOULEVARD, FIRST STREET, AND FIGUEROA STREET. REPLACEMENT AND/OR NEW STREET LIGHTS SHALL MEET LATEST CITY STANDARDS PER APPROVED STREETLIGHT IMPROVEMENT PLANS AND CITY STANDARDS. STREETLIGHT SPACING SHALL NOT EXCEED 150'. WORK SHALL INCLUDE NEW CONDUIT, CONDUCTORS, STREETLIGHTS, AND SERVICE PEDESTAL, AS NEEDED.

EXISTING EASEMENT NOTES

(1) (INDICATES THE CORRESPONDING EASEMENT ITEM AS SHOWN ON THE MAP)
** TO BE VACATED AFTER THE PROPOSED SEWER MAIN IS CONSTRUCTED

(1) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES RECORDED OCTOBER 15, 1946 IN BOOK 1458 OF OFFICIAL RECORDS, PAGE 148. FALLS WITHIN THE EXISTING RIGHT-OF-WAY OF HARBOR BOULEVARD

(2) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES RECORDED MARCH 18, 1947 IN BOOK 1495, PAGE 275 OF OFFICIAL RECORDS. EASED ON THE LEGAL DESCRIPTION IN SAID DOCUMENT. THIS EASEMENT IS INDETERMINABLE FROM RECORD

(3) AN EASEMENT IN FAVOR OF SOUTHERN CALIFORNIA EDISON COMPANY FOR PUBLIC UTILITIES AND INCIDENTAL PURPOSES RECORDED OCTOBER 8, 1947 IN BOOK 1653, PAGE 489 OF OFFICIAL RECORDS. FALLS WITHIN THE EXISTING RIGHT-OF-WAY OF FIRST STREET.

(4) AN EASEMENT IN FAVOR COUNTY OF ORANGE FOR STREET AND HIGHWAY AND INCIDENTAL PURPOSES RECORDED MARCH 9, 1959 IN BOOK 4991, PAGE 243 OF OFFICIAL RECORDS.

(5) AN EASEMENT IN FAVOR OF COUNTY OF ORANGE FOR STREET AND HIGHWAY AND INCIDENTAL PURPOSES RECORDED NOVEMBER 30, 1959 IN BOOK 5004, PAGE 142 OF OFFICIAL RECORDS.

(6) AN EASEMENT IN FAVOR OF COUNTY OF ORANGE FOR STREET AND HIGHWAY AND INCIDENTAL PURPOSES RECORDED DECEMBER 8, 1959 IN BOOK 5004, PAGE 142 OF OFFICIAL RECORDS.

(7) AN EASEMENT IN FAVOR OF THE COUNTY OF ORANGE FOR STREET AND HIGHWAY AND INCIDENTAL PURPOSES RECORDED MAY 18 1960 IN BOOK 5246, PAGE 525 OF OFFICIAL RECORDS.

(8)** THE RIGHTS, IF ANY, OF A CITY PUBLIC UTILITY OR SPECIAL DISTRICT TO MAINTAIN A PUBLIC EASEMENT IN ALLEY AS THE SAME WAS VACATED BY THE DOCUMENT RECORDED JANUARY 17, 2001 AS INSTRUMENT NO 2001 0027849 OF OFFICIAL RECORDS (TO BE QUITCLAIMED)

(9)** AN EASEMENT AFFECTING THAT PORTION OF SAID LAND AND FOR THE PURPOSES STATED HEREIN AND INCIDENTAL PURPOSES AS PROVIDED IN THE FOLLOWING FOR : PUBLIC UTILITIES RECORDED JANUARY 17, 2001 IN OFFICIAL RECORDS AS INSTRUMENT NO 2001002/348 OF OFFICIAL RECORDS. ((TO BE QUITCLAIMED)

(10)** AN EASEMENT AFFECTING THAT PORTION OF SAID LAND AND FOR THE PURPOSES STATED HEREIN AND INCIDENTAL PURPOSES AS PROVIDED IN THE FOLLOWING GRANTED TO : THE CITY OF SANTA ANA, A CHARTER CITY AND MUNICIPAL CORPORATION FOR : FUTURE STREET OR HIGHWAY PURPOSES AND/OR SANITARY SEWERS AND STORM DRAINS AND PIPES OF PIPE CONDUITS, CABLES, WIRES, PIPES AND OTHER CONVENIENT STRUCTURES RECORDED : JANUARY 24, 2006 IN OFFICIAL RECORDS AS INSTRUMENT NUMBER 20060000060995 OF OFFICIAL RECORDS. (TO BE QUITCLAIMED).

PROPOSED EASEMENT NOTES

(A) NON-EXCLUSIVE EASEMENT FOR EMERGENCY VEHICULAR ACCESS AND FIRE PROTECTION FACILITIES PURPOSES

(B) NON-EXCLUSIVE EASEMENT RESERVED FOR UTILITIES AND PRIVATE DRIVE

LEGAL DESCRIPTION

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF SANTA ANA IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOTS 24, 25, 26, 44, 45, 46, 47, 48, 49, 50, 51, AND 52, IN BLOCK A OF TRACT NO. 546, WEST SANTA ANA PARK, TOGETHER WITH ALL OF THE 15.00 FEET WIDE ALLEY LYING SOUTHERLY OF LOTS 24 AND 44, AND NORTHERLY OF LOT 47 THROUGH 52, SAID ALLEY WAS VACATED BY RESOLUTION NO. 2001-204 OF THE CITY COUNCIL OF SAID CITY RECORDED JANUARY 17, 2001 AS INSTRUMENT NO. 20010027849 OF OFFICIAL RECORDS, ALL WITHIN BLOCK A OF SAID TRACT NO. 546, WEST SANTA ANA PARK, AS PER MAP RECORDED IN BOOK 21, PAGE 25 OF MISCELLANEOUS MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA. EXCEPTING THEREFROM THE WEST 30 FEET OF SAID 15.00 FEET WIDE ALLEY.

SAID LAND IS SHOWN AS PARCEL 1 OF LOT MERGER NO. 2019-7 RECORDED DECEMBER 17, 2020 AS INSTRUMENT NO. 2020000745750 OF OFFICIAL RECORDS OF SAID COUNTY.

APN: 398-182-19, 398-182-20, 398-182-21, 398-182-22, 398-182-23

BASIS OF BEARINGS:

BEARINGS SHOWN HEREON ARE BASED PER ORANGE COUNTY SURVEYOR'S HORIZONTAL CONTROL STATION CPS NO. 4164 PER RECORDS ON FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR

OWNERSHIP CERTIFICATE

THE ESTATE OR INTEREST IN BE LAND HEREINAFTER DESCRIBED OR REFERRED TO CONVEYED BY THIS REPORT

A FEE

TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREO IS VESTED IN

HARBOR & FIRST, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, AS TO AN UNDIVIDED 75.58 INTEREST;
AND
CITIZENS BANK, A NATIONAL BANK, AS TO AN UNDIVIDED 24.58 INTEREST, ALL AS TENANTS IN COMMON

BENCHMARK:

ORANGE COUNTY BENCHMARK NO. 1F-185-99

ELEVATION = 72.790 (NAVD 1988)

DESCRIBED AS: DESCRIBED BY OCS 2002 – FOUND 3 3/4" ALUMINUM BENCHMARK DISK STAMPED "1F-185-99" SET ON TOP OF THE NORTHWESTERLY CORNER OF A 5.5'x6.5' EDISON VAULT. MONUMENT IS LOCATED IN THE SOUTHEAST PORTION OF THE INTERSECTION OF HARBOR BOULEVARD AND FIFTH STREET, 4.5' FEET EAST OF CENTERLINE HARBOR BLVD., 340' SOUTH OF THE CENTERLINE OF FIFTH STREET. MONUMENT IS SET LEVEL WITH THE SIDEWALK

LOT STATISTICS

LOT NUMBER/LETTER	AREA (SF)	AREA (AC)	DESCRIPTION
1	68,067	1.56	PODIUM STRUCTURE/ ATTACHED CONDOMINIUMS/ RETAIL UNITS
GROSS AREA	68,067	1.56	
RIGHT OF WAY DEDICATION	6056	0.14	
NET AREA	62,011	1.42	

REVISIONS		
REV	DATE	DESCRIPTION

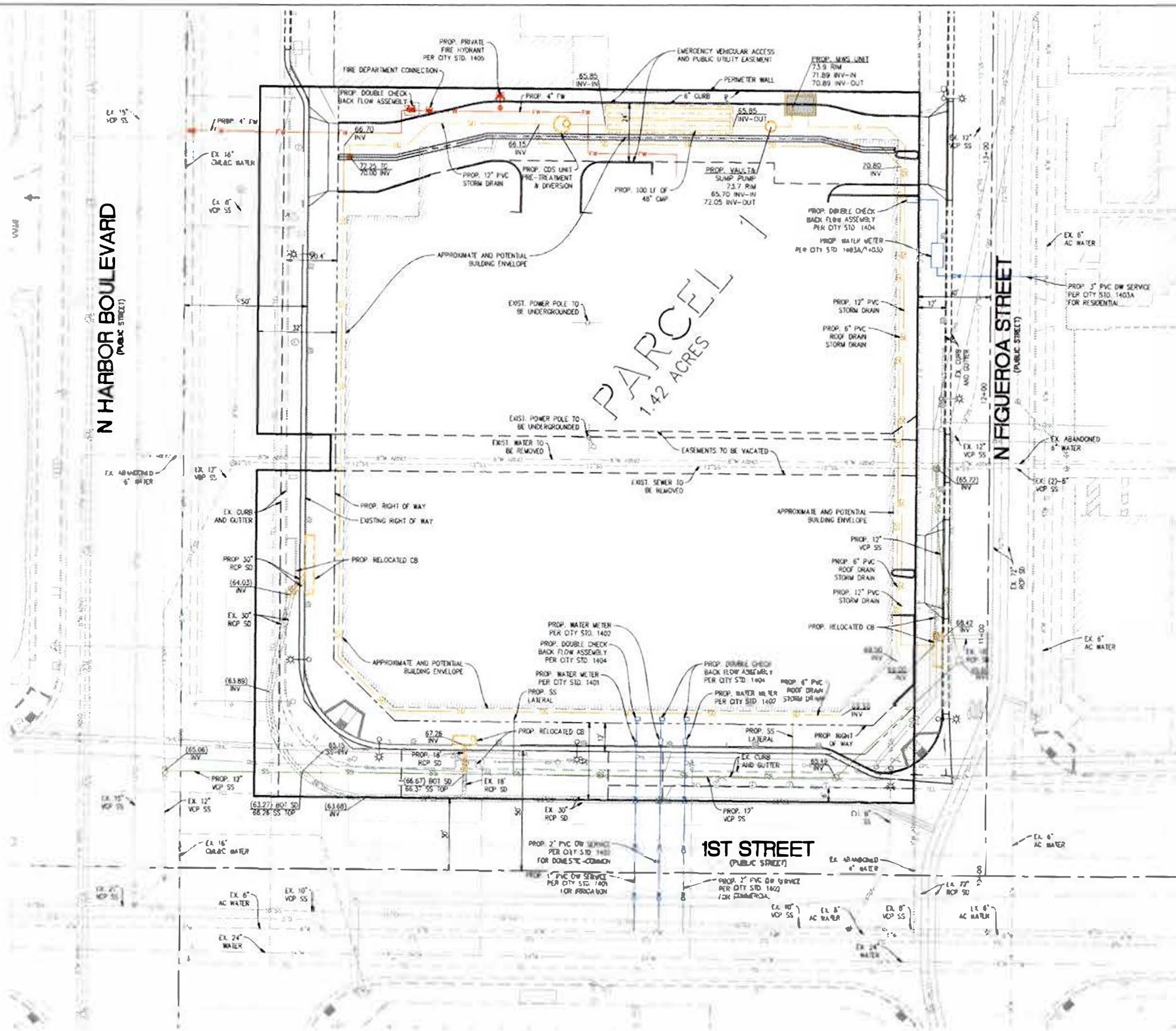
PREPARED BY:
ADAMS STREETER Civil Engineers
Nicholas A. Streeter RCE 70962
Date: 12/20/2023

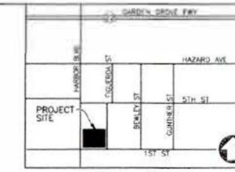
DEVELOPER:
PRIMIOR
750 N. DIAMOND BAR, BLVD., SUITE 101
DIAMOND BAR, CA 91765
800.735.9973 | WWW.PRIMIOR.COM

Scale: As Noted On Plan
Created: 12/20/2023
Revised:

TENTATIVE TRACT MAP NO. 19274
101 NORTH HARBOR BOULEVARD
CITY OF SANTA ANA, COUNTY OF ORANGE,
STATE OF CALIFORNIA

SHEET
TTM-1





VICINITY MAP
NOT TO SCALE

LEGEND

- TRACT BOUNDARY
- CENTERLINE
- PROPOSED RIGHT OF WAY (TO BE DEDICATED TO CITY)
- EXISTING RIGHT OF WAY
- EASEMENT LINE
- PROPOSED STORM DRAIN
- PROPOSED SEWER WITH MANHOLE
- PROPOSED FIRE WATER
- PROPOSED WATER
- EXISTING SEWER
- EXISTING WATER
- EXISTING TELECOM/GAS LINE
- EXISTING STORM DRAIN

ALL UTILITY AND DRAINAGE LOCATIONS, DEPTHS, AND SIZES ARE APPROXIMATE.

NOTE

ABOVE GROUND WATER SYSTEM APPURTENANCES SUCH AS FIRE HYDRANTS, BACKFLOW PREVENTION DEVICES, FIRE CONNECTION STANDPIPES AND ABOVE GROUND METERS SHALL BE PAINTED AS FOLLOWS:

- PUBLIC FIRE HYDRANTS – WHITE
- PRIVATE FIRE APPURTENANCE – RED
- IRRIGATION APPURTENANCE – GREEN
- DOMESTICE APPURTENANCE – BLUE

REVISIONS		
REV	DATE	DESCRIPTION

PREPARED BY: ADAMS STREETER Civil Engineers
Nicholas A. Streeter RCE 70862 Date 12/20/2023

DEVELOPER: PRIMIOR
750 N. DIAMOND BAR BLVD, SUITE 101
DIAMOND BAR, CA 91765
800 735 9973 | WWW.PRIMIOR.COM

Scale: As Noted On Plan
Created: 12/20/2023
Revised:

PRELIMINARY UTILITY PLAN
TENTATIVE TRACT MAP NO. 19274
101 NORTH HARBOR BOULEVARD
CITY OF SANTA ANA, COUNTY OF ORANGE, STATE OF CALIFORNIA

SHEET TTM-2

PLOT DATE: 12/20/2023

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
5.2 AIR QUALITY					
2-1	Applicants for new development projects within the Harbor Boulevard Mixed Use Transit Corridor Plan shall require the construction contractor to use equipment that meets the United States Environmental Protection Agency (EPA)-Certified emissions standards according to the following schedule. • From the end of 2011 to December 31, 2014, all project-related off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 3 off-road emissions standards. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine, as defined by CARB regulations. • After January 1, 2015, all off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 Final emission standards. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 4 diesel emissions control strategy for a similarly sized engine, as defined by CARB regulations. Prior to construction, the project engineer shall ensure that all demolition and grading plans clearly show the requirement for EPA Tier 3 or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use on the project site for verification by the Building Safety Division. The construction equipment list shall state the makes, models, and numbers of construction equipment onsite. Equipment shall properly service and maintain construction equipment in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to five minutes or less in compliance with California Air	Project applicant	Prior to grading permits; on-going monitoring during construction	Planning and Building Agency, Building Safety Division	

3. Mitigation Monitoring Requirements

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	Resources Board's Rule 2449.				
2-2	Applicants for new development projects within the Harbor Boulevard Mixed Use Transit Corridor Plan shall require the construction contractor to prepare a dust control plan and implement the following measures during ground-disturbing activities in addition to the existing requirements for fugitive dust control under South Coast Air Quality Management District Rule 403 to further reduce PM10 and PM2.5 emissions. The Building Safety Division shall verify compliance that these measures have been implemented during normal construction site inspections. • Following all grading activities, the construction contractor shall reestablish ground cover on the construction site through seeding and watering. • During all construction activities, the construction contractor shall sweep streets with Rule 1186–compliant, PM10-efficient vacuum units on a daily basis if silt is carried over to adjacent public thoroughfares or occurs as a result of hauling. • During all construction activities, the construction contractor shall maintain a minimum 24-inch freeboard on trucks hauling dirt, sand, soil, or other loose materials and tarp materials with a fabric cover or other cover that achieves the same amount of protection. • During all construction activities, the construction contractor shall water exposed ground surfaces and disturbed areas a minimum of every three hours on the construction site and a minimum of three times per day. • During all construction activities, the construction contractor shall limit onsite vehicle speeds on unpaved roads to no more than 15 miles per hour.	Project applicant	Prior to grading permits; on-going monitoring during construction	Planning and Building Agency, Building Safety Division	
2-3	Applicants for new development projects within the Harbor Boulevard Mixed Use Transit Corridor Plan shall require the construction contractor to use coatings and solvents with a volatile organic	Project applicant	Prior to building permits; on-going monitoring during construction	Planning and Building Agency, Building Safety Division	

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	compound (VOC) content lower than required under Rule 1113 (i.e., super compliant paints). All architectural coatings shall be applied either by (1) using a high-volume, low-pressure spray method operated at an air pressure between 0.1 and 10 pounds per square inch gauge to achieve a 65 percent application efficiency; or (2) manual application using a paintbrush, hand-roller, trowel, spatula, dauber, rag, or sponge, to achieve a 100 percent applicant efficiency. The construction contractor shall also use precoated/natural colored building materials, where feasible. Use of low-VOC paints and spray method shall be included as a note on architectural building plans and verified by the Building Safety Division during construction.				
2-4	Applicants of residential developments which are designed to include shared community barbeques shall only install electric powered barbeque units. These units shall be specified on site and building plans and shall be verified by the Building Safety Division prior to issuance of a Certificate of Occupancy.	Project applicant	Prior to issuance of certificate of occupancy	Planning and Building Agency, Building Safety Division	
2-5	Applicant-provided appliances shall be Energy Star appliances (dishwashers, refrigerators, clothes washers, and dryers). Installation of Energy Star appliances shall be verified by the Building Safety Division during plan check.	Project applicant	Prior to issuance of certificate of occupancy	Planning and Building Agency, Building Safety Division	
2-6	Applicants of residential developments which include garage and/or car port parking shall ensure that garage and/or car port parking are electrically wired to accommodate a Level 2 (240 volt) electric vehicle charging outlet per dwelling unit. The location of the electrical outlets shall be specified on building plans and proper installation shall be verified by the Building Safety Division prior to issuance of a Certificate of Occupancy.	Project applicant	Prior to issuance of certificate of occupancy	Planning and Building Agency, Building Safety Division	
2-7	Applicants of retail, commercial, office, and other non-residential development shall provide Level 2 vehicle charging stations for public use and where feasible, coordinate with the City of Santa Ana to install Level 3 (480 volt or higher) charging stations. The location of the charging station(s) shall be specified on site and building plans	Project applicant	Prior to issuance of certificate of occupancy	Planning and Building Agency, Building Safety Division	

3. Mitigation Monitoring Requirements

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	and proper installation shall be verified by the Building Safety Division prior to issuance of a Certificate of Occupancy.				
2-8	Applicants for non-residential projects within the Harbor Boulevard Mixed Use Transit Corridor Plan, that employ 20 or more people—which is equivalent to 16,000 square feet of retail space or 10,000 square feet of office space—shall implement an employee commute trip reduction (CTR) program. The CTR program shall identify alternative modes of transportation to the project, including transit schedules, bike and pedestrian routes, and carpool/vanpool availability. Information regarding these programs shall be readily available to employees and clients. The project applicant or designee shall consider the following incentives for commuters as part of the CTR program: • Rideshare matching assistance through OCTA • Subsidized public transit passes • Vanpool assistance • Car or bike-sharing program • Bicycle end-trip support facilities such as bike storage or lockers.	Project applicant	Prior to issuance of certificate of occupancy	Planning and Building Agency, Planning Division	
2-9	Applicants of commercial, office, retail, and other non-residential development within the specific plan area shall provide the following features to reduce project-related mobile-source air pollutant emissions: • Preferential parking for carpools and vanpools. • Preferential parking for alternative-fuel vehicles (e.g., compressed natural gas or hydrogen). • Secure bicycle parking and storage facilities for visitors. • Commuter information boards identifying bicycle paths and public transit routes and schedules.	Project applicant	Prior to issuance of building permit	Planning and Building Agency, Planning Division	
2-10	Applicants for residential or residential mixed-use projects within: 1) 1,000 feet from the truck bays of an existing distribution centers that accommodate more than 100 trucks per day, more than 40 trucks with	Project applicant	Prepare HRA prior to approval of any future discretionary residential or	Planning and Building Agency, Building Safety Division, Zoning	

Table 3-1 Mitigation Monitoring Requirements

Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
operating transport refrigeration units, or where transport refrigeration unit operations exceed 300 hours per week; or 2) 1,000 feet of an SCAQMD permitted facility, or an industrial facility which emits toxic air contaminants shall submit a health risk assessment (HRA) prepared in accordance with policies and procedures of the state Office of Environmental Health Hazard Assessment (OEHHA) and the South Coast Air Quality Management District (SCAQMD). The HRA shall be submitted to the Zoning Administrator prior to approval of any future discretionary residential or residential mixed-use project. If the HRA shows that the incremental cancer risk exceeds one in one hundred thousand (1.0E-05), PM concentrations would exceed 2.5 µg/m3, or the appropriate noncancer hazard index exceeds 1.0, the HRA shall identify the level of high-efficiency Minimum Efficiency Reporting Value (MERV) filter required to reduce indoor air concentrations of pollutants to achieve the cancer and/or noncancer threshold. The Applicant shall be required to install high efficiency MERV filters in the intake of residential ventilation systems, consistent with the recommendations of the HRA. Heating, air conditioning and ventilation (HVAC) systems shall be installed with a fan unit power designed to force air through the MERV filter. To ensure long-term maintenance and replacement of the MERV filters in the individual units, the following shall occur: • Developer, sale, and/or rental representative shall provide notification to all affected tenants/residents of the potential health risk for affected units. • For rental units, the owner/property manager shall maintain and replace MERV filters in accordance with the manufacture's recommendations. The property owner shall inform renters of increased risk of exposure to diesel particulates when windows are open. • For residential owned units, the Homeowner's Association (HOA) shall incorporate requirements for long-term maintenance		residential mixed-use project; Installation of MERV filter requirements and maintenance prior to issuance of building permits	Administrator	

3. Mitigation Monitoring Requirements

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	in the Covenant Conditions and Restrictions and inform homeowners of their responsibility to maintain the MERV filter in accordance with the manufacturer's recommendations. The HOA shall inform homeowners of increased risk of exposure to diesel particulates when windows are open.				
5.3 CULTURAL RESOURCES					
3-1	Prior to the issuance of grading permits, and for any subsequent permit involving excavation to increased depth, the project applicant for each development or redevelopment project considered for approval pursuant to the Harbor Boulevard Mixed Use Transit Corridor Plan shall provide letters to the City of Santa Ana from a qualified archaeologist and paleontologist (for excavations six feet below ground surface and deeper) who meet the Secretary of the Interior's Professional Qualifications Standards. The letters shall state that the project applicant has retained these individuals, and that the consultant(s) will be on call during all grading and other significant ground-disturbing activities. In the event archeological or paleontological resources are discovered during ground-disturbing activities, the professional archeological or paleontological monitor shall have the authority to halt any activities adversely impacting potentially significant cultural resources until they can be formally evaluated. Suspension of ground disturbances in the vicinity of the discoveries shall not be lifted until the archaeological or paleontological monitor, in coordination with the construction contractor, has evaluated discoveries to assess whether they are significant cultural resources, pursuant to the California Environmental Quality Act (CEQA). If significance criteria are met, then the project shall be required to perform data recovery, professional identification, radiocarbon dates as applicable, and other special studies; they shall be offered for curation or preservation to a repository with a retrievable collection system and an educational and research interest in the materials, such as the Los Angeles County Museum of Natural History or California State University, Fullerton, or other local museum or repository. If no museum or repository is willing to accept the	Project applicant	Prior to issuance of grading permit	Planning and Building Agency, Planning Division	

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	resource, the resource shall be considered the property of the City, and may be stored, disposed of, transferred, exchanged, or otherwise handled by the City at its discretion.				
5.6 HAZARDS AND HAZARDOUS MATERIALS					
6-1	Prior to the issuance of demolition permits for any buildings or structures that would be demolished in conjunction with individual development projects that would be accommodated by the Harbor Boulevard Mixed Use Transit Corridor, the project applicant shall conduct the following inspections and assessments for all buildings and structures onsite and shall provide the City of Santa Ana's Planning and Building Agency with a copy of the report of each investigation or assessment. • The project applicant shall retain a certified lead inspector/assessor to inspect buildings and structures onsite for lead-based paint (LBP). The inspector/assessor's report shall include requirements for abatement, containment, and disposal of LBP, if encountered, in accordance with the State of California Occupational Safety & Health Administration Rule 29 CFR Part 1926. • The project applicant shall retain a licensed or certified asbestos consultant to inspect buildings and structures onsite for asbestos-containing materials (ACM). The consultant's report shall include requirements for abatement, containment, and disposal of ACM, if encountered, in accordance with the South Coast Air Quality Management District's Rule 1403.	Project applicant	Prior to issuance of demolition permit	Planning and Building Agency, Building Safety Division	
6-2	Prior to the issuance of grading permits for new development within the Harbor Boulevard Mixed Use Transit Corridor, the project applicant shall submit a Phase I Environmental Site Assessment (ESA) to identify environmental conditions and determine whether contamination is present. The Phase I ESA shall be prepared by a Registered Professional Engineer and in accordance with the American Society for Testing and Materials (ASTM) Standard E	Project applicant	Submit Phase I ESA prior to issuance of grading permit; Submit remediation documentation prior to issuance of building permit, if needed	Building Official	

3. Mitigation Monitoring Requirements

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	1527.05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process. If recognized environmental conditions related to soils are identified in the Phase I ESA, the project applicant shall perform soil sampling as a part of a Phase II ESA. If contamination is found at significant levels, the project applicant shall remediate all contaminated soils in accordance with state and local agency requirements (DTSC, RWQCB, Orange County Fire Authority, etc.). All contaminated soils and/or material encountered shall be disposed of at a regulated site and in accordance with applicable laws and regulations prior to the completion of grading. Prior to the issuance of building permits, a report documenting the completion, results, and any follow-up remediation on the recommendations, if any, shall be provided to the Building Official and the City of Santa Ana's Planning and Building Agency evidencing that all site remediation activities have been completed.				
5.7 HYDROLOGY AND WATER QUALITY					
7-1	Prior to issuance of grading permits for future development projects in the Harbor Corridor Plan, applicants shall submit site-specific hydrology and hydraulic Studies to the Public Works Agency for review and approval. If existing facilities are not adequate to handle runoff generated by the proposed development, then the applicant shall construct storm drain improvements. Storm drain upgrades shall be implemented prior to issuance of occupancy permits.	Project applicant	Prior to issuance of grading permit	Public Works Agency	
7-2	During the design of individual projects, applicants shall minimize impervious area by incorporating landscaped areas over substantial portions of a proposed project area. Furthermore, impervious areas shall be directly connected to landscaped areas or bioretention facilities to promote filtration and infiltration of stormwater. The applicant must comply with the latest Orange County Model Water Quality Management Plan (WQMP).	Project applicant	Prior to issuance of grading permit	Public Works Agency	
7-3	Notice of Intent (NOI). Prior to the issuance of a grading permit for	Project applicant	Prior to issuance of grading	Public Works Agency; City	

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	construction sites with a disturbed area of one or more acres, the project applicant shall provide the City Engineer with evidence that a NOI has been filed with the State Water Resources Control Board. Such evidence shall consist of a copy of the NOI stamped by the State Water Resources Control Board or Regional Water Quality Control Board, or a letter from either agency stating that the NOI has been filed.		permit	Engineer	
7-4	Storm Water Pollution Prevention Plan (SWPPP). Prior to the issuance of grading permits for construction sites with a disturbed area of one or more acres, the project applicant shall prepare a SWPPP that will: • Require implementation of best management practices (BMPs) designed with a goal of preventing a net increase in sediment load in stormwater discharges relative to preconstruction levels; • During the construction period, prohibit discharges of stormwater or non-storm water at levels which would cause or contribute to an exceedance of applicable water quality standards contained in the Basin Plan; • Discuss in detail the BMPs planned for the project related to control of sediment and erosion, nonsediment pollutants, and potential pollutants in non-storm water discharges; • Describe post-construction BMPs for the project; • Explain the maintenance program for the project's BMPs; • During construction, require reporting of violations to the Regional Board; • List the parties responsible for SWPPP implementation and BMP maintenance during and after grading. The project proponent shall implement the SWPPP and will modify the SWPPP as directed by the Storm Water Permit.	Project applicant	Prior to issuance of grading permit	Public Works Agency; City Engineer	
7-5	Water Quality Management Plan (WQMP). Prior to the issuance of precise grading permits, project-specific WQMPs shall be submitted for review and approved by the Public Works Agency. The WQMP	Project applicant	Prior to issuance of precise grading permits	Property Owner	

3. Mitigation Monitoring Requirements

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	shall identify the best management practices (BMPs) that will be used on the site to control predictable pollutant runoff. More specifically, the WQMP shall: • Describe the routine and special post-construction BMPs to be used at the proposed development site (including both structural and non-structural measures); • Describe responsibility for the initial implementation and long-term maintenance of the BMPs; • Provide narrative with the graphic materials as necessary to specify the locations of the structural BMPs; • Certify that the project applicant will seek to have the WQMP carried out by all future successors or assigns to the property. • The applicant must comply with the latest Orange County Model Water Quality Management Plan (WQMP).				
7-6	Prior to the issuance of precise grading permit for any lot or parcel wholly or partially located within the 100-year floodplain, the applicant shall furnish to the Building Official documentation required by FEMA for approval of the Conditional Letter of Map Revision/Letter of Map Revision (CLOMR/LOMR) process. The FEMA for revision to the FIRM and Flood Insurance Study (FIS). The applicant shall pay all preliminary and subsequent fees as required by FEMA.	Project applicant	Prior to issuance of precise grading permit	Building Official	
5.9 NOISE					
9-1	Prior to issuance of a building permit, applicants for new residential development in the Harbor Corridor Plan shall submit an acoustic report prepared to the satisfaction of the Building Official or their designee to ensure that noise levels at outdoor living areas such as private yards, balconies, and park picnic areas shall not exceed 65 dBA CNEL, and all residential habitable rooms would meet the 45 dBA CNEL interior noise standard. These noise studies would need to be submitted after the precise grading and architectural plans are prepared, but prior to issuance of building permits. The required	Project applicant	Prior to issuance of building permit	Planning and Building Agency, Building Safety Division	

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	exterior noise reduction can be accomplished with sound walls or berms, or by site plan/building layout design. The required interior noise reduction can be accomplished with enhanced construction design or materials such as upgraded dual-glazed windows and/or upgraded exterior wall assemblies. These features shall be shown on all building plans and incorporated into construction of the project. City inspectors shall verify compliance of the building with the acoustic report's recommendations prior to issuance of a Certificate of Occupancy.				
9-2	Prior to issuance of a building permit, applicants for new commercial, office, or retail developments in the Harbor Corridor Plan shall submit an acoustic report prepared to the satisfaction of the Zoning Administrator and Building Official or their designee to ensure that the operation of stationary noise sources (i.e., HVAC units, truck deliveries) would not cause a noise increase of more than 5 dBA over the ambient noise levels at any adjacent property. These noise studies would need to be submitted after the precise grading and architectural plans are prepared, but prior to issuance of building permits. This requirement can be accomplished with selection of quieter equipment, judicious site layouts and equipment positioning, and/or equipment enclosures, sound screening, or parapet walls. These features shall be shown on all building plans and incorporated into the construction of the project. City inspectors shall verify compliance of the building with the acoustic report's recommendations prior to issuance of a Certificate of Occupancy.	Project applicant	Prior to issuance of building permit; prior to issuance of certificate of occupancy	Planning and Building Agency, Zoning Administrator and Building Official or designee	
9-3	Prior to issuance of a building permit, applicants for projects within the Harbor Corridor Plan that involve high-vibration construction activities, such as pile driving or vibratory rolling/compacting, shall be evaluated for potential vibration impacts to nearby sensitive receptors. The project developer shall submit a vibration report prepared to the satisfaction of the City of Santa Ana Building Official or their designee to determine if the use of pile driving and/or vibratory rolling/compacting equipment would exceed the Federal Transit	Project applicant	Prior to issuance of building permit	Planning and Building Agency, Building Official or designee	

3. Mitigation Monitoring Requirements

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	Administration's (FTA's) vibration-annoyance criteria of 78 VdB during the daytime or FTA's vibration-induced architectural damage PPV criteria of 0.2 inches/second for wood-framed structures or 0.5 inches/second for reinforced masonry buildings. The construction contractor shall require the use of lower-vibration-producing equipment and techniques. Examples of lower-vibration equipment and techniques would include avoiding the use of vibratory rollers near sensitive areas and/or the use of drilled piles, sonic pile driving, or vibratory pile driving (as opposed to impact pile driving).				
9-4	Prior to issuance of grading permits, the project applicant shall ensure the following notes are included on the grading plan cover sheet, and the construction contractor shall comply with these measures during the duration of all construction activities. • Properly maintain and tune all construction equipment to minimize noise. • Fit all equipment with properly operating mufflers, air intake silencers, and engine shrouds, no less effective than as originally equipped by the manufacturer, to minimize noise emissions. • Locate all stationary noise sources (e.g., generators, compressors, staging areas) as far from noise-sensitive receptors as possible. Material delivery, soil haul trucks, and equipment servicing shall be restricted to the hours between 7:00 AM and 8:00 PM Mondays through Saturdays, and not at all on Sundays or federal holidays.	Project applicant	Prior to issuance of grading permit	Planning and Building Agency, Planning Division	
9-5	Prior to the issuance of grading permits, each project applicant within the project area shall prepare a construction management plan that shall be approved by the City of Santa Ana Public Works. The construction management plan shall: • Establish truck haul routes on the appropriate transportation facilities. Truck routes that avoid congested streets and sensitive land uses shall be considered.	Project applicant	Prior to issuance of grading permit	Public Works Agency	

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	• Provide Traffic Control Plans (for detours and temporary road closures) that meet the minimum City criteria. Traffic control plans shall determine if dedicated turn lanes for movement of construction truck and equipment on- and offsite are available. • Minimize offsite road closures during the peak hours. • Keep all construction-related traffic onsite at all times. • Provide temporary traffic controls, such as a flag person, during all phases of construction to maintain smooth traffic flow.				
5.13 TRANSPORTATION AND CIRCULATION					
13-1	Prior to the issuance of building permits, the project applicant shall evaluate the potential for any neighborhood cut through traffic. Neighborhood cut through traffic shall be minimized through implementation of traffic calming measures as approved by the Public Works Agency.	Project applicant	Prior to the issuance of building permit	Public Works Agency	
13-2	The City of Santa Ana shall implement a program for traffic improvements in the Harbor Corridor Plan. The program shall prescribe the method of participation in the mitigation program by individual projects and guide the timely implementation of mitigation measures. The program shall include the following elements: • A funding and improvement program should be established to identify financial resources adequate to construct all identified mitigation measures in a timely basis. • All properties that redevelop within the Harbor Corridor Plan should participate in the program on a fair share per new development trip basis. The fair share shall be based upon the total cost of all identified mitigation measures (see Mitigation Measure 13-3), divided by the peak hour trip generation increase forecast. This rate per peak hour trip should be imposed upon the incremental traffic growth for any new development within the Harbor Corridor Plan. • The project shall raise fund from full development of the Harbor	City of Santa Ana	On-going monitoring	Public Works Agency	

3. Mitigation Monitoring Requirements

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
	Corridor Plan to fund all identified mitigation measures. • The project shall monitor phasing development of the Harbor Corridor Plan and defer or eliminate improvements if the densities permitted in the Harbor Corridor Plan are not occurring. • Program phasing shall be monitored through preparation of specific project traffic studies for any project that is expected to include more than 100 dwelling units or 100,000 sf of non-residential development. Traffic impact studies should use traffic generation rates that are deemed to be most appropriate for the actual development proposed. • The City may elect to implement appropriate mitigation measures as a condition of approval of the proposed developments, where appropriate. All or part of the costs of these improvements may be considered to be a negotiated credit toward the program, however the program must be administered in a manner that assures that it can fund necessary improvements to maintain adequate level of service at all intersections within the study. If funding of priority improvements cannot be assured, credit for construction of lower priority improvements may not be assured or may be postponed until more program funds are available.				
13-3	Prior to the issuance of building permits, the project applicant shall participate in the program for traffic improvements in the Harbor Corridor Plan per MM 13-2. The traffic improvement program includes the following improvements: • Intersection #26: Fairview Street and 17th Street (Year 2035) o Improvements are to add a northbound through lane. • Intersection #27: Fairview Street and 1st Street (Year 2035) o Improvements are to add a southbound right-turn lane.	Project applicant	Prior to issuance of building permit	Public Works Agency	
5.14 UTILITIES AND SERVICE SYSTEMS					
7-1	Mitigation Measure 7-1 applies.	See *Hydrology and Water Quality* section, above.			

3. Mitigation Monitoring Requirements

Table 3-1 Mitigation Monitoring Requirements

	Mitigation Measure	Responsibility for Implementation	Timing	Responsibility for Monitoring	Monitor (Signature Required) (Date of Compliance)
14-1	Prior to the first building permit pursuant to the proposed project, the City of Santa Ana shall prepare a "Nexus" Study that will serve as the basis for requiring development impact fees under AB 1600 legislation, as codified by California Code Government Section 66000 et seq. The established procedures under AB 1600 require that a "reasonable relationship" or nexus exist between the water and sewer infrastructure improvements and facilities required to mitigate the sewer impacts of new development pursuant to the proposed project. The sewer segment improvements shown on Table 5.14-11 of the DEIR are necessary to mitigate project impacts and shall be included, among other improvements, in the AB 1600 nexus study.	City of Santa Ana	Prior to issuance of first building permit	Public Works Agency	
14-2	Prior to the issuance of the first building permit pursuant to the proposed project, the City of Santa Ana shall prepare a Development Fee program pursuant to the AB 1600 Nexus Study identified in Mitigation Measure 14-1, above. The Development Fee program would fund the Harbor Corridor Plan area-wide water and sewer infrastructure improvements. The fee program shall stipulate that fees are assessed when there is new construction or when there is an increase in square footage within an existing building or the conversion of existing square footage to a more intensive use. Fees are calculated by multiplying the proposed square footage or dwelling unit by the rate identified. The fees are included with any other applicable fees payable at the time the building permit is issued. The City will use the development fees to fund construction (or to recoup fees advanced to fund construction) of the infrastructure improvements identified in Mitigation Measure 14-1.	City of Santa Ana	Prior to issuance of first building permit	Public Works Agency	
14-3	Prior to the issuance of a grading permit, the project applicant shall prepare water and sewer studies and identify the sizing and location of backbone facilities necessary to serve the proposed project, in accordance with City standards. The water and sewer plans shall be submitted to the City's Public Works Agency for review and approval. Design of facilities that serve the project shall be sufficient to meet the projected service demands.	Project applicant	Prior to issuance of a grading permit	Public Works Agency	

LINSCOTT LAW & GREENSPAN engineers

TRAFFIC AND PARKING ANALYSIS

FIRST HARBOR MIXED-USE PROJECT

Santa Ana, California
October 23, 2023

Prepared for:

HARBOR & FIRST, LLC
750 N. Diamond Bar Boulevard, Suite 101
Diamond Bar, CA 91765

LLG Ref. 2.23.4737.1

Prepared by:

Megan A. Lam
Transportation Engineer III

Under the Supervision of:

Trissa de Jesus Allen, P.E., RSP
Senior Transportation Engineer

Linscott, Law & Greenspan, Engineers
2 Executive Circle
Suite 250
Irvine, CA 92614
949.825.6175 T
949.825.6173 F
www.llgengineers.com

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

APPENDICES

APPENDIX

A. Existing Traffic Count Data

B. Intersection Level of Service Calculation Worksheets

C. Project Driveway Level of Service Calculation Worksheets

D. Queuing Calculation Worksheets

LIST OF FIGURES

LIST OF TABLES

TRAFFIC AND PARKING ANALYSIS

FIRST HARBOR MIXED-USE PROJECT

Santa Ana, California
October 23, 2023

1.0 INTRODUCTION

This Traffic and Parking Analysis was conducted by Linscott, Law & Greenspan, Engineers (LLG) to determine and evaluate the potential traffic circulation and parking needs associated with the First Harbor Mixed-Use Project, which is the development of a nine-story building with 183 multifamily residential units (including studios, 1-bedroom, 2-bedroom, and 3-bedroom units) and 15,182 square feet (SF) of retail on the ground floor, as proposed by Harbor & First, LLC. Of the 183 total units proposed, 15% (28 units) would be designated as low-income housing. The residential and retail uses would wrap around a four-level parking structure, consisting of two subterranean levels, one street/ground level, and a second above-ground level, and provide a total of 333 standard parking spaces.

The Project site, which is currently vacant, is located on the north side of 1st Street, between Harbor Boulevard and Figueroa Street, at 101 North Harbor Boulevard in the City of Santa Ana, California.

The Project site exists within a Specific Plan district regulated by the *Harbor Mixed Use Transit Corridor Plan*; specifically, the South Transit Node District, which is comprised of the properties surrounding the Bravo Bus Rapid Transit (BRT) stations at Harbor Boulevard and 1st Street, and at Harbor Boulevard and McFadden Avenue. The South Transit Node generally anticipates three- to six-story buildings within the District, with the flexibility to allow 10 stories, and has an emphasis on mixed-use development. Based on this, the Project, as proposed with nine stories and a mix of uses, is consistent with the land use plan for the South Transit Node District the Project site is located in.

1.1 Scope of Work

Based on close coordination with City staff, and staying consistent with the *City of Santa Ana Traffic Impact Study Guidelines* (September 2019), this report presents a non-CEQA transportation assessment, including an inventory of existing characteristics and traffic volumes during the AM and PM peak commute periods at key locations within the study area, forecasts of vehicular traffic anticipated to be generated by the Project, evaluation of potential non-CEQA impacts of Project-generated trips on the surrounding street system under Year 2028 conditions (i.e., the anticipated completion year for the Project), and site access and internal circulation analysis.

As described in the City's traffic impact study guidelines, this report also provides a CEQA assessment (Project screening) of VMT, active transportation, and public transit.

In addition, the last section of this report presents the parking analysis and Parking Management Plan (PMP) prepared for the Project.

1.2 Study Area

Two (2) key study intersections and one (1) key roadway segment have been identified for evaluation. The two (2) intersections/one (1) roadway segment listed below provide regional and local access to the study area and define the extent of the boundaries for this traffic investigation.

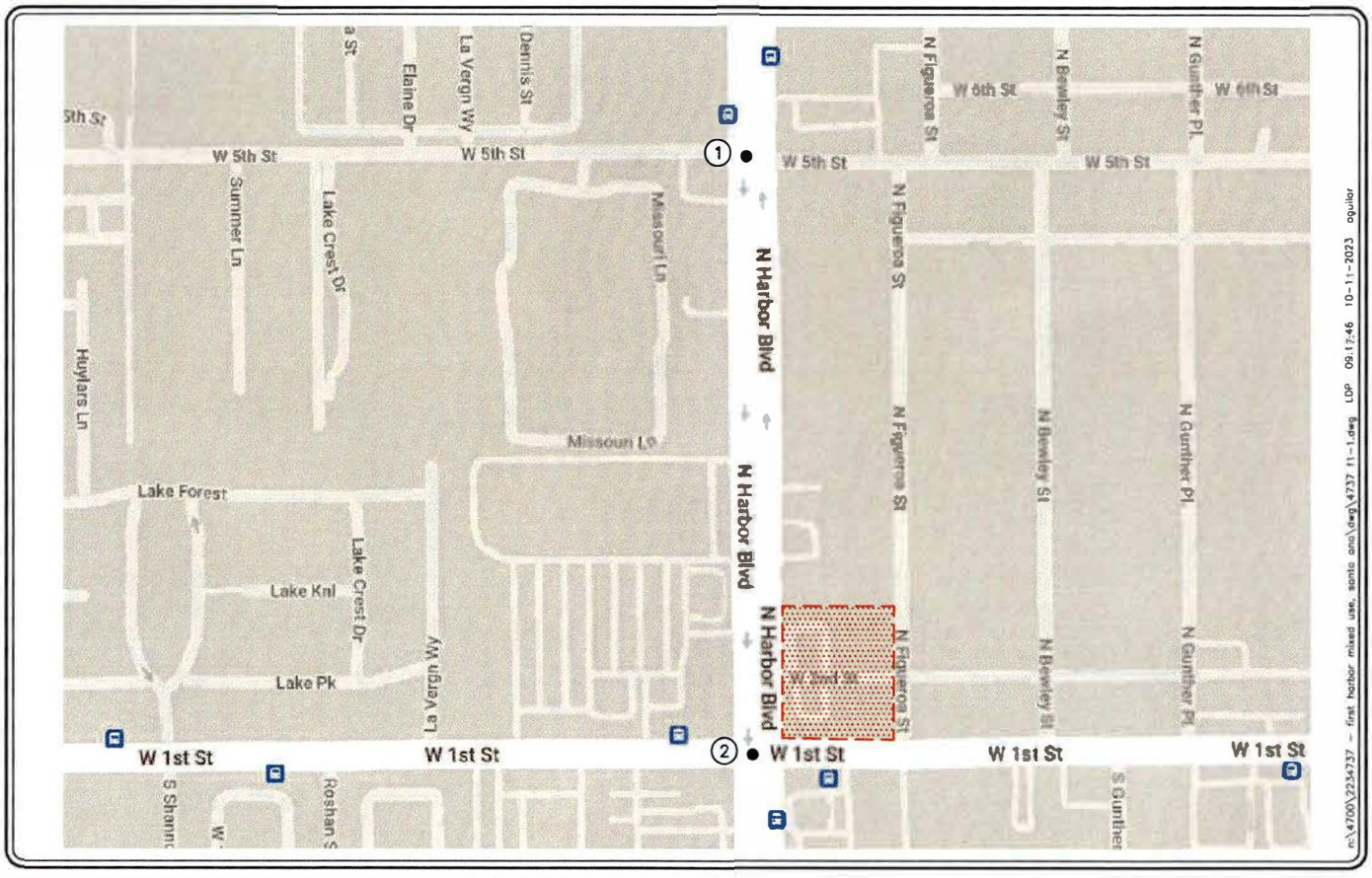
Key Study Intersections

1. Harbor Boulevard at 5th Street *(City of Santa Ana)*
2. Harbor Boulevard at 1st Street *(City of Santa Ana)*

Key Roadway Segment

A. Figueroa Street, between 5th Street and 1st Street *(City of Santa Ana)*

Figure 1-1 presents a Vicinity Map, which illustrates the general location of the Project and depicts the study locations and surrounding street system. The Level of Service (LOS) investigations at these key locations were used to evaluate the potential traffic circulation needs associated with area growth, cumulative projects, and the proposed Project.



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: GOOGLE

KEY

= STUDY INTERSECTION

= PROJECT SITE

FIGURE 1–1

VICINITY MAP

FIRST HARBOR MIXED–USE PROJECT, SANTA ANA

2.0 PROJECT DESCRIPTION

The First Harbor Mixed-Use Project proposes to develop a nine-story building with 183 multifamily residential units (including studios, 1-bedroom, 2-bedroom, and 3-bedroom units) and 15,182 SF of retail on the ground floor. Of the 183 total units proposed, 15% (28 units) would be designated as low-income housing. The residential and retail uses would wrap around a four-level parking structure, consisting of two subterranean levels, one street/ground level, and a second above-ground level, and provide a total of 333 standard parking spaces.

As presented previously, *Figure 1-1* is the Vicinity Map, which shows the general location of the Project and surrounding street system. ***Figure 2-1*** is an existing aerial photograph of the Project site.

The Project is expected to be completed and fully occupied by Year 2028.

As part of the Project-specific improvements planned at the intersection of Harbor Boulevard and 1st Street (Intersection No. 2) previously approved by the City, the Project will be adding a right-turn pocket (with a total length of 213 feet, comprised of 186 feet of storage length, and 27 feet of transition length) along 1st Street on the westbound approach of the intersection.

2.1 Site Access

Access to the Project will be provided via one (1) right-turn in/out only driveway on Harbor Boulevard and two (2) driveways restricted to left-turns/right-turns in, and right-turns out, on Figueroa Street.

2.2 Pedestrian and Bicycle Circulation

Sidewalks are provided on both sides of the street throughout most of the City. Crosswalks, pedestrian push buttons, and pedestrian indication lights are provided at all signalized intersections adjacent to the Project site. The proposed Project plans to retain this existing pedestrian infrastructure.

The proposed Project will encourage walking by integrating pedestrian connections internally, as well as to nearby activities. Pedestrian circulation would be provided via existing public sidewalks along Harbor Boulevard, 1st Street, and Figueroa Street within the vicinity of the Project. The proposed Project will protect the existing sidewalk along Project frontage on these roadways. The existing sidewalk system within the Project vicinity provides direct connectivity to the existing development located along major thoroughfares.

Long-term bicycle storage for the residential and retail uses will be provided in two bike rooms, totaling 96 long-term bike spaces. An additional four (4) bicycle spaces will be provided for short-term bicycle storage purposes. According to the City of Santa Ana Bikeway Master Plan, Class IV Cycle Tracks are planned on Harbor Boulevard and 1st Street along the Project's frontage.

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: GOOGLE

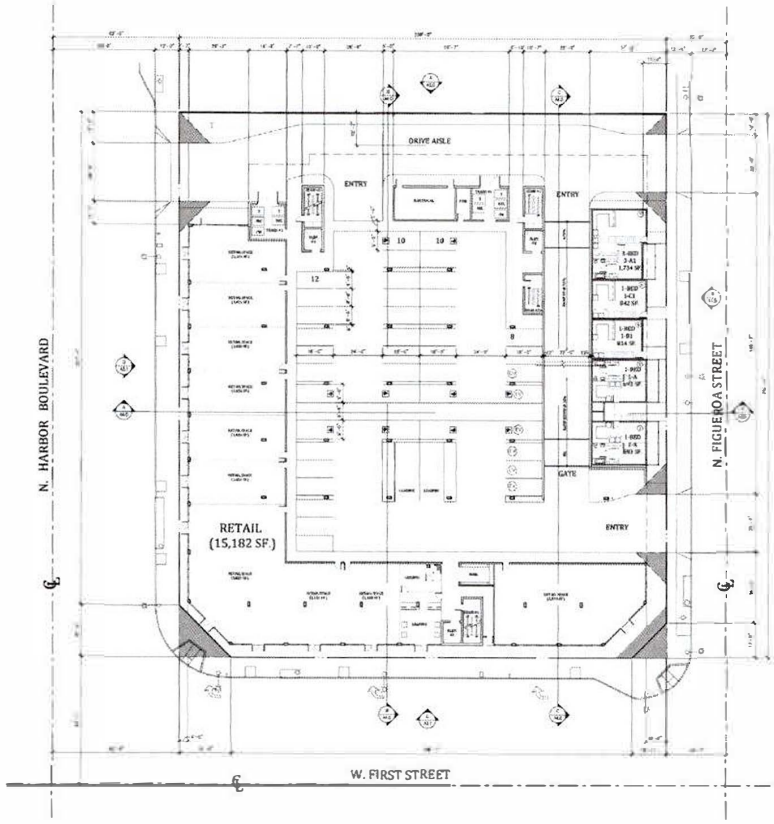
KEY

= PROJECT SITE

FIGURE 2-1

EXISTING SITE AERIAL

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



SOURCE: PRIMIOR

LINSCOTT LAW & GREENSPAN engineers

NO SCALE

FIGURE 2-2

PROPOSED SITE PLAN

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

3.0 EXISTING (2023) CONDITIONS

3.1 Existing Street System

The principal local network of streets serving the project site are Harbor Boulevard, 1st Street, 5th Street and Figueroa Street. The following discussion provides a brief synopsis of these key area streets. The descriptions are based on an inventory of existing roadway conditions.

Harbor Boulevard is generally a six-lane, divided roadway that borders the Project site to the west, oriented in the north-south direction that provides three northbound and three southbound travel lanes separated by a raised median. Harbor Boulevard will provide one (1) right-in/right-out driveway for the proposed Project. The posted speed limit on Harbor Boulevard is 40 miles per hour (mph). On-street parking is not permitted along this roadway in the vicinity of the project. The City of Santa Ana General Plan Circulation Element classifies Harbor Boulevard as a Major Arterial. Class II Buffered Bike Lanes are provided south of 1st Street in the vicinity of the project. Traffic signals control the study intersections of Harbor Boulevard at 5th Street and 1st Street.

1st Street is generally a six-lane, divided roadway that borders the Project site to the south, oriented in the east-west direction that provides three lanes in each direction separated by a TWLT striped median. The posted speed limit on 1st Street is 40 mph. On-street parking is not permitted along this roadway in the vicinity of the project. The City of Santa Ana General Plan Circulation Element classifies 1st Street as a Major Arterial. Class II Buffered Bike Lanes are provided west of Harbor Boulevard in the vicinity of the project.

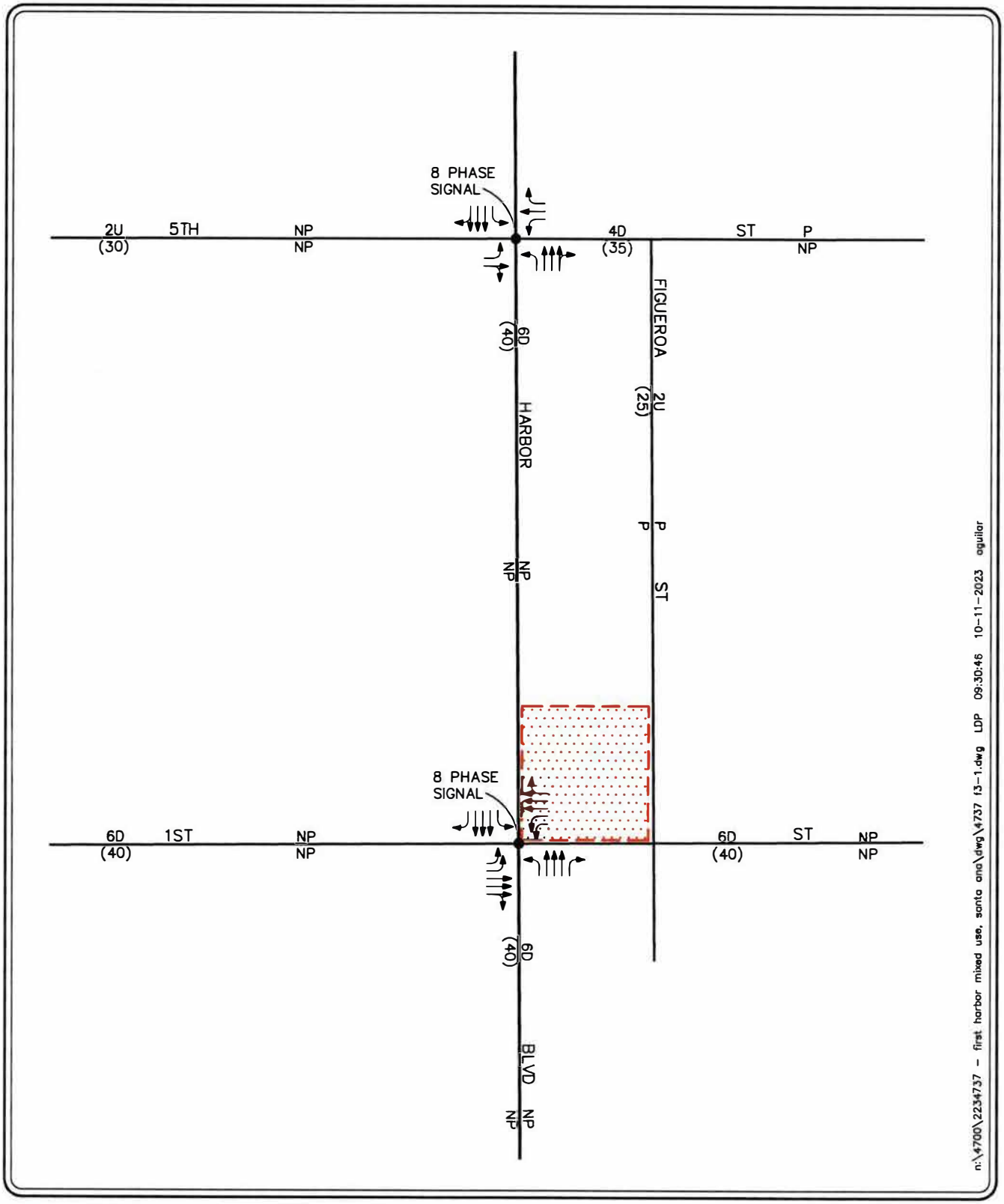
5th Street is generally a four-lane divided roadway east of Harbor Boulevard and a two-lane undivided roadway west of Harbor Boulevard, oriented in the east-west direction. The posted speed limit is 35 mph east of Harbor Boulevard and 30 mph west of Harbor Boulevard. On-street parking is only permitted on the north side of this roadway east of Harbor Boulevard in the vicinity of the project. The City of Santa Ana General Plan Circulation Element classifies 5th Street as a Secondary Arterial east of Harbor Boulevard and a Commuter west of Harbor Boulevard.

Figueroa Street is a two-lane undivided roadway that borders the Project site to the east, oriented in the north-south direction. The prima facie speed limit is 25 mph and parking is permitted on both sides of the roadway. Figueroa Street will provide two (2) left-turn/right-turns in and right-turn out only driveways for the proposed Project.

Figure 3-1 presents an inventory of the existing roadway conditions for the arterials and intersections evaluated in this report. This figure identifies the number of travel lanes for key arterials, as well as intersection configurations and controls for the key area study intersections.

3.2 Existing Traffic Volumes

Two (2) key study intersections and one (1) key roadway segment have been identified as the locations at which to evaluate existing and future traffic operating conditions. Some portion of potential project-related traffic will pass through each of these intersections, and their analysis will reveal the potential need for Project-related circulation improvements. These key locations were



LINSCOTT LAW & GREENSPAN engineers

N

NO SCALE

KEY

= APPROACH LANE ASSIGNMENT
● = TRAFFIC SIGNAL, ▼ = STOP SIGN
P = PARKING, NP = NO PARKING
U = UNDIVIDED, D = DIVIDED
2 = NUMBER OF TRAVEL LANES
(XX)= POSTED SPEED LIMIT (MPH)
= PROJECT SITE

FIGURE 3–1

EXISTING ROADWAY CONDITIONS AND INTERSECTION CONTROLS

FIRST HARBOR MIXED–USE PROJECT, SANTA ANA

selected for evaluation based on discussions with City of Santa Ana staff and in consideration of Orange County CMP requirements.

Existing daily, AM peak hour and PM peak hour traffic volumes for the two (2) key study intersections and one (1) key roadway segment evaluated in this report were obtained from manual turning movement counts conducted by Transportation Studies, inc. in August 2023.

Figures 3-2 and ***3-3*** illustrate the existing AM and PM peak hour traffic volumes at the two (2) key study intersections evaluated in this report, respectively. *Figure 3-3* also presents the existing average daily traffic volumes for the one (1) key roadway segment in the vicinity of the proposed Project. ***Appendix A*** contains the detailed peak hour and daily traffic count sheets for the key intersections and roadway segments evaluated in this report.

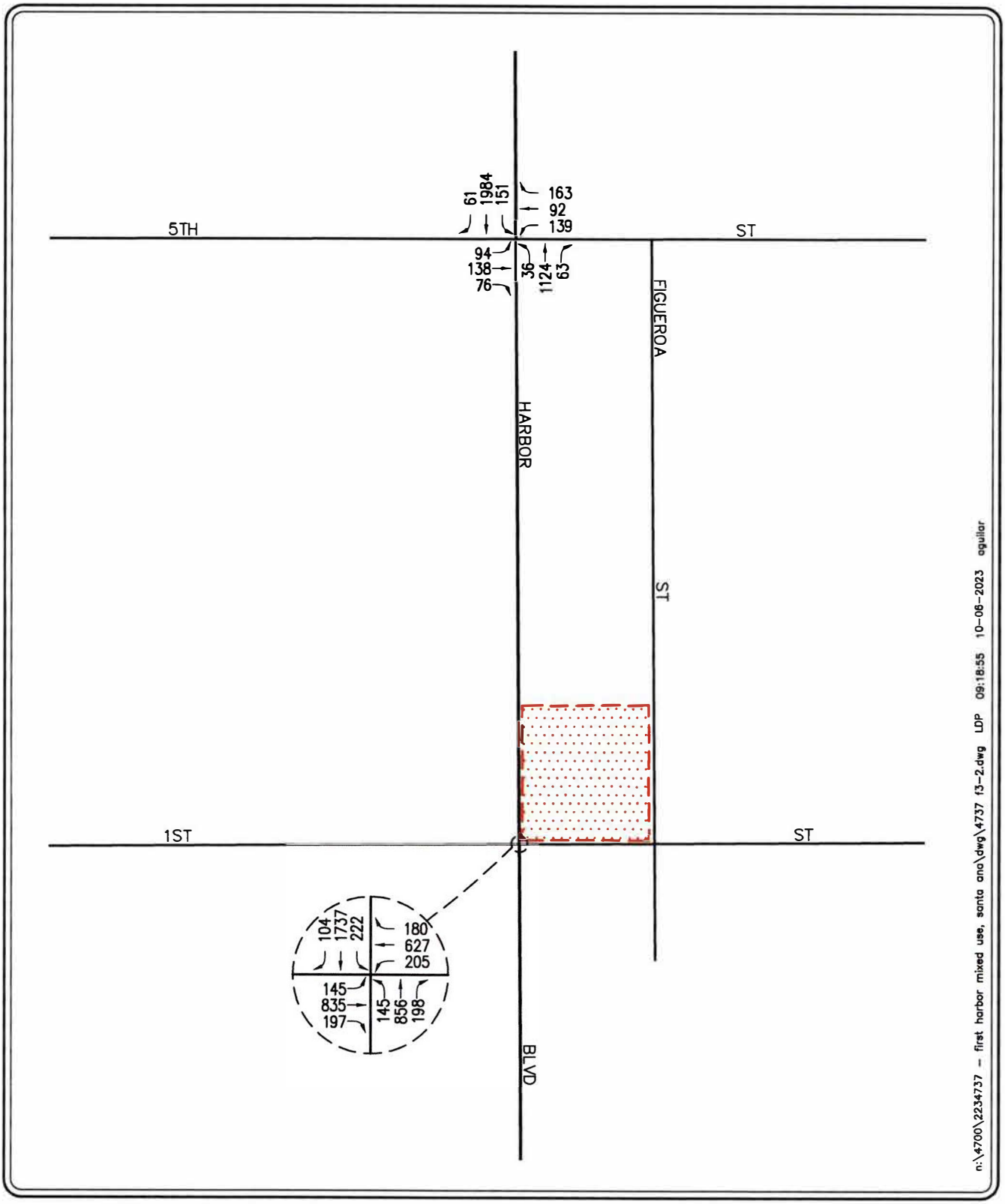
3.3 Existing Public Transportation

Public transit bus service is provided in the project area by the Orange County Transportation Authority (OCTA). *Figure 1-1* identifies the bus stop locations nearest to the Project site. Three (3) OCTA bus routes operate within the vicinity of the Project site on Harbor Boulevard and 1st Street, which consist of the following:

- OCTA Route 43 (Fullerton to Costa Mesa): Route 43 is a local bus route serving the Cities of Fullerton, Anaheim, Garden Grove, Santa Ana, Fountain Valley and Costa Mesa. The major route of travel is along Harbor Boulevard in the vicinity of the project. Route 43 connects to the Fullerton Transportation Center, approximately 13.8 miles from the Project site, which also connects to OCTA Routes 26, 47, 143, and 543 as well as Metrolink/Amtrak. Route 43 operates on approximately 20-minute headways during weekdays and 15-minute headways on weekends. Nearest to the project site are bus stops on Harbor Boulevard – northbound and southbound, south of 1st Street. The northbound bus stop is located approximately 210 feet from the Project site and the southbound bus stop is located approximately 460 feet from the Project site.

- OCTA Route 64 (Huntington Beach to Tustin): Route 64 is a local bus route serving the Cities of Tustin, Santa Ana, Garden Grove, Westminster, Midway City and Huntington Beach. The major route of travel is along 1st Street in the vicinity of the project. Route 64 operates on approximately 15-minute headways during weekdays and 20-minute headways on weekends. Nearest to the project site are bus stops on 1st Street – eastbound and westbound, at its intersection with Harbor Boulevard. The eastbound bus stop is located approximately 210 feet from the Project site and the westbound bus stop is located approximately 230 feet from the Project site.

- OCTA Route 543 (Fullerton Transportation Center to Santa Ana): Route 543 is a Bravo route serving the Cities of Fullerton, Anaheim, Garden Grove, Santa Ana and Costa Mesa. The major route of travel is along Harbor Boulevard in the vicinity of the project. Route 543 connects to the Fullerton Transportation Center, approximately 13.8 miles from the Project site, which also connects to OCTA Routes 26, 43, 47, and 143 as well as Metrolink/Amtrak. Route 543 operates



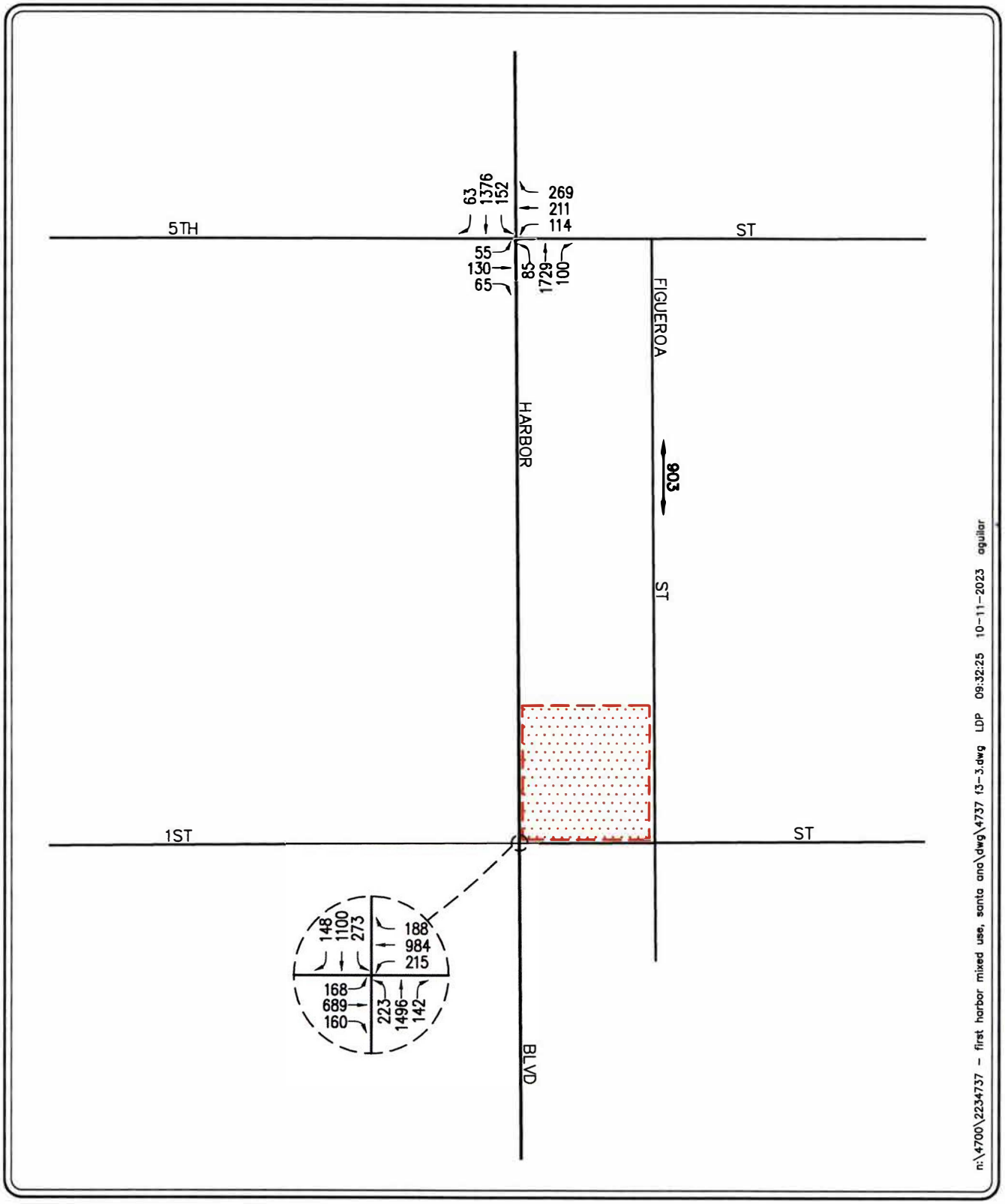
LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY
= PROJECT SITE

FIGURE 3-2

EXISTING AM PEAK HOUR TRAFFIC VOLUMES
FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY
XXXX = DAILY TRAFFIC VOLUMES
= PROJECT SITE

FIGURE 3-3

EXISTING PM PEAK HOUR AND DAILY TRAFFIC VOLUMES

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

on approximately 25-minute headways during weekdays and is closed on the weekends. Nearest to the project site are bus stops on Harbor Boulevard – northbound and southbound, south of 1st Street. The northbound bus stop is located approximately 210 feet from the Project site and the southbound bus stop is located approximately 460 feet from the Project site.

3.4 Existing Intersection Conditions

Existing AM and PM peak hour operating conditions for the two (2) key study intersections were evaluated using the *Intersection Capacity Utilization* (ICU) methodology for signalized intersections and the methodology outlined in the *Highway Capacity Manual 6* (HCM 6) for unsignalized intersections (i.e. project driveways).

3.4.1 *Intersection Capacity Utilization (ICU) Method of Analysis*

In conformance with City of Santa Ana requirements, existing AM and PM peak hour operating conditions for the key signalized study intersections were evaluated using the Intersection Capacity Utilization (ICU) method. The ICU technique is intended for signalized intersection analysis and estimates the volume to capacity (V/C) relationship for an intersection based on the individual V/C ratios for key conflicting traffic movements. The ICU numerical value represents the percent signal (green) time, and thus capacity, required by existing and/or future traffic. It should be noted that the ICU methodology assumes uniform traffic distribution per intersection approach lane and optimal signal timing.

Per City of Santa Ana requirements, the ICU calculations use a lane capacity of 1,700 vehicles per hour (vph) for through lanes and 1,600 vph for left-turn lanes and right-turn lanes. A clearance adjustment factor of 0.05 was added to each Level of Service calculation.

The ICU value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The ICU value is the sum of the critical volume to capacity ratios at an intersection; it is not intended to be indicative of the LOS of each of the individual turning movements. The six qualitative categories of Level of Service have been defined along with the corresponding ICU value range and are shown in ***Table 3-1***.

3.4.2 *Highway Capacity Manual (HCM) Method of Analysis (Unsignalized Intersections)*

The HCM unsignalized methodology for stop-controlled intersections was utilized for the analysis of the unsignalized intersections. This methodology estimates the average control delay for each of the subject movements and determines the level of service for each movement. For all-way stop controlled intersections, the overall average control delay measured in seconds per vehicle, and level of service is then calculated for the entire intersection. For one-way and two-way stop-controlled (minor street stop-controlled) intersections, this methodology estimates the worst side street delay, measured in seconds per vehicle and determines the level of service for that approach. The HCM control delay value translates to a Level of Service (LOS) estimate, which is a relative measure of the intersection performance. The six qualitative categories of Level of Service have been defined along with the corresponding HCM control delay value range, as shown in ***Table 3-2***.

TABLE 3-1

LEVEL OF SERVICE CRITERIA FOR SIGNALIZED INTERSECTIONS (ICU METHODOLOGY)

Level of Service (LOS)	Intersection Capacity Utilization Value (V/C)	Level of Service Description
A	≤ 0.600	EXCELLENT. No vehicle waits longer than one red light, and no approach phase is fully used.
B	0.601 – 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	0.701 – 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	0.801 – 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	0.901 – 1.000	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	> 1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.

TABLE 3-2

LEVEL OF SERVICE CRITERIA FOR UNSIGNALIZED INTERSECTIONS (HCM METHODOLOGY)[1]

Level of Service (LOS)	Highway Capacity Manual (HCM) Delay Per Vehicle (seconds/vehicle)	Level of Service Description
A	≤ 10.0	Little or no delay
B	> 10.0 and ≤ 15.0	Short traffic delays
C	> 15.0 and ≤ 25.0	Average traffic delays
D	> 25.0 and ≤ 35.0	Long traffic delays
E	> 35.0 and ≤ 50.0	Very long traffic delays
F	> 50.0	Severe congestion

[1] Source: *Highway Capacity Manual 7th Edition*, Chapter 20: Two-Way Stop-Controlled Intersections. The LOS criteria apply to each lane on a given approach and to each approach on the minor street. LOS is not calculated for major-street approaches or for the intersection as a whole.

3.4.3 *Level of Service Criteria*

According to the City of Santa Ana, LOS D is the minimum acceptable condition that should be maintained during the peak commute hours. However, the City of Santa Ana has defined exceptions to this criterion at specific locations within the study area. The City of Santa Ana has defined major development areas where LOS "E" is considered acceptable.

Based on the above, the following summarizes the LOS required for each key study intersection:

LOS "D" Requirements	***LOS "E" Requirements***
1. Harbor Boulevard at 5th Street	2. Harbor Boulevard at 1st Street

3.5 Existing Level of Service Results

Table 3-3 summarizes the existing peak hour service level calculations for the two (2) key study intersections based on existing traffic volumes and current street geometrics. Review of *Table 3-3* indicates that all key study intersections currently operate at an acceptable level of service (LOS) during the AM and PM peak hours when compared to the LOS criteria defined in this report.

Appendix B presents the ICU/LOS calculation worksheets for the two (2) key study intersections for the AM peak hour and PM peak hour.

TABLE 3-3

EXISTING PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Jurisdiction	Minimum Acceptable LOS	Control Type	Time Period	ICU	LOS
1. Harbor Boulevard at 5th Street	Santa Ana	D	8Ø Traffic Signal	AM	0.719	C
				PM	0.729	C
2. Harbor Boulevard at 1st Street	Santa Ana	E	8Ø Traffic Signal	AM	0.760	C
				PM	0.811	D

Note:

- **Bold ICU values indicate adverse service levels based on the Cities LOS standards.**

4.0 TRAFFIC FORECASTS

In order to estimate the traffic characteristics of the proposed Project, a multi-step process has been utilized. The first step is trip generation, which estimates the total arriving and departing traffic on a peak hour and daily basis. The traffic generation potential is forecast by applying the appropriate vehicle trip generation equations or rates to the Project development tabulation.

The second step of the forecasting process is trip distribution, which identifies the origins and destinations of inbound and outbound Project traffic. These origins and destinations are typically based on demographics and existing/anticipated travel patterns in the study area.

The third step is traffic assignment, which involves the allocation of Project traffic to study area streets and intersections. Traffic assignment is typically based on minimization of travel time, which may or may not involve the shortest route, depending on prevailing operating conditions and travel speeds. Traffic distribution patterns are indicated by general percentage orientation, while traffic assignment allocates specific volume forecasts to individual roadway links and intersection turning movements throughout the study area.

With the forecasting process complete and Project traffic assignments developed, the effect of the proposed Project's added traffic is isolated by comparing operational (LOS) conditions at selected key intersections using expected future traffic volumes with and without forecast Project traffic. The need for site-specific and/or cumulative local area traffic improvements can then be evaluated.

4.1 Project Traffic Generation

Traffic generation is expressed in vehicle trip ends, defined as one-way vehicular movements, either entering or exiting the generating land use. Generation equations and/or rates used in the traffic forecasting procedure are found in the 11th Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE) [Washington D.C., 2021].

The upper portion of ***Table 4-1*** summarizes the trip generation rates used in forecasting the vehicular trips generated by the proposed Project. As shown in *Table 4-1*, ITE Land Use 221: Multifamily Housing Mid Rise and ITE Land Use 822: Strip Retail Plaza Less than 40K trip rates were used to forecast the trip generation potential of the proposed Project.

The lower portion of *Table 4-1* presents the project's forecast peak hour and daily traffic volumes, inclusive of applicable pass-by trip reductions. As shown on the bottom of *Table 4-1*, the proposed Project is forecast to generate approximately 1,575 daily trips, with 100 trips (36 inbound, 64 outbound) produced in the AM peak hour and 131 trips (73 inbound, 58 outbound) produced in the PM peak hour on a "typical" weekday.

Please note that trip generation for the proposed Project includes adjustments for pass-by as recommended by ITE. The pass-by reduction factors are based on a review of available information published in the 11th Edition of *Trip Generation,* published by the Institute of Transportation Engineers (ITE), [Washington, D.C., 2021].

4.2 Project Traffic Distribution and Assignment

Figure 4-1 presents the traffic distribution pattern for the proposed Project. Project traffic volumes both entering and exiting the project site have been distributed and assigned to the adjacent street system based on the following considerations:

- location of site access points in relation to the surrounding street system,
- the site's proximity to major traffic carriers and regional access routes,
- physical characteristics of the circulation system such as lane channelization and presence of traffic signals that affect travel patterns,
- presence of traffic congestion in the surrounding vicinity, and
- ingress/egress availability at the project site, as well as allowance of "U-turn" movements at 5th Street and 1st Street.

The anticipated AM and PM peak hour project traffic volumes associated with the proposed Project are presented in ***Figures 4-2*** and ***4-3***, respectively. *Figure 4-3* also presents the daily Project traffic volumes. The traffic volume assignments presented in *Figures 4-2* and *4-3* reflect the traffic distribution characteristics shown in *Figure 4-1* and the traffic generation forecast presented in *Table 4-1*.

TABLE 4-1

PROJECT TRAFFIC GENERATION FORECAST[2]

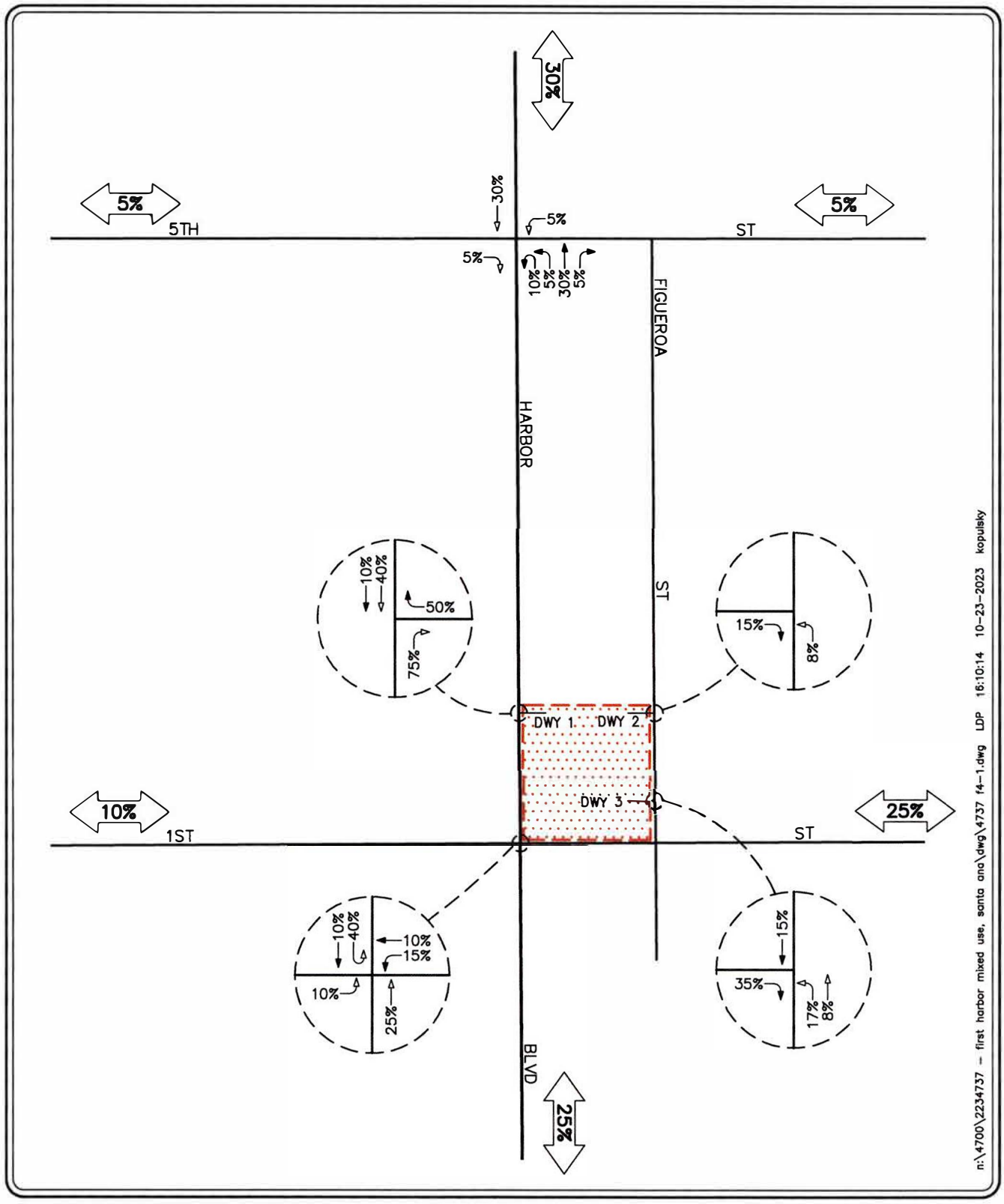
ITE Land Use Code / Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		Enter	Exit	Total	Enter	Exit	Total
Generation Factors:							
▪ 221: Multifamily Housing Mid Rise (TE/DU)	4.54	23%	77%	0.37	61%	39%	0.39
▪ 822: Strip Retail Plaza Less than 40K (TE/TSF)	54.45	60%	40%	2.36	50%	50%	6.59
Proposed Project Generation Forecast:							
▪ Residential (183 DU)	831	16	52	68	43	28	71
▪ Retail (15,182 SF)	827	22	14	36	50	50	100
Pass-by (Daily: 10%, AM: 10% PM: 40%)[3]	-83	-2	-2	-4	-20	-20	-40
Retail Subtotal	744	20	12	32	30	30	60
Total Project Trip Generation	**1,575**	**36**	**64**	**100**	**73**	**58**	**131**

Notes:

- TE/DU = Trip ends per dwelling unit
- TE/TSF = Trip ends per thousand square feet

2 Source: *Trip Generation, 11th Edition*, Institute of Transportation Engineers, (ITE) [Washington, D.C. (2021)].

3 Source: The *ITE Trip Generation Manual* does not contain pass-by information for the ITE LU 822: Strip Retail Plaza Less than 40K. Therefore, the Daily, AM peak hour, and PM peak hour pass-by rates were conservatively assumed to be 10% (estimated) for Daily, 10% (estimated) for AM peak hour, and 40% for PM peak hour (consistent with ITE LU 821 pass-by rates).



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

= STUDY INTERSECTION

= INBOUND PERCENTAGE

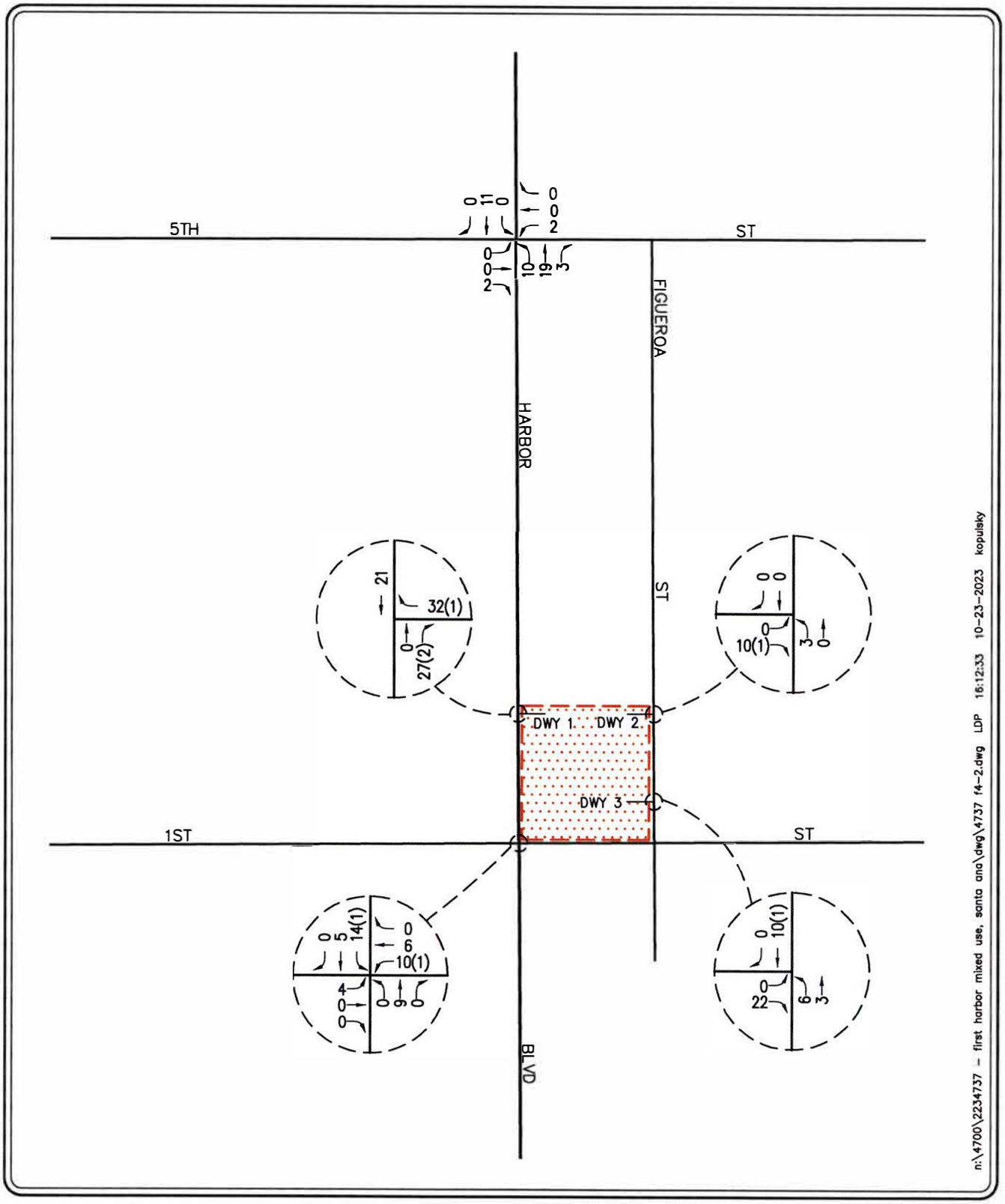
= OUTBOUND PERCENTAGE

= PROJECT SITE

FIGURE 4–1

PROJECT TRAFFIC DISTRIBUTION PATTERN

FIRST HARBOR MIXED–USE PROJECT, SANTA ANA



LINSCOTT LAW & GREENSPAN engineers

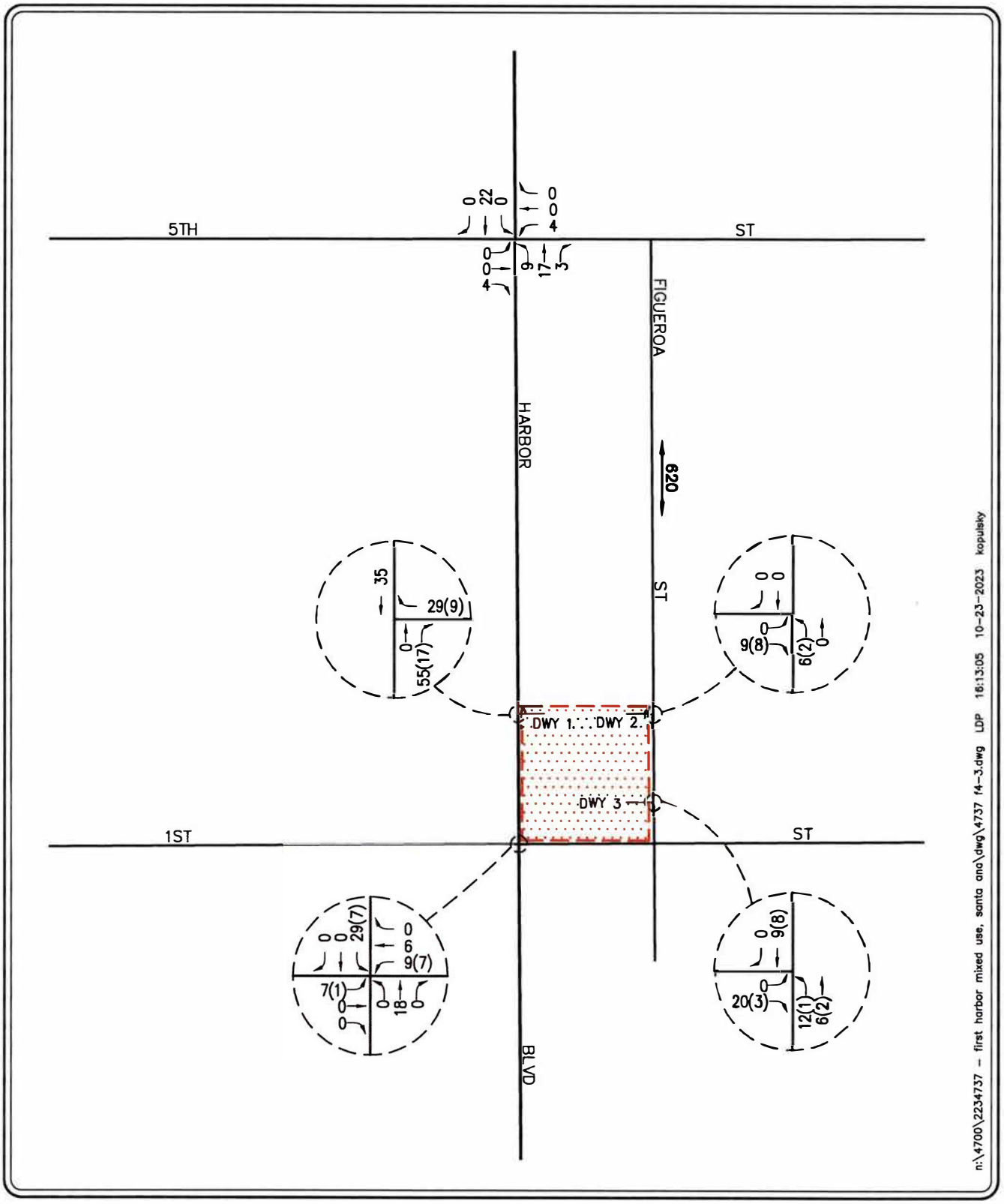
N NO SCALE

KEY
(XX) = PASS-BY TRIPS
= PROJECT SITE

FIGURE 4-2

AM PEAK HOUR PROJECT TRAFFIC VOLUMES

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

XX,XXX = DAILY TRAFFIC VOLUMES
(XX) = PASS-BY TRIPS
= PROJECT SITE

FIGURE 4-3

PM PEAK HOUR AND DAILY PROJECT TRAFFIC VOLUMES

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

4.3 Existing Plus Project Traffic Volumes

The Existing Plus Project traffic conditions have been generated based upon existing conditions and the estimated project traffic. These forecast traffic conditions have been prepared to assess the potential effects of the Project upon the circulation system as it currently exists per the requirements of the City. This traffic volume scenario and the related intersection capacity analyses will identify the roadway improvements necessary to offset the Project, if any.

Figures 4-4 and ***4-5*** present projected AM and PM peak hour traffic volumes at the two (2) key study intersections and three (3) Project driveways with the addition of the trips generated by the proposed Project to existing traffic volumes, respectively. *Figure 4-5* also presents the Existing Plus Project daily traffic volumes.

4.4 Year 2028 Cumulative Base

4.4.1 *Ambient Traffic Growth*

Horizon year, background traffic growth estimates have been calculated using an ambient traffic growth factor. The ambient traffic growth factor is intended to include unknown and future related projects in the study area, as well as account for regular growth in traffic volumes due to the development of projects outside the study area. The future growth in traffic volumes has been calculated at one percent (1.0%) per year. Applied to the Year 2023 existing traffic volumes, this factor results in a 5.0% growth in existing volumes to the near-term horizon year 2028.

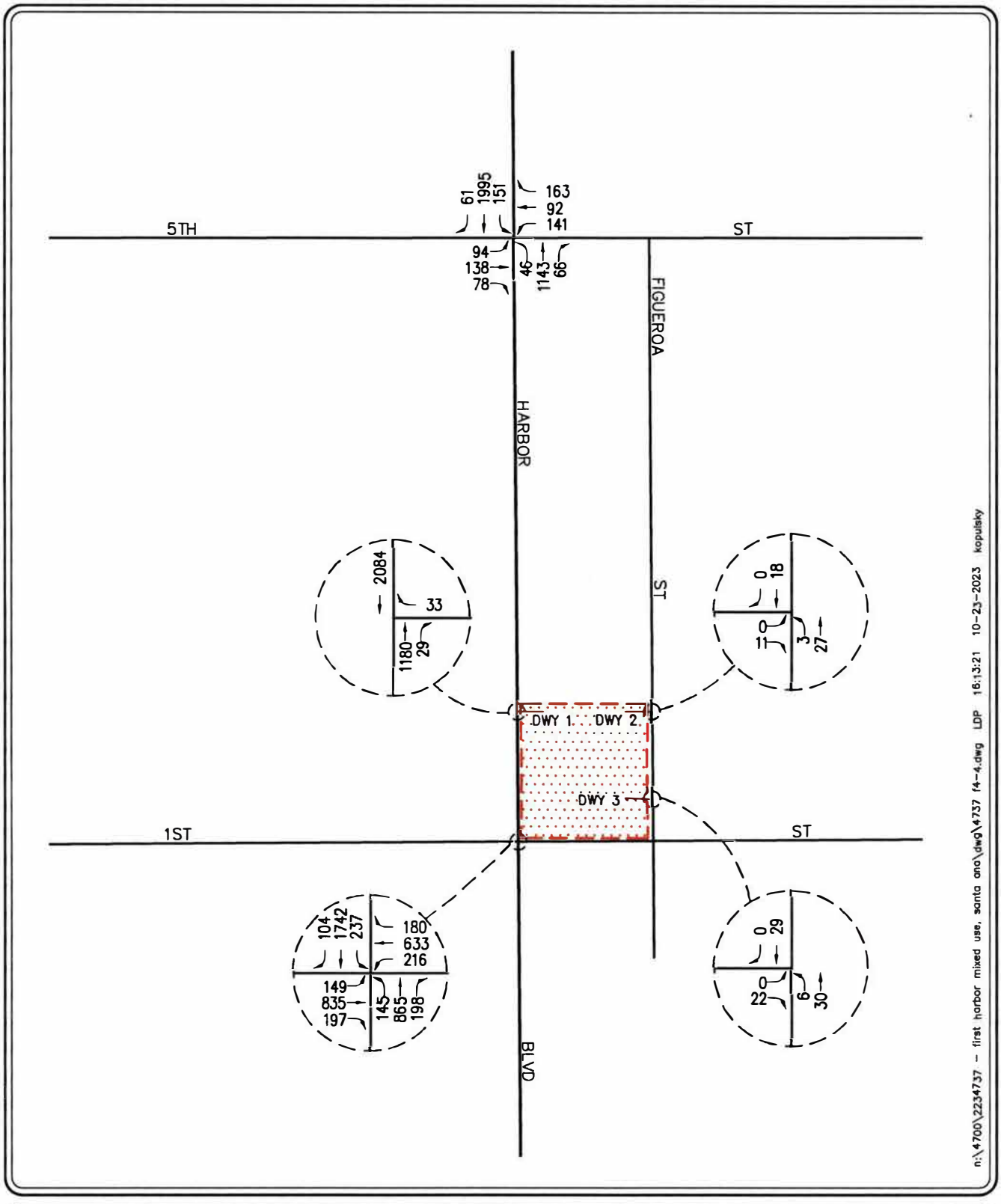
4.4.2 *Cumulative Projects*

In order to make a realistic estimate of future on-street conditions prior to implementation of the proposed Project, the status of other known development projects (related projects) within a two-mile radius of the proposed project has been researched at the City of Santa Ana, City of Garden Grove, City of Fountain Valley and City of Westminster. With this information, the potential circulation effects of the proposed Project can be evaluated within the context of the cumulative impact of all ongoing development.

Based on our research during the scoping process, there are nine (9) related projects in the City of Santa Ana and one (1) related project in the City of Garden Grove that are being processed for approval or to be constructed and fully operational within a two-mile radius of the proposed project site. These ten (10) related projects have been included as part of the cumulative background setting.

Table 4-2 provides a brief description for each of the ten (10) related projects. ***Figure 4-6*** graphically illustrates the location of the ten (10) related projects. These related projects are expected to generate vehicular traffic, which may affect the operating conditions of the key study intersections.

Table 4-3 summarizes the trip generation potential for all ten (10) related projects on a daily and peak hour basis for a typical weekday. As shown, the related projects are expected to generate 4,705 daily trips, with 245 trips (103 inbound, 142 outbound) anticipated during the AM peak hour and 287 trips (162 inbound, 125 outbound) produced during the PM peak hour.



LINSCOTT LAW & GREENSPAN engineers

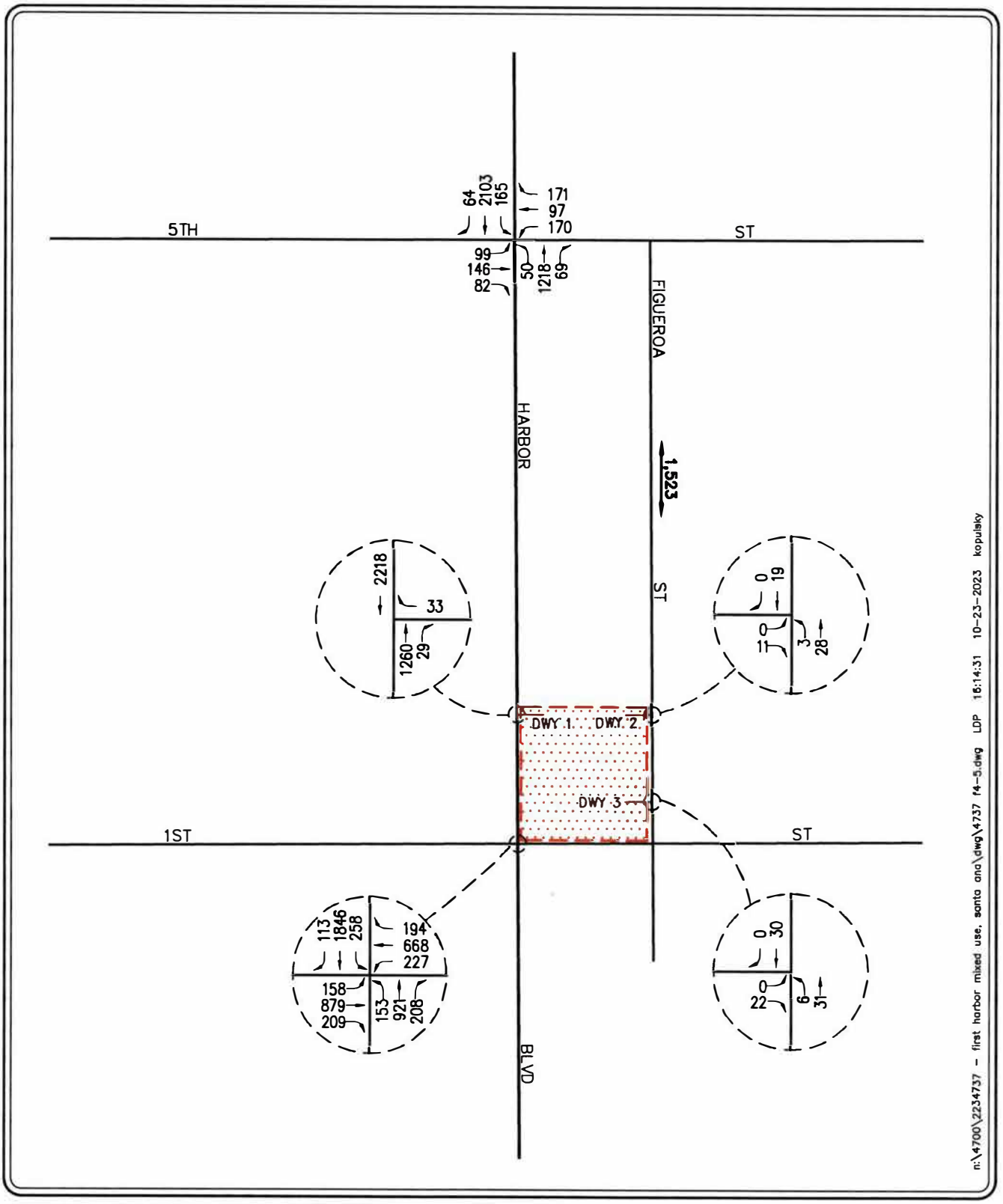
N NO SCALE

KEY
= PROJECT SITE

FIGURE 4-4

EXISTING PLUS PROJECT AM PEAK HOUR TRAFFIC VOLUMES

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

XX,XXX = DAILY TRAFFIC VOLUMES

= PROJECT SITE

FIGURE 4-5

EXISTING PLUS PROJECT PM PEAK HOUR AND DAILY TRAFFIC VOLUMES

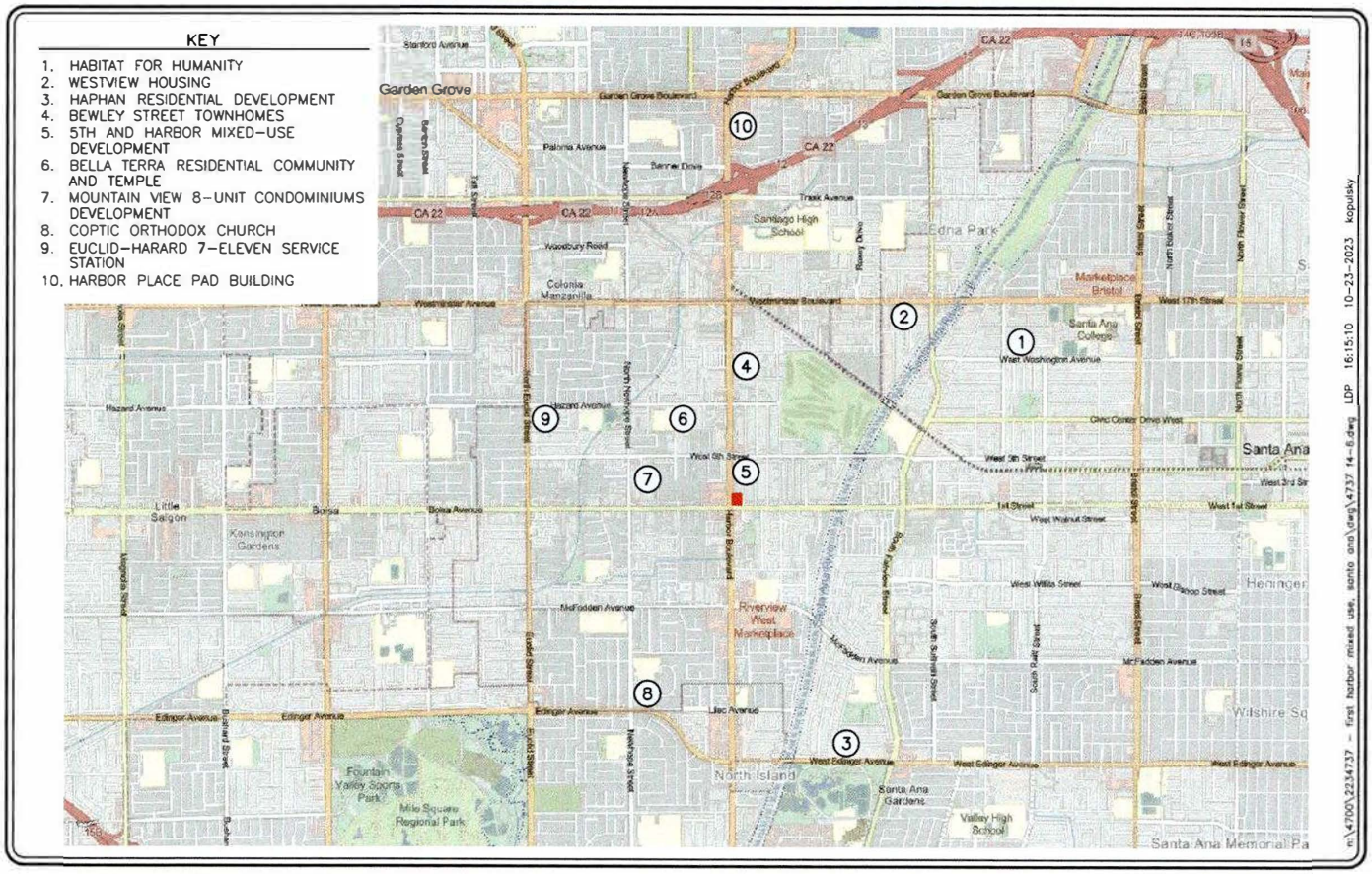
FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

TABLE 4-2
LOCATION AND DESCRIPTION OF CUMULATIVE PROJECTS[4]

No.	Cumulative Project	Location/Address	Description
City of Santa Ana			
1.	Habitat for Humanity	1921 West Washington Avenue	6 DU Affordable Housing
2.	Westview Housing	2534 West Westminster Avenue	85 DU Multi-family Residential
3.	Haphan Residential Development	3025 West Edinger Avenue	18 DU Multi-family Residential
4.	Bewley Street Townhomes	1122 North Bewley Street	10 DU Condominium
5.	5th and Harbor Mixed-Use Development	419-421 North Harbor Boulevard	94 DU Multi-family Residential 9,500 SF Retail
6.	Bella Terra Residential Community and Temple	4006,4010, and 4018 West Hazard Avenue	13 DU Single-family Residential 3,500 SF Temple
7.	Mountain View 8-Unit Condominium Development	301 and 305 North Mountain View Street	8 DU Condominium
8.	Coptic Orthodox Church	4405 West Edinger Avenue	110 Seat Expansion for Church
9.	Euclid-Hazard 7-Eleven Service Station	813 North Euclid Street	8 VFP 3,045 SF Convenience Store
City of Garden Grove			
10.	Harbor Place Pad Building	13200-13220 Harbor Boulevard	2,800 SF Fast Food Restaurant with Drive-thru 1,200 SF Restaurant

Notes:
- SF = Square-feet
- DU = Dwelling units
- VFP = Vehicle Fueling Positions

[4] Source: City of Santa Ana and City of Garden Grove Planning Departments.



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY
CUMULATIVE PROJECT LOCATION
= PROJECT SITE

FIGURE 4-6

LOCATION OF CUMULATIVE PROJECTS

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

TABLE 4-3
CUMULATIVE PROJECTS TRAFFIC GENERATION FORECAST[5]

Cumulative Project Description	Daily 2-Way	AM Peak Hour			PM Peak Hour		
		In	Out	Total	In	Out	Total
1. Habitat for Humanity	40	0	2	2	2	1	3
2. Westview Housing	573	8	26	34	27	16	43
3. Haphan Residential Development	121	2	5	7	6	3	9
4. Bewley Street Townhomes	67	1	3	4	3	2	5
5. 5th and Harbor Mixed-Use Development	1,099	21	37	58	49	37	86
6. Bella Terra Residential Community and Temple	115	2	4	6	5	4	9
7. Mountain View 8-Unit Condominium Development	54	1	2	3	3	1	4
8. Coptic Orthodox Church	99	5	3	8	5	6	11
9. Euclid-Hazard 7-Eleven Service Station	1,426	25	25	50	33	32	65
10. Harbor Place Pad Building	1,111	38	35	73	29	23	52
Cumulative Projects Total Trip Generation Potential	**4,705**	**103**	**142**	**245**	**162**	**125**	**287**

[5] Unless otherwise noted, Source: *Trip Generation*, 11th Edition, Institute of Transportation Engineers (ITE), Washington, D.C. (2021).

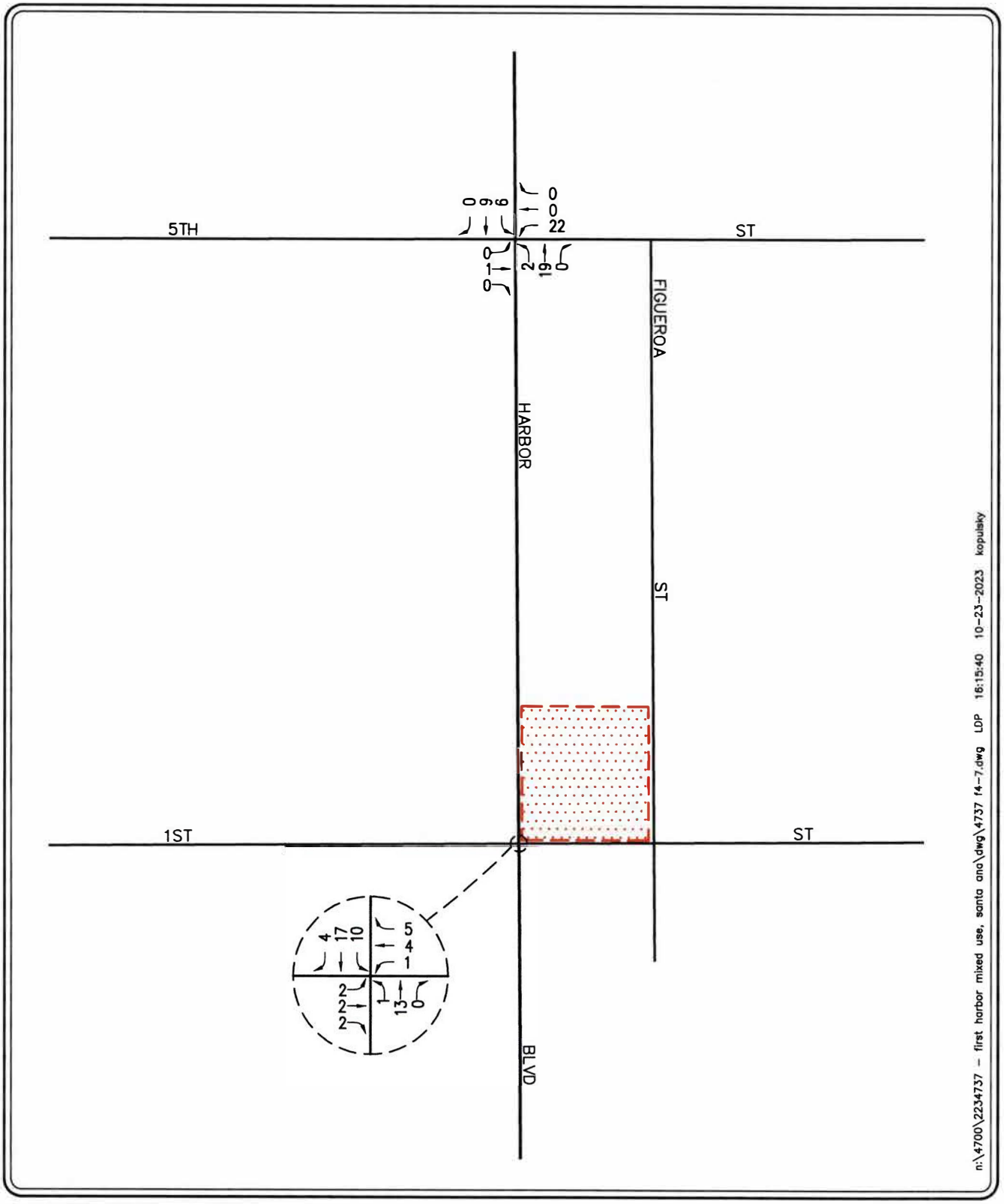
The AM and PM peak hour traffic volumes associated with the ten (10) related projects in the Year 2028 are presented in ***Figures 4-7*** and ***4-8***, respectively. *Figure 4-8* also presents the daily related project traffic volumes.

4.4.3 *Year 2028 Cumulative Base Traffic Volumes*

Figures 4-9 and ***4-10*** present the AM and PM peak hour cumulative base traffic volumes (existing traffic + ambient growth + cumulative projects) at the two (2) key study intersections for the Year 2028, respectively.

4.4.4 *Year 2028 Cumulative Plus Project Traffic Volumes*

Figures 4-11 and ***4-12*** illustrate the Year 2028 forecast AM and PM peak hour traffic volumes, with the inclusion of the trips generated by the proposed Project, respectively.



LINSCOTT LAW & GREENSPAN engineers

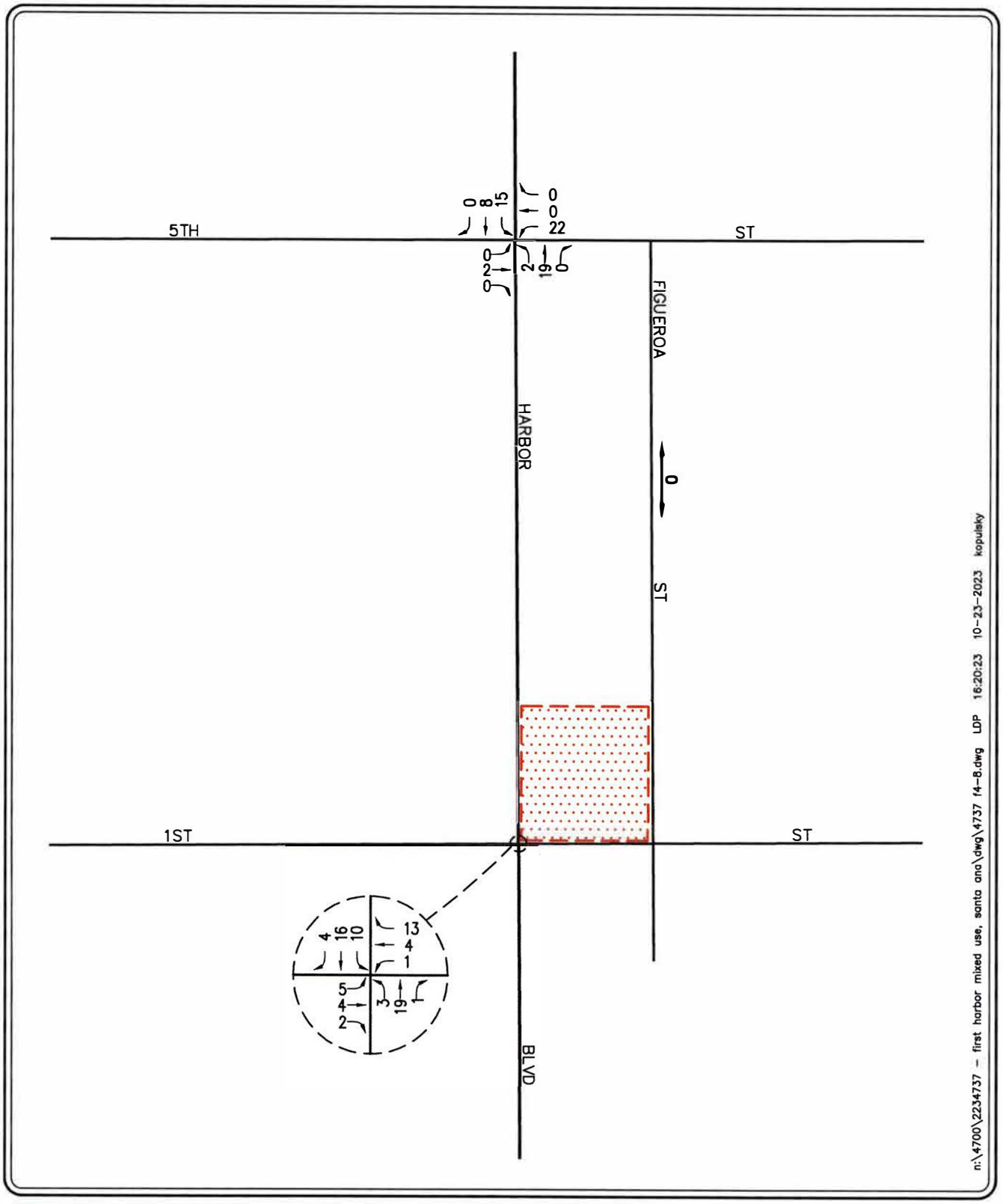
N NO SCALE

KEY
= PROJECT SITE

FIGURE 4-7

AM PEAK HOUR CUMULATIVE PROJECT TRAFFIC VOLUMES

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

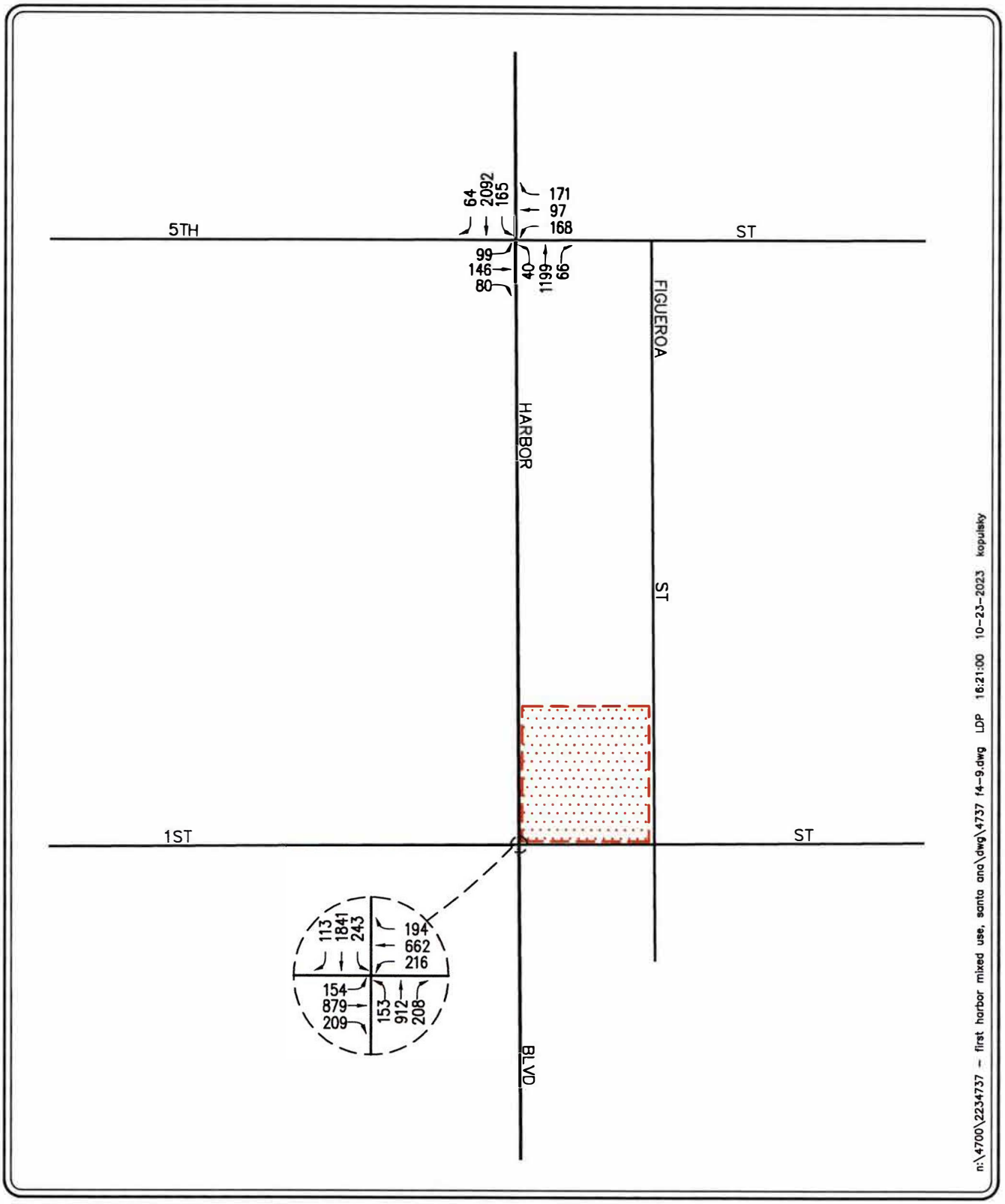
xx,xxx = DAILY TRAFFIC VOLUMES

= PROJECT SITE

FIGURE 4-8

PM PEAK HOUR AND DAILY CUMULATIVE PROJECT TRAFFIC VOLUMES

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



LINSCOTT LAW & GREENSPAN engineers

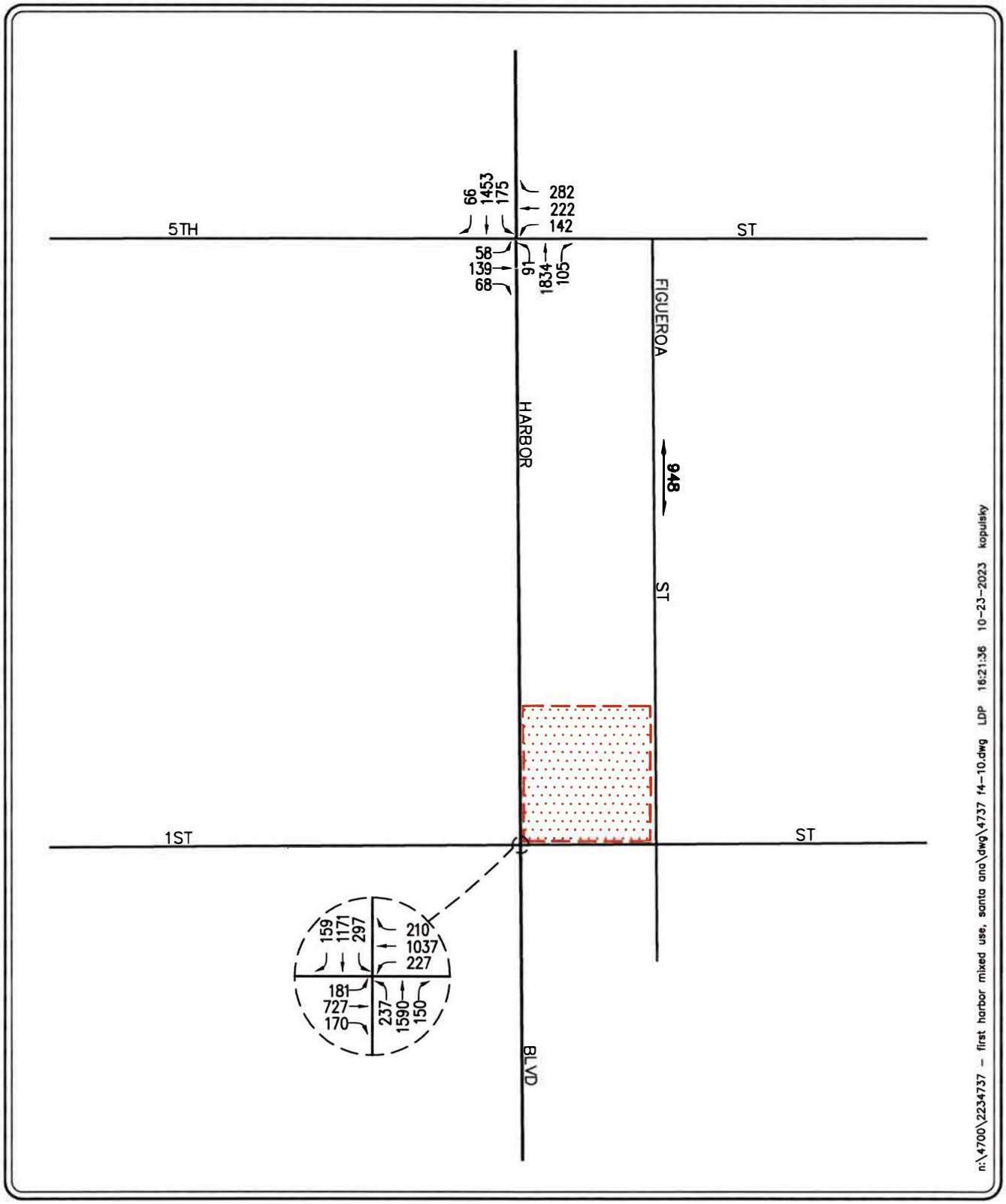
N NO SCALE

KEY
= PROJECT SITE

FIGURE 4-9

YEAR 2028 AM PEAK HOUR CUMULATIVE BASE TRAFFIC VOLUMES

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

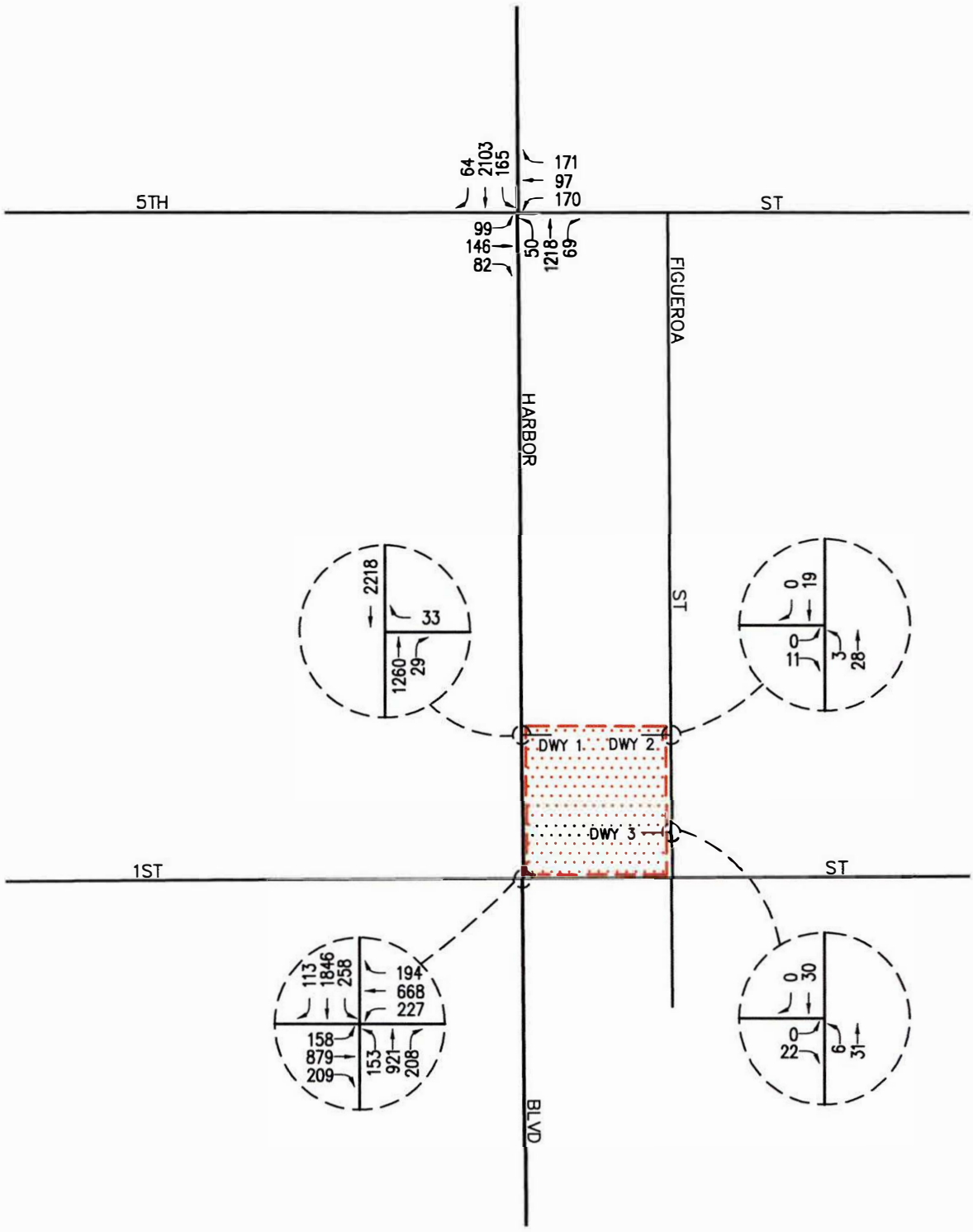
xx/xxx = DAILY TRAFFIC VOLUMES

= PROJECT SITE

FIGURE 4-10

YEAR 2028 PM PEAK HOUR AND DAILY CUMULATIVE BASE TRAFFIC VOLUMES

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



LINSCOTT LAW & GREENSPAN engineers

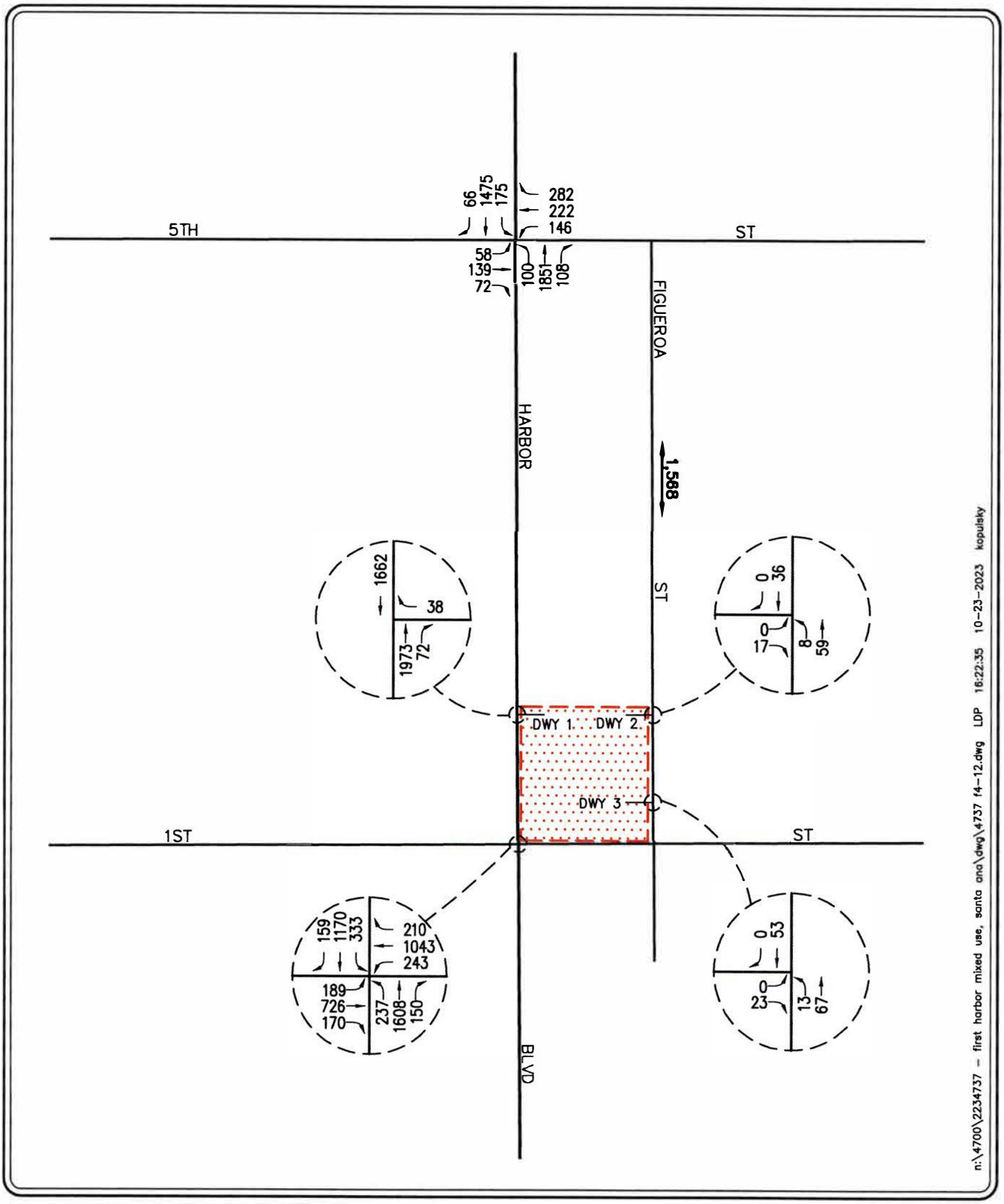
N NO SCALE

KEY
= PROJECT SITE

FIGURE 4-11

YEAR 2028 AM PEAK HOUR CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

KEY

XX,XXX = DAILY TRAFFIC VOLUMES

= PROJECT SITE

FIGURE 4-12

YEAR 2028 PM PEAK HOUR AND DAILY CUMULATIVE PLUS PROJECT TRAFFIC VOLUMES

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

5.0 NON-CEQA TRAFFIC ANALYSIS

The relative effect of the proposed Project during the AM peak hour and PM peak hour was evaluated based on analysis of future operating conditions at the two (2) key study intersections, without, then with, the proposed Project. The previously discussed capacity analysis procedures were utilized to investigate the future volume-to-capacity relationships and LOS characteristics at each study intersection. The potential effect of the Project at each key intersection was then evaluated using LOS standards and thresholds summarized below.

5.1 LOS Standards and Thresholds

5.1.1 *City of Santa Ana*

Based on the City of Santa Ana, the need for potential improvements will be assessed based on the following criteria:

- Project traffic would cause an intersection currently operating at an acceptable peak hour Level of Service (LOS) to operate at an unacceptable peak hour LOS. The City of Santa Ana considers LOS D to be the minimum acceptable LOS for all intersections, or
- The project increases traffic demand by 1% of capacity (ICU increase ≥ 0.01) if the intersection already operates at an unacceptable LOS.
- At unsignalized intersections, the project causes an intersection at LOS D or better to degrade to LOS E or F.

5.2 Traffic Analysis Scenarios

The following scenarios are those for which volume/capacity calculations have been performed at the five (5) key intersections for existing plus project and near-term (Year 2028) traffic conditions:

A. Existing Traffic Conditions;
B. Existing Plus Project Traffic Conditions;
C. Scenario (B) with Improvements, if necessary;
D. Near-Term (Year 2028) Cumulative Traffic Conditions,
E. Near-Term (Year 2028) Cumulative plus Project Traffic Conditions;
F. Scenario (E) with Project-Related Mitigation, if necessary.

5.3 Existing (2023) Plus Project Traffic Conditions

Table 5-1 summarizes the peak hour Level of Service results at the two (2) key study intersections for existing plus project traffic conditions. The first column (1) of ICU/LOS values in *Table 8-1* presents a summary of existing AM and PM peak hour traffic conditions (which were also presented in *Table 3-3*). The second column (2) lists existing plus project traffic conditions. The third column (3) shows the increase in ICU value due to the added peak hour Project trips and indicates whether the traffic associated with the Project will exceed the LOS thresholds defined in this report.

The project-specific intersection improvement described below has been presumed as part of the evaluation of Existing Plus Project traffic conditions:

- No. 2 – Harbor Boulevard at 1st Street: Widen the westbound approach of the intersection to provide an exclusive westbound right-turn lane on 1st Street with 190-feet of storage.

Review of Column 3 of *Table 5-1* indicates that the two (2) key study intersections are forecast to operate at LOS D or better during the weekday AM and PM peak hours with the addition of Project traffic to Existing traffic conditions.

Review of Columns 2 and 3 of *Table 5-1* indicates that the traffic associated with the proposed Project will not require improvements at either of the two (2) key study intersections, when compared to the LOS standards and thresholds specified in this report.

Appendix B presents the existing plus project ICU/LOS calculations for the two (2) key study intersections.

TABLE 5-1

EXISTING PLUS PROJECT PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Existing Plus Project Traffic Conditions		(3) Exceeds LOS Thresholds	
			ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
1. Harbor Boulevard at 5th Street	D	AM	0.719	C	0.730	C	0.011	No
		PM	0.729	C	0.733	C	0.004	No
2. Harbor Boulevard at 1st Street[6]	E	AM	0.760	C	0.765	C	0.005	No
		PM	0.811	D	0.789	C	-0.022	No

Notes:

- **Bold** ICU values indicate adverse service levels based on the Cities LOS standards.

[6] A 190-foot westbound right-turn pocket at the intersection of Harbor Boulevard and 1st Street will be constructed as part of the proposed Project.

5.4 Year 2028 Traffic Conditions

Table 5-2 summarizes the peak hour Level of Service results at the two (2) key study intersections for the Year 2028 horizon year. The first column (1) of ICU/LOS values in *Table 5-2* presents a summary of existing AM and PM peak hour traffic conditions. The second column (2) lists projected cumulative traffic conditions (existing plus ambient plus related projects traffic) based on existing intersection geometry, but without any traffic generated from the proposed Project. The third column (3) presents forecast Year 2028 near-term traffic conditions with the addition of Project traffic. The fourth column (4) shows the increase in ICU value due to the added peak hour Project trips and indicates whether the traffic associated with the Project will exceed the LOS thresholds defined in this report.

The project-specific intersection improvement described below has been presumed as part of the evaluation of Year 2028 Cumulative Plus Project traffic conditions:

- No. 2 – Harbor Boulevard at 1st Street: Widen the westbound approach of the intersection to provide an exclusive westbound right-turn lane on 1st Street with 190-feet of storage.

5.4.1 *Year 2028 Cumulative Base Traffic Conditions*

Review of Column 2 of *Table 5-2* indicates that the two (2) key study intersections are forecast to continue to operate at acceptable levels of service (LOS D or better) during the AM and PM peak hours for Year 2028 Cumulative Base traffic conditions.

5.4.2 *Year 2028 Cumulative Plus Project Conditions*

Review of Column 3 of *Table 5-2* indicates that the two (2) key study intersections are forecast to continue to operate at acceptable levels of service (LOS D or better) during the AM and PM peak hours with the addition of Project traffic to Year 2028 Cumulative traffic conditions.

Review of Columns 3 and 4 of *Table 5-2* indicates that the traffic associated with the proposed Project will not require improvements at either of the two (2) key study intersections, when compared to the LOS standards and thresholds specified in this report.

Appendix B also presents the near-term ICU/LOS calculations for the two (2) key study intersections.

TABLE 5-2

YEAR 2028 PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Minimum Acceptable LOS	Time Period	(1) Existing Traffic Conditions		(2) Year 2028 Traffic Conditions		(3) Year 2028 Plus Project Traffic Conditions		(4) Exceeds LOS Thresholds	
			ICU/HCM	LOS	ICU/HCM	LOS	ICU/HCM	LOS	Increase	Yes/No
1. Harbor Boulevard at 5th Street	D	AM	0.719	C	0.770	C	0.781	C	0.011	No
		PM	0.729	C	0.781	C	0.791	C	0.010	No
2. Harbor Boulevard at 1st Street[7]	E	AM	0.760	C	0.801	D	0.805	D	0.004	No
		PM	0.811	D	0.864	D	0.837	D	-0.027	No

Notes:

- **Bold ICU values indicate adverse service levels based on the Cities LOS standards.**

[7] A westbound right-turn pocket at the intersection of Harbor Boulevard and 1st Street will be constructed as part of the proposed Project.

6.0 SITE ACCESS AND INTERNAL CIRCULATION EVALUATION

6.1 Site Access

Access to the Project will be provided via one (1) right-turn in/out only driveway on Harbor Boulevard and two (2) driveways restricted to left-turns/right-turns in, and right-turns out, on Figueroa Street.

Table 6-1 summarizes the intersection level of service results for the three (3) proposed Project driveways under Existing and near-term (Year 2028) traffic conditions at completion and full occupancy of the proposed Project based on the HCM methodology. As shown, these Project driveways are forecast to operate at LOS D or better during the AM peak hour and PM peak hour. As such, Project access would be adequate. Motorists entering and exiting the Project site would be able to do so without undue congestion. Furthermore, the anticipated queues at each of the Project driveways are anticipated to be no more than one (1) vehicle during the AM and PM peak hours.

Appendix C presents the existing and near-term HCM/LOS calculations for the three (3) Project driveways.

TABLE 6-1
PROJECT DRIVEWAY PEAK HOUR INTERSECTION CAPACITY ANALYSIS

Key Intersection	Intersection Control	Time Period	(1) Existing Plus Project Traffic Conditions		(2) Year 2028 Plus Project Traffic Conditions	
			HCM	LOS	HCM	LOS
A. Harbor Boulevard at Project Driveway No. 1	One-Way Stop	AM	15.4 s/v	C	16.1 s/v	C
		PM	24.6 s/v	C	27.1 s/v	D
B. Figueroa Street at Project Driveway No. 2 (North)	One-Way Stop	AM	8.4 s/v	A	8.4 s/v	A
		PM	8.5 s/v	A	8.5 s/v	A
C. Figueroa Street at Project Driveway No. 3 (South)	One-Way Stop	AM	8.5 s/v	A	8.5 s/v	A
		PM	8.6 s/v	A	8.6 s/v	A

Notes:
- s/v = seconds per vehicle

6.1.1 *Traffic Gap Assessment*

To supplement the level of service analysis, a traffic gap analysis was conducted along Harbor Boulevard, as well as at the intersection of Figueroa Street at 1st Street, to determine if the existing traffic gaps along the main arterial roadways are considered adequate to accommodate egress at the proposed Project driveways.

For the purposes of this study, it is assumed that the minimum time for one vehicle to complete the outbound right-turn movement and outbound left-turn movement is 7 seconds and 10 seconds, respectively. These duration criteria were derived from empirical data collected by LLG from prior studies, and are considered conservative when compared against *Table 405.1A* of the Caltrans Highway Design Manual, which indicates a minimum of 6.5 seconds is required for a passenger vehicle to complete a right-turn from a stop, and a minimum of 8.5 seconds is required for a passenger vehicle to complete a left-turn from a stop when crossing three lanes.

Table 6-2 presents a summary of the results from traffic gap observations/surveys performed in September 2023 for the westbound right-turn movement at the intersection of Harbor Boulevard at Project Driveway No. 1, and the southbound right-turn movement at the intersection of Figueroa Street at 1st Street. *Table 6-2* indicates that based on the gap surveys, traffic gaps along northbound Harbor Boulevard and on westbound 1st Street (that meet the duration criteria described previously) were observed to occur more frequently compared to the number of times a vehicle would be exiting the Project site using the driveway off Harbor Boulevard, or a vehicle exited/would be exiting from southbound Figueroa Street, to enter into/merge with the traffic stream already on Harbor Boulevard and 1st Street. Based on these empirical results, it is reasonable to conclude that there would be an adequate number of available gaps in traffic to accommodate right-turning vehicles from the Project site onto Harbor Boulevard, and from southbound Figueroa Street onto westbound 1st Street.

Table 6-3 summarizes the results of the traffic gap analysis for the southbound left-turn movement at the intersection of Figueroa Street at 1st Street. *Table 6-3* indicates that based on the gap surveys, traffic gaps along 1st Street (that meet the duration criteria described previously) were observed to occur more frequently compared to the number of times a vehicle exited/would be exiting from southbound Figueroa Street to enter into/merge with the traffic stream already on 1st Street. Based on these empirical results, it is reasonable to conclude that there would be an adequate number of available gaps in traffic to accommodate left-turning vehicles from southbound Figueroa Street onto eastbound 1st Street.

As described previously, Project-specific improvements are planned for implementation at the intersection of Harbor Boulevard and 1st Street (Intersection No. 2) that were previously approved by the City. As part of those improvements, the Project will be adding a right-turn pocket (with a total length of 213 feet, comprised of 186 feet of storage length, and 27 feet of transition length) along 1st Street on the westbound approach of the intersection. The additional roadway capacity on westbound 1st Street due to the provision of the future right-turn pocket could help increase the number of available traffic gaps that would facilitate southbound right-turns from Figueroa Street onto 1st Street.

TABLE 6-2

RIGHT-TURN OUT VEHICLE GAP ANALYSIS

	Harbor Boulevard at Project Driveway No. 1 (Westbound Right-Turn)						Figueroa Street at 1st Street (Southbound Right-Turn)					
	AM Peak Hour (7AM – 8AM)			PM Peak Hour (5PM – 6PM)			AM Peak Hour (7AM – 8AM)			PM Peak Hour (5PM – 6PM)		
Gap[8] (seconds)	Vehicles Served by Gap[9]	Gaps Occurring During Peak Hour[10]	Total Vehicles that could be Served[11]	Vehicles Served by Gap[9]	Gaps Occurring During Peak Hour[10]	Total Vehicles that could be Served[11]	Vehicles Served by Gap[9]	Gaps Occurring During Peak Hour[10]	Total Vehicles that could be Served[11]	Vehicles Served by Gap[9]	Gaps Occurring During Peak Hour[10]	Total Vehicles that could be Served[11]
7-13	1	59	59	1	45	45	1	52	52	1	17	17
14-20	2	21	42	2	24	48	2	19	38	2	9	18
21-27	3	7	21	3	16	48	3	12	36	3	1	3
≥ 28	4	20	80	4	9	36	4	17	68	4	3	12
	Total Vehicles that could be Accommodated by Traffic Gaps		202	Total Vehicles that could be Accommodated by Traffic Gaps		177	Total Vehicles that could be Accommodated by Traffic Gaps		194	Total Vehicles that could be Accommodated by Traffic Gaps		50
	Total Vehicles Exiting the Project[12]		33	Total Vehicles Exiting the Project[12]		38	Total Vehicles Exiting the Project & Figueroa Street[12]		49	Total Vehicles Exiting the Project & Figueroa Street[12]		43
	Adequate Traffic Gaps?		Yes	Adequate Traffic Gaps?		Yes	Adequate Traffic Gaps?		Yes	Adequate Traffic Gaps?		Yes

8 A gap is defined as the time interval between cars crossing the Project driveway/minor street.

9 For purposes of this study, it is assumed the minimum time for one vehicle to complete a turning movement out of the Project driveway is 7 seconds, which was derived from empirical data collected by LLG. Per *Table 405.1A* of the Caltrans Highway Design Manual, a minimum of 6.5 seconds is required for a passenger vehicle to complete a right-turn from a stop, so an assumption of 7 seconds is considered conservative.

10 Values are based on gap survey performed on Wednesday September 27, 2023.

11 Total Vehicles that could be Served = (Number of Vehicles Served) x (Number of Gaps During Peak Hour)

12 Total vehicles exiting is based on Year 2028 Plus Project traffic conditions traffic volumes. Although Figueroa at 1st Street is not a study intersection, existing counts were collected at the intersection for the purposes of this gap analysis.

TABLE 6-3
LEFT-TURN OUT VEHICLE GAP ANALYSIS

Gap[13] (seconds)	Figueroa Street at 1st Street (Southbound Left-Turn)					
	AM Peak Hour (7AM – 8AM)			PM Peak Hour (5PM – 6PM)		
	Vehicles Served by Gap[14]	Gaps Occurring During Peak Hour[15]	Total Vehicles that could be Served[16]	Vehicles Served by Gap[14]	Gaps Occurring During Peak Hour[15]	Total Vehicles that could be Served[16]
10-19	1	47	47	1	15	15
20-29	2	16	32	2	6	12
30-39	3	7	21	3	2	6
≥ 40	4	4	16	4	0	0
	Total Vehicles that could be Accommodated by Traffic Gaps		116	**Total Vehicles that could be Accommodated by Traffic Gaps**		33
	Total Vehicles Exiting the Project & Figueroa Street[17]		28	**Total Vehicles Exiting the Project & Figueroa Street[17]**		20
	Adequate Traffic Gaps?		Yes	**Adequate Traffic Gaps?**		Yes

13 A gap is defined as the time interval between cars crossing the Project driveway/minor street.

14 For purposes of this study, it is assumed the minimum time for one vehicle to complete a turning movement out of the Project driveway is 10 seconds, which was derived from empirical data collected by LLG. Per *Table 405.1A* of the Caltrans Highway Design Manual, a minimum of 8.5 seconds is required for a passenger vehicle to complete a left-turn from a stop when crossing three lanes, so an assumption of 10 seconds is considered conservative.

15 Values are based on gap survey performed on Wednesday September 27, 2023.

16 Total Vehicles that could be Served = (Number of Vehicles Served) x (Number of Gaps During Peak Hour)

17 Total vehicles exiting is based on Year 2028 Plus Project traffic conditions traffic volumes. Although Figueroa at 1st Street is not a study intersection, existing counts were collected at the intersection for the purposes of this gap analysis.

6.2 Internal Circulation Evaluation

Based on our review of the preliminary site plan, driveway lengths are sufficient such that access to parking spaces would not be impeded by internal vehicle queuing/stacking. Curb return radii have been confirmed and are adequate for service/delivery trucks and trash trucks. The circulation on each level of the parking structure is adequate, with sufficient sight distance along the drive aisles.

6.3 Sight Distance Evaluation

At intersections and/or Project driveways, a substantially clear line of sight should be maintained between the driver of a vehicle waiting at the crossroad and the driver of an approaching vehicle. Adequate time must be provided for the waiting vehicle to either cross all lanes of through traffic, cross the nearby lanes and turn left, or turn right, without requiring through traffic to radically alter their speed. A sight distance evaluation has been performed for the three (3) Project driveways located along Harbor Boulevard and Figueroa Street, as well as the intersection of Figueroa Street and 1st Street.

The Sight Distance Evaluation prepared for the Project driveways is based on the criteria and procedures set forth by the California Department of Transportation (Caltrans) in the State's *Highway Design Manual (HDM)*. Corner sight distance was utilized for the evaluation. Corner sight distance is defined in the Caltrans HDM to be the distance required by the driver of a vehicle, traveling at a given speed, to maneuver their vehicle and avoid an object without radically altering their speed. Line of sight for corner sight distance is to be determined from a 3½ foot height at the location of the driver of a vehicle on a minor road to a 4¼ foot object height in the center of the approaching lane of the major road.

Based on the criteria set forth in Table 405.1A of the Caltrans HDM and a posted speed limit of 40 mph on Harbor Boulevard, a corner sight distance of 382 feet for right-turning vehicles is required for Project Driveway 1.

Based on the criteria set forth in Table 405.1A of the Caltrans HDM and a prima facie speed limit of 25 mph on Figueroa Street, a corner sight distance of 239 feet is required for right-turning vehicles at Project Driveways 2 and 3.

Based on the criteria set forth in Table 405.1A of the Caltrans HDM and a prima facie speed limit of 40 mph on 1st Street, a corner sight distance of 382 feet is required for right-turning vehicles. For left-turning vehicles, a corner sight distance of 434 feet is required when looking to the left and 492 feet is required when looking to the right.

Figure 6-1 presents the results of the sight distance evaluation for right-turning vehicles at Project Driveway 1 based on the application of the corner sight distance criteria. The figure illustrates the limited use areas. As shown, the sight lines at the proposed Project driveway are expected to be adequate as long as obstructions within the sight triangles are minimized.

Figure 6-2 presents the results of the sight distance evaluation for right-turning vehicles at Project Driveways 2 and 3 based on the application of the corner sight distance criteria. The figure illustrates the limited use areas. As shown, the sight lines at the two (2) Project driveways will be obstructed by vehicles parked on-street along Figueroa Street. Based on this, it is recommended to restrict on-street parking along the segment of Figueroa Street adjoining the Project site to help facilitate traffic flows, and enhance visibility for southbound traffic on Figueroa Street and Project traffic exiting the driveways.

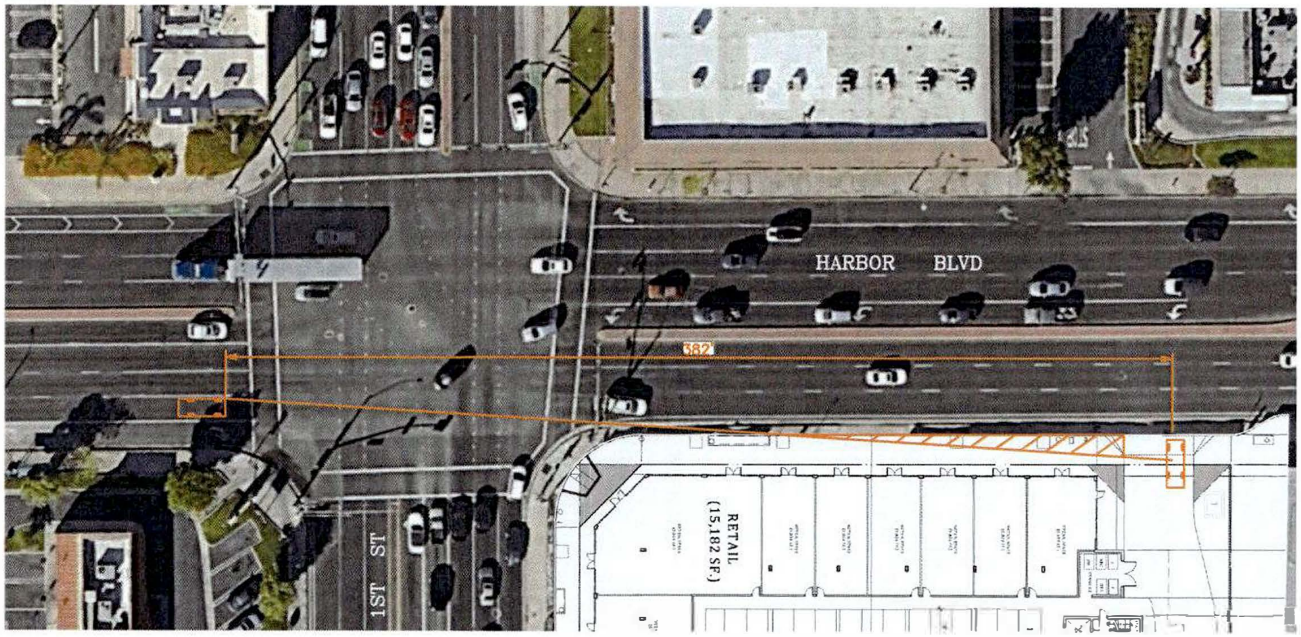
Figures 6-3 and ***6-4*** present the results of the sight distance evaluation for southbound right-turning vehicles and southbound left-turning vehicles, respectively, at the intersection of Figueroa Street and 1st Street based on the application of the corner sight distance criteria. The figure illustrates the limited use areas. As shown, the sight lines for southbound right-turning and left-turning vehicles on Figueroa Street are expected to be adequate as long as obstructions within the sight triangles are minimized.

SIGHT DISTANCE

DESIGN SPEED LIMIT:	40 MPH
REQUIRED CORNER SIGHT DISTANCE:	382 FEET

LEGEND

PUBLIC RIGHT-OF-WAY LIMITED USE AREA: TO ENSURE ADEQUATE SIGHT DISTANCE, HARDSCAPE AND/OR LANDSCAPE SHALL NOT BE HIGHER THAN 30 INCHES ABOVE THE CURB/SIDEWALK. NO FENCES OR WALLS IN LIMITED USE AREA.



c:\47001\234737 - first harbor mixed use, santa ana\dwg\47737 f6-1.dwg LDP 16:24:56 10-23-2023 kapulsky

LINSCOTT LAW & GREENSPAN engineers

N

NO SCALE

SOURCE: PRIMIOR

FIGURE 6-1

HARBOR BOULEVARD SIGHT DISTANCE ANALYSIS

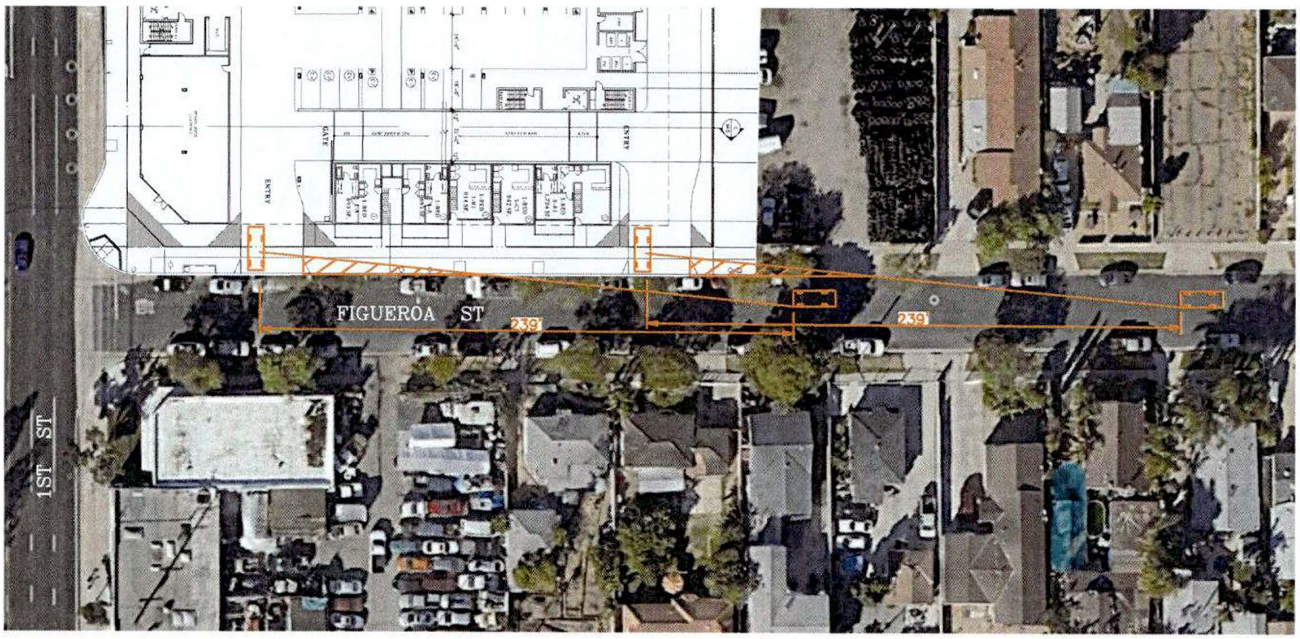
FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

SIGHT DISTANCE

DESIGN SPEED LIMIT:	25 MPH
REQUIRED CORNER SIGHT DISTANCE:	239 FEET

LEGEND

PUBLIC RIGHT-OF-WAY LIMITED USE AREA: TO ENSURE ADEQUATE SIGHT DISTANCE, HARDSCAPE AND/OR LANDSCAPE SHALL NOT BE HIGHER THAN 30 INCHES ABOVE THE CURB/SIDEWALK. NO FENCES OR WALLS IN LIMITED USE AREA.



n:\4700\2234737 - first harbor mixed use, santo ana\dwg\4737 f6-2.dwg LDP 16:25:29 10-23-2023 kopulsky

LINSCOTT LAW & GREENSPAN engineers

NO SCALE

SOURCE: PRIMIOR

FIGURE 6-2

FIGUEROA STREET SIGHT DISTANCE ANALYSIS

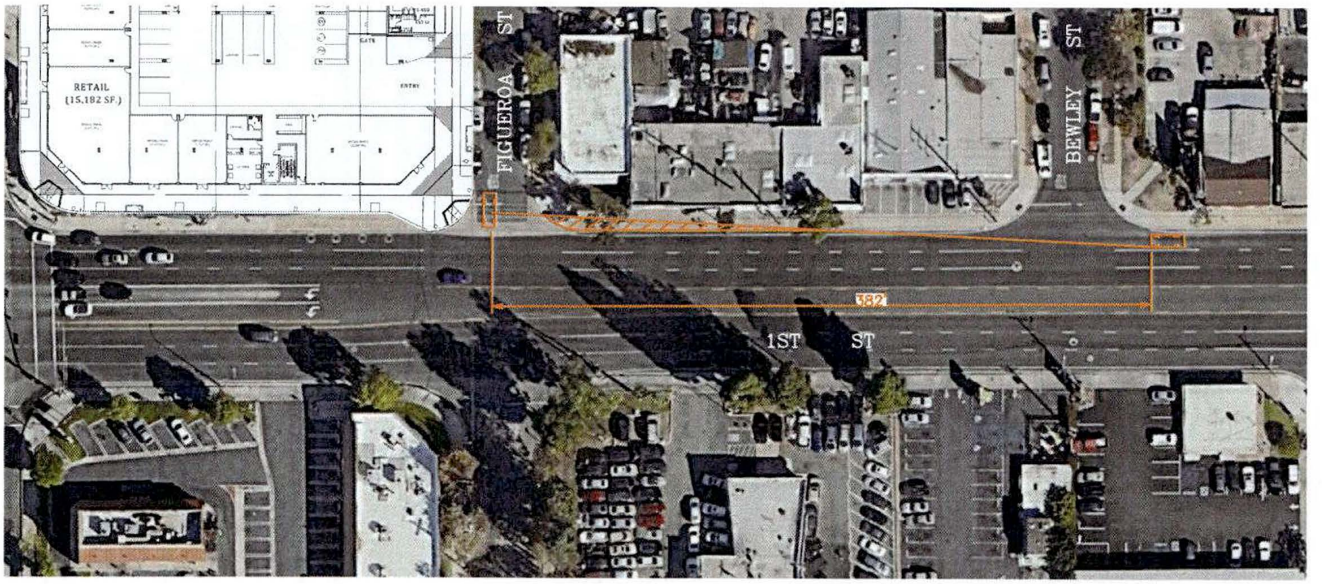
FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

SIGHT DISTANCE

DESIGN SPEED LIMIT:	40 MPH
REQUIRED CORNER SIGHT DISTANCE LOOKING LEFT:	382 FEET

LEGEND

PUBLIC RIGHT-OF-WAY LIMITED USE AREA: TO ENSURE ADEQUATE SIGHT DISTANCE, HARDSCAPE AND/OR LANDSCAPE SHALL NOT BE HIGHER THAN 30 INCHES ABOVE THE CURB/SIDEWALK. NO FENCES OR WALLS IN LIMITED USE AREA.



n:\4700\2234737 - first harbor mixed use, santa ana\dwg\4737 f6-3.dwg LDP 16:26:37 10-23-2023 kopulsky

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: PRIMIOR

FIGURE 6-3

FIGUEROA STREET AT 1ST STREET
SOUTHBOUND RIGHT SIGHT DISTANCE ANALYSIS
FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

SIGHT DISTANCE

DESIGN SPEED LIMIT:	40 MPH
REQUIRED CORNER SIGHT DISTANCE LOOKING LEFT:	434 FEET
REQUIRED CORNER SIGHT DISTANCE LOOKING RIGHT:	492 FEET

LEGEND

PUBLIC RIGHT-OF-WAY LIMITED USE AREA: TO ENSURE ADEQUATE SIGHT DISTANCE, HARDSCAPE AND/OR LANDSCAPE SHALL NOT BE HIGHER THAN 30 INCHES ABOVE THE CURB/SIDEWALK. NO FENCES OR WALLS IN LIMITED USE AREA.

n:\4700\2234737 - first harbor mixed use, santa ana\dwg\4737 f6-4.dwg LDP 16:27:01 10-23-2023 kopulsky

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

SOURCE: PRIMIOR

FIGURE 6-4

FIGUEROA STREET AT 1ST STREET
SOUTHBOUND LEFT SIGHT DISTANCE ANALYSIS
FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

7.0 INTERSECTION TURN POCKET QUEUING ANALYSIS

To validate the adequacy of stacking provided for the northbound left-turn/"U-turn" lane located at the intersection of Harbor Boulevard and 5th Street, as well as the southbound left-turn/"U-turn" lane, westbound dual left-turn lanes, and future Project-specific improvement of a westbound right-turn lane located at the intersection of Harbor Boulevard and 1st Street, a queuing evaluation was conducted under Existing, Existing plus Project, Year 2028 Cumulative Base and Year 2028 Cumulative plus Project traffic conditions. The Highway Capacity Manual 6th Edition (HCM 6) methodology was utilized to confirm the adequacy of vehicular stacking for the aforementioned turn lanes located at the intersections of Harbor Boulevard and 5th Street, and Harbor Boulevard and 1st Street.

Tables 7-1 and ***7-2*** present the queueing results. Existing Plus Project and Year 2028 Plus Project traffic conditions presume the Project-specific improvement (i.e., addition of an exclusive right-turn pocket on the westbound approach) at the intersection of Harbor Boulevard and 1st Street.

Tables 7-1 and *7-2* indicate that adequate queue storage length is currently provided for the northbound left-turn/"U-turn" lane located at the intersection of Harbor Boulevard and 5th Street based on the anticipated maximum 95th percentile queue length under Existing, Existing plus Project, Year 2028 Cumulative Base, and Year 2028 Cumulative plus Project traffic conditions.

Although the existing and future 95th percentile queues reported for the southbound left-turn/"U-turn" and westbound left-turn movements at the intersection of Harbor Boulevard and 1st Street exceed the existing storage lengths for the respective movements, these are existing queue storage deficiencies not caused by the Project. The 95th percentile queue lengths are conservative estimates of potential queues because, given 30 signal cycles per hour (based on a cycle length of 120 seconds), the 95th percentile queue might form in only 1.5 cycles during the peak hour. It should be noted further that the Project-generated traffic that could be added to the southbound and westbound left-turn movements are nominal (i.e., southbound left-turn: 15 AM peak hour trips, 36 PM peak hour trips; westbound left-turn: 11 AM peak hour trips, 16 PM peak hour trips), corresponding to a maximum of one vehicle on a given cycle.

Tables 7-1 and *7-2* indicate that adequate queue storage length would be provided for the planned westbound right-turn pocket at the intersection of Harbor Boulevard and 1st Street based on the anticipated maximum 95th percentile queue length under Existing plus Project, and Year 2028 Cumulative plus Project (during the AM peak hour only) traffic conditions.

Although the future 95th percentile queue length of 232 feet during the PM peak hour would exceed the proposed pocket length of 213 feet, there is an additional 27 feet of queue storage on westbound 1st Street between the end of the future right-turn pocket and Figueroa Street that would result in a total storage length of 240 feet, which could accommodate the forecasted queue length of 232 feet.

Based on the considerations above, improvements are not recommended. ***Appendix D*** provides the queuing calculation worksheets for Harbor Boulevard at 5th Street and Harbor Boulevard at 1st Street.

TABLE 7-1
EXISTING PLUS PROJECT QUEUING ANALYSIS

Key Intersections	Storage Provided [18] (ft.)	(1) Existing Traffic Conditions				(2) Existing Plus Project Traffic Conditions			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Max. Queue[19] (ft.)	Adequate Storage Yes / No	Max. Queue[19] (ft.)	Adequate Storage Yes / No	Max. Queue[19] (ft.)	Adequate Storage Yes / No	Max. Queue[19] (ft.)	Adequate Storage Yes / No
1. Harbor Boulevard at 5th Street									
Northbound Left-Turn/"U-turn"	185'	43'	Yes	113'	Yes	54'	Yes	123'	Yes
2. Harbor Boulevard at 1st Street									
Southbound Left-Turn/"U-turn"	245'	**293'**	**No**	**410'**	**No**	**311'**	**No**	**493'**	**No**
Westbound Dual Left-Turn	310'	296'	Yes	**332'**	**No**	**316'**	**No**	**394'**	**No**
Future Westbound Right-Turn[20]	213'[21]	--	--	--	--	206'	Yes	213'	Yes

18 Source: *Google Earth.*

19 Maximum queue in feet (ft) is calculated by taking the 95th Percentile Queue length (ft) in HCM 7.

20 A westbound right-turn pocket at the intersection of Harbor Boulevard and 1st Street will be constructed as part of the proposed Project.

21 Based on proposed Site Plan prepared by Primior.

TABLE 7-2
YEAR 2028 PLUS PROJECT QUEUING ANALYSIS

Key Intersections	Storage Provided [22] (ft.)	(1) Year 2028 Traffic Conditions				(2) Year 2028 Plus Project Traffic Conditions			
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour	
		Max. Queue[23] (ft.)	Adequate Storage Yes / No	Max. Queue[23] (ft.)	Adequate Storage Yes / No	Max. Queue[23] (ft.)	Adequate Storage Yes / No	Max. Queue[23] (ft.)	Adequate Storage Yes / No
1. Harbor Boulevard at 5th Street									
Northbound Left-Turn/"U-turn"	185'	50'	Yes	141'	Yes	67'	Yes	156'	Yes
2. Harbor Boulevard at 1st Street									
Southbound Left-Turn/"U-turn"	245'	**306'**	**No**	**484'**	**No**	**336'**	**No**	**550'**	**No**
Westbound Dual Left-Turn	310'	**316'**	**No**	**382'**	**No**	**344'**	**No**	**438'**	**No**
Future Westbound Right-Turn[24]	213'[25]	--	--	--	--	211'	Yes	**232'**	NoError! Bookmark not defined.

[22] Source: *Google Earth.*

[23] Maximum queue in feet (ft) is calculated by taking the 95th Percentile Queue length (ft) in HCM 7.

[24] A westbound right-turn pocket at the intersection of Harbor Boulevard and 1st Street will be constructed as part of the proposed Project.

[25] Based on proposed Site Plan prepared by Primior.

Error! Bookmark not defined. Although the future 95th percentile queue length of 232 feet during the PM peak hour would exceed the proposed pocket length of 213 feet, there is an additional 27 feet of queue storage on westbound 1st Street between the end of the future right-turn pocket and Figueroa Street that would result in a total storage length of 240 feet, which could accommodate the forecasted queue length of 232 feet.

8.0 CONGESTION MANAGEMENT PROGRAM (CMP) COMPLIANCE ASSESSMENT

This analysis is consistent with the requirements and procedures outlined in the current *Orange County Congestion Management Program (CMP).*

The CMP requires that a traffic analysis be conducted for any project generating 2,400 or more daily trips, or 1,600 or more daily trips for projects that directly access the CMP Highway System (HS). As noted in Section 4.0 of this traffic study, the proposed Project is forecast to generate approximately 1,575 daily trip-ends, and therefore, does not require a CMP traffic analysis.

The CMPHS includes specific roadways, which include State Highways and Super Streets, which are now known as Smart Streets. Therefore, the CMP traffic analysis requirements relate to the potential circulation effects only on the specified CMPHS.

The intersection of Harbor Boulevard and 1st Street (Intersection No. 2) is a CMP intersection, which would have required evaluation if the CMP threshold was exceeded. It should be noted that the City of Santa Ana LOS criteria and evaluation identified in Section 5.0 of this report is consistent with the Orange County CMP traffic analysis guidelines. The level of service results for the intersection are summarized in *Tables 5-1* and *5-2* and indicate that the proposed Project will not require improvements at this location.

9.0 ROADWAY SEGMENT EVALUATION

Per City of Santa Ana requirements, this section of the report analyzes the daily operating conditions of key roadway segments within the vicinity of the proposed Project. A total of one (1) key roadway segment within the City of Santa Ana have been selected for evaluation and consist of the following locations:

A. Figueroa Street, between 5th Street and 1st Street *(City of Santa Ana)*

9.1 Roadway Link Capacities

The City of Santa Ana utilizes the methodology presented in the County Master Plan of Arterial Highways (MPAH) and the City of Santa Ana Circulation Element to determine LOS midblock locations, as summarized in ***Table 9-1***.

9.2 Roadway Link Level of Service Criteria

According to the City of Santa Ana, LOS D is the minimum acceptable condition that should be maintained for roadway segments. However, the City of Santa Ana has defined exceptions to this criteria in major development areas where LOS E is considered acceptable

If the daily roadway V/C ratio results in unacceptable LOS conditions, a peak hour link analysis is conducted to determine if the roadway operates at a satisfactory service level during the peak hours.

TABLE 9-1

ROADWAY SEGMENT CAPACITIES AND LEVEL OF SERVICE CRITERIA[26]

Roadway Classification	Lanes	Roadway Capacities					
		LOS A	LOS B	LOS C	LOS D	LOS E	LOS F
Principal Arterial	8D	45,000	52,500	60,000	67,500	75,000	> 75,000
Major Arterial	6D	33,900	39,400	45,000	50,600	56,300	> 56,300
Primary Arterial	4D	22,500	26,300	30,000	33,800	37,500	> 37,500
Secondary Arterial	4U	15,000	17,500	20,000	22,500	25,000	> 25,000
Divided Collector	2D	9,000	12,000	15,000	20,000	22,000	> 22,000
Collector	2U	7,500	8,800	10,000	11,300	12,500	> 12,500

[26] Source: *Guidance for Administration of the Orange County Master Plan of Arterials and Highways (2017).*

9.3 Roadway Segment Analysis Results

9.3.1 *Existing Plus Project Analysis*

Table 9-2 summarizes the results of the Existing Plus Project daily analysis for the one (1) key roadway segment. The first column (1) in *Table 9-2* presents a summary of existing daily traffic conditions. The second column (2) lists existing traffic conditions with the addition of traffic generated by the proposed Project. The third column (3) indicates whether the traffic associated with the Project will exceed the level of service thresholds defined in this report.

Existing Traffic Conditions

Review of Column 1 of *Table 9-2* indicates that the one (1) key roadway segment currently operates at acceptable LOS A.

Existing Plus Project Traffic Conditions

Review of Columns 2 and 3 of *Table 9-2* indicates that the one (1) key roadway segment is forecast to continue to operate at an acceptable service level on a daily basis with the addition of Project generated traffic to existing traffic and will not require improvements when compared to the LOS standards and thresholds specified in this report.

TABLE 9-2

EXISTING PLUS PROJECT ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY

Key Roadway Segment	Jurisdiction	Min. Acceptable LOS	Roadway Classification	No. of Lanes	(1) Existing Traffic Conditions		(2) Existing Plus Project Traffic Conditions		(3) Exceeds LOS Threshold
					Daily Volume	LOS	Daily Volume	LOS	Yes/No
A. Figueroa Street, between 5th Street and 1st Street	Santa Ana	D	Collector	2U	903	A	1,523	A	No

9.3.2 *Year 2028 Plus Project Analysis*

Table 9-3 summarizes the results of the Year 2028 Plus Project daily analysis for the one (1) key roadway segment. The first column (1) in *Table 9-3* presents a summary of Year 2028 Cumulative daily traffic conditions. The second column (2) lists Year 2028 Cumulative traffic conditions with the addition of traffic generated by the proposed Project. The third column (3) indicates whether the traffic associated with the Project will exceed the level of service thresholds defined in this report.

Year 2028 Cumulative Traffic Conditions

Review of Column 1 of *Table 9-3* indicates that the one (1) key roadway segment is forecast to operate at acceptable LOS A with the addition of ambient traffic growth and cumulative projects traffic.

Year 2028 Cumulative Plus Project Traffic Conditions

Review of Columns 2 and 3 of *Table 9-3* indicates that the one (1) key roadway segment is forecast to continue to operate at an acceptable service level on a daily basis with the addition of Project generated traffic in the Year 2028 and will not require improvements when compared to the LOS standards and thresholds specified in this report.

TABLE 9-3

YEAR 2028 ROADWAY SEGMENT LEVEL OF SERVICE SUMMARY

Key Roadway Segment	Jurisdiction	Min. Acceptable LOS	Roadway Classification	No. of Lanes	(1) Year 2028 Traffic Conditions		(2) Year 2028 Plus Project Traffic Conditions		(3) Exceeds LOS Threshold
					Daily Volume	LOS	Daily Volume	LOS	Yes/No
A. Figueroa Street, between 5th Street and 1st Street	Santa Ana	D	Collector	2U	948	A	1,568	A	No

10.0 CEQA Assessment of VMT, Active Transportation, & Public Transit

10.1 Vehicle Miles Traveled (VMT) Screening Analysis

The purpose of this Vehicle Miles Traveled (VMT) analysis is to evaluate the Project based on Senate Bill 743 (SB 743) requirements, as required in CEQA section 15064.3.

The City of Santa Ana has adopted criteria for evaluating VMT impacts under CEQA, and they are presented in the *City of Santa Ana Traffic Impact Study Guidelines* (September 2019).

There are three types of screening methods to effectively screen projects from project-level assessment: (1) Transit Priority Area (TPA) Screening; (2) Low VMT Area Screening; (3) Project Type Screening.

Projects located within a TPA may be presumed to have a less-than-significant impact on VMT absent substantial evidence to the contrary. A TPA is defined as a half-mile area around an existing "major transit stop" (i.e., a site containing an existing rail transit station, ferry terminal served by bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods), or an existing stop along a "high-quality transit corridor" (i.e., a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours). To identify if a project is in a TPA, Appendix A (Santa Ana Transit Priority Areas) of the City's guidelines is reviewed.

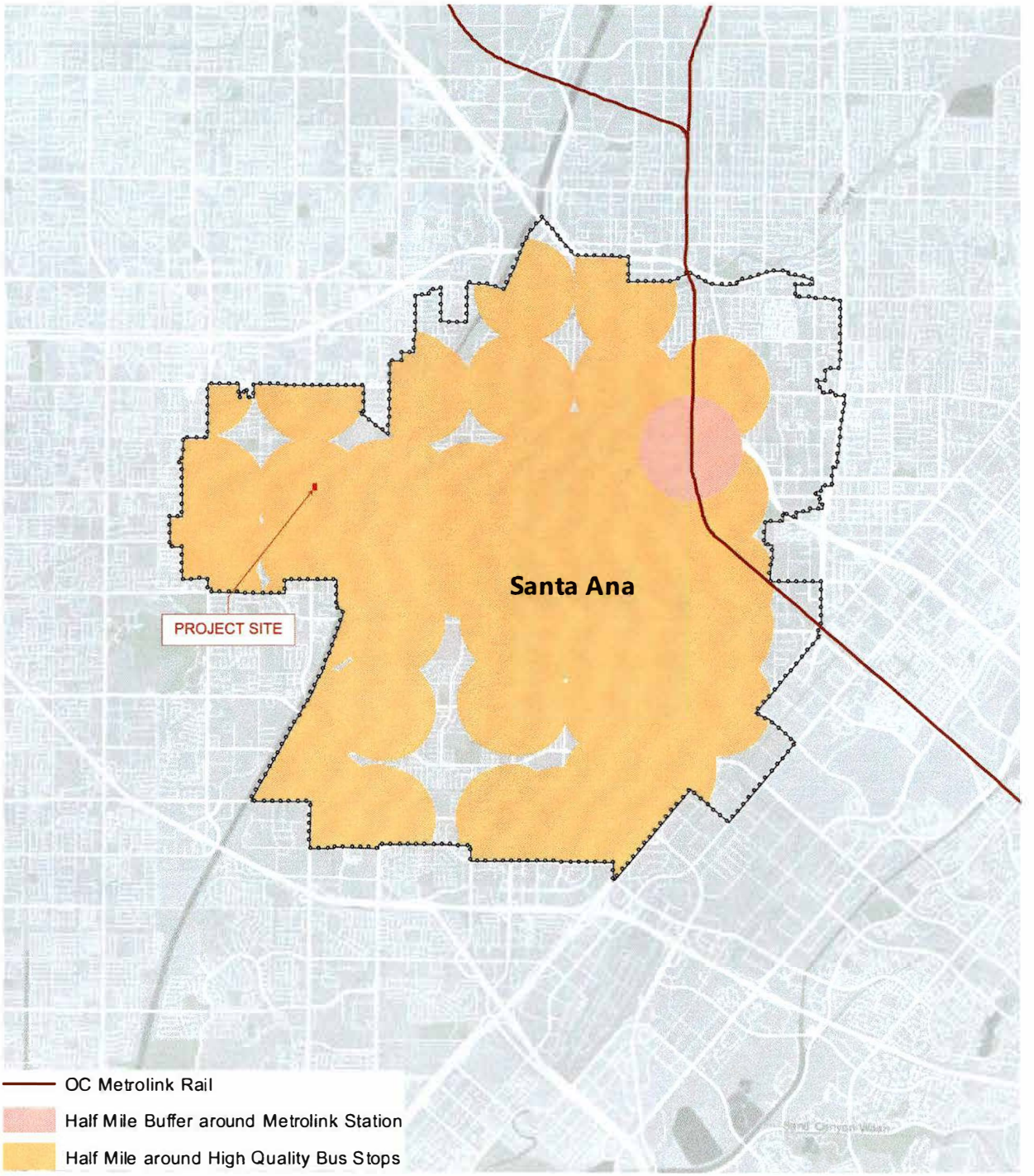
Residential and office projects located within a low VMT-generating area may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area. To identify if a project is in a TPA, Appendix B (VMT/SP in Santa Ana as Compared to Orange County Average) and Appendix C (Santa Ana Development Areas that Cannot Be Screened) of the City's guidelines are used.

Some project types have been identified as having the presumption of a less-than-significant impact absent substantial evidence to the contrary because their uses are local serving in nature, including local-serving retail uses with less than 50,000 SF, and projects generating less than 110 net daily trips.

Based on the application of the City's screening criteria described above, and using Appendices A, B, and C in the City's guidelines, it was determined that the Project is located in a TPA (as shown on ***Figure 10-1***) and is located in a low-VMT generating area (as shown on ***Figures 10-2*** and ***10-3***); and is therefore screened out from further VMT project-level assessment because it can be presumed to have less-than-significant impact on VMT.

10.2 Active Transportation and Public Transit Screening Analysis

Even though the City's traffic impact analysis guidelines do not specify the need for Active Transportation and Public Transit Screening Analysis, potential impacts to active transportation



n:\4700\2234737 - first harbor mixed use, santa ana\dwg\4737 f10-1.dwg LDP 16:27:46 10-23-2023 kopulsky

SOURCE: CITY OF SANTA ANA

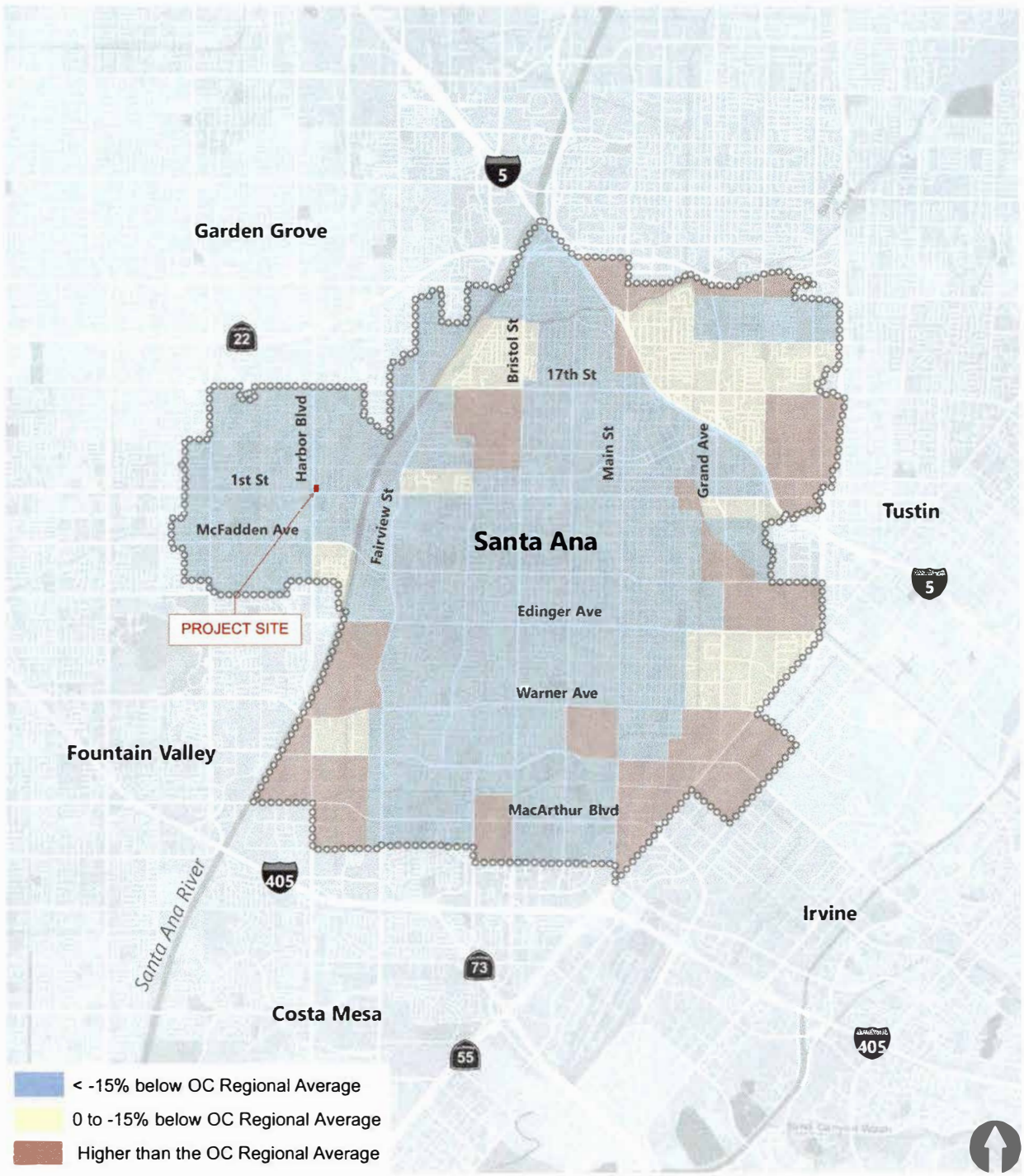
LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

FIGURE 10-1

SANTA ANA TRANSIT PRIORITY AREAS

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



n:\4700\2234737 - first harbor mixed use, santa ana\dwg\4737 f10-2.dwg LDP 16:28:36 10-23-2023 kopulsky

SOURCE: CITY OF SANTA ANA

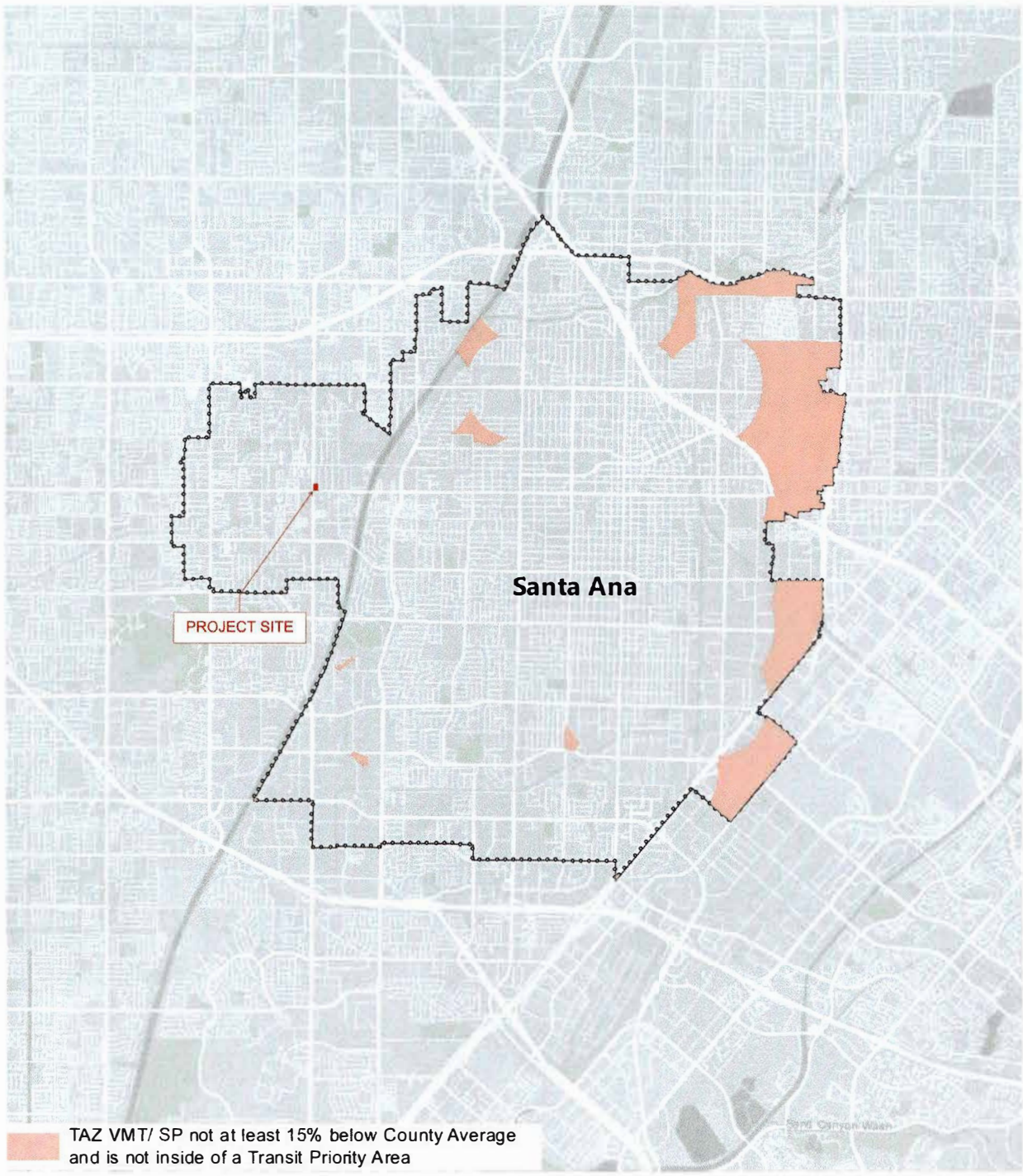
LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

FIGURE 10-2

VMT/SP IN SANTA ANA AS COMPARED TO ORANGE COUNTY AVERAGE

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA



SOURCE: CITY OF SANTA ANA

LINSCOTT LAW & GREENSPAN engineers

N NO SCALE

FIGURE 10-3

SANTA ANA DEVELOPMENT AREAS THAT CANNOT BE SCREENED

FIRST HARBOR MIXED-USE PROJECT, SANTA ANA

(pedestrian and bicycle) and public transit facilities and circulation were evaluated in this report by determining whether the Project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities.

Sidewalks are provided on both sides of the street throughout most of the City. Crosswalks, pedestrian push buttons, and pedestrian indication lights are provided at all signalized intersections adjacent to the Project site. The proposed Project plans to retain this existing pedestrian infrastructure.

The proposed Project will encourage walking by integrating pedestrian connections internally, as well as to nearby activities. Pedestrian circulation would be provided via existing public sidewalks along Harbor Boulevard, 1st Street, and Figueroa Street within the vicinity of the Project. The proposed Project will protect the existing sidewalk along Project frontage on these roadways. The existing sidewalk system within the Project vicinity provides direct connectivity to the existing development located along major thoroughfares.

Long-term bicycle storage for the residential and retail uses will be provided in two bike rooms, totaling 96 long-term bike spaces. An additional four (4) bicycle spaces will be provided for short-term bicycle storage purposes. According to the City of Santa Ana Bikeway Master Plan, Class IV Cycle Tracks are planned on Harbor Boulevard and 1st Street along the Project's frontage.

Figure 1-1 illustrates the location of public transit stops near the Project site, and Section 3.3 (Existing Public Transportation) describes the public transit-rich setting for the Project.

Based on the above, the proposed Project would not have an impact on the existing multimodal network; specifically, it would not: (1) conflict with a plan, ordinance, or policy related to bicycle, pedestrian, and public transit; (2) substantially increase hazards due to a geometric design feature; or (3) result in inadequate emergency access. The proposed site plan for the Project will maintain existing sidewalks and access to public transit, construct new pedestrian connections on site and with adjoining uses, and meet City design standards regarding site access, multimodal connectivity within the internal site circulation system, emergency access, and on-site parking.

11.0 PARKING ANALYSIS AND PARKING MANAGEMENT PLAN (PMP)

11.1 City Code Parking Requirements

City Code parking requirements for the Project were calculated based on the parking ratios from Table 3-7 (Off-Street Parking Standards) on Page 3-11 of the October 2014 *Harbor Mixed Use Transit Corridor Plan* for the Transit Node District. ***Table 11-1*** presents a summary of the parking ratios applied to calculate the City Code requirements for residents, residential guests, and non-residential/retail uses.

As indicated on *Table 11-1*, the application of Specific Plan parking ratios to the various Project components results in a total City Code requirement of 313 spaces. Comparing this Code requirement against the proposed parking supply of 333 standard spaces results in a Code-based surplus of 20 spaces. Based on this, the Project's parking supply provisions would be adequate in meeting the City Code requirements for the Project.

11.2 Parking Management Plan (PMP)

A PMP defines how parking for a development would be managed and what measures would be implemented to assure that parking needs in the aggregate and in localized sub-areas would be adequately served. A TDM Program identifies measures that could potentially reduce parking needs through the provision of physical and/or operational improvements that promote the use of alternative modes of travel (i.e., public transit, bicycle, walking).

Recommendations for PMP measures are provided in this study to ensure competing parking needs for all Project tenants, guests, and employees are adequately managed and controlled to facilitate parking efficiency. Implementation of PMP measures will help ensure that the Project's parking supply will be sufficient, convenient/accessible, responsive to varying demand, and provide parking contingencies in meeting the parking needs of all users (i.e., residential, retail).

It is recommended that when the Property Owner and/or Property Management Company deems it necessary, the following key Parking Management Strategies be implemented by the Property Owner and/or Property Management Company:

- The PMP should identify where the retail/commercial employees park within the site.
- The PMP should identify where location of short-term parking spaces for service retail uses and/or food uses (take-out/curb side service, etc.).
- The PMP should direct residents to park in their assigned spaces and provide parking to accommodate resident guest parking needs.
- The PMP should restrict vehicles from exceeding the time restriction on any short-term parking.
- The PMP should provide rules of conduct for tenants and guests to abide by. Strict enforcement shall be adhered to.

TABLE 11-1

CITY CODE PARKING REQUIREMENTS[27]

Project Description	Size	Code Parking Ratio	Spaces Required
Residential			
▪ Residents	183 DU	1 parking space for dwelling unit	183 Spaces
▪ Residential Guests	183 DU	0.5 visitor spaces per dwelling unit	92 Spaces
▪ Residential Guests	15,182 SF	1 parking space per 400 SF	38 Spaces
		Total Code Parking Requirement:	**313 Spaces**
		Proposed Parking Supply:	**333 Spaces**
		Total Parking Surplus (+) or Deficiency (-):	**+20 Spaces**

[27] Source: *City of Santa Ana* parking ratios from Table 3-7 (Off-Street Parking Standards) on Page 3-11 of the October 2014 *Harbor Mixed Use Transit Corridor Plan* for the Transit Node District

- The PMP should adopt the mindset with the following parking goals:
  1. Meet or exceed the minimum requirements for total parking spaces for the Project's retail/commercial component, as well as the residential component.
  2. Provide all resident and guest parking spaces onsite.
  3. Provide flexible on-site parking opportunities for commercial and resident parking that respect both commercial tenants and guest parking needs.
  4. Enact policies that promote parking efficiencies and effective communication between Property Management, commercial tenants and residents.
  5. Enact policies of enforcement by Property Management that are sufficiently flexible to meet current and changing parking demands, while imposing penalties, if necessary.

11.3 PMP Measures

The following measures are available to the Project to mitigate any parking impacts or deficiencies in the event the proposed on-site parking supply is determined to be greater than what is provided.

Retail/Commercial Component

1. The Property Owner/Property Management Company will implement a reciprocal parking program to ensure the pool of parking for the retail/commercial component and guest of the residential component is available to be "shared".

2. The Property Owner/Property Management Company will work with tenants of the retail uses to implement an employee parking program, with the goal of providing convenient and accessible shopping experience for the customers of the retail uses, and to leave the most desirable parking spaces within the parking structure for use by customers. The location of designated employee parking spaces will be developed in collaboration between Property Owner/Property Management Company and the tenants. The employee parking spaces will be identified with a white or yellow circle, and/or other signage recommended by the the Property Owner/Property Management Company. It is noted that these spaces will be open for customer use.

3. The Property Owner/Property Management Company will work with tenants of the retail uses to identify the need for "short term/time restricted spaces" on an as need basis, dependent on the needs of the proposed retail and/or food use. These short-term spaces will most likely be designated along the internal roadways. The short-term spaces may be used for "curbside/take out" and/or for service retail-type users. The number and location of spaces will be determined by Property Owner/Property Management Company and the potential tenants.

4. If the Property Owner/Property Management Company determines additional parking is needed to meet the parking requirements of the retail/commercial component of the Project and/or desires to provide "enhanced customer service", the Property Owner/Property Management Company shall implement a valet/valet assist program. The hours of operation of the valet/valet assist program will be determined by the Property Owner/Property Management Company, and subject to actual demand, may include weekdays and weekends, between the period 11:00 AM and 2:00 PM and 5:00 PM to 10:00 PM, to enhance the customer experience accommodate the "lunch time" and "dinner" crowd of the proposed restaurant/food uses.

Residential Component

5. The Property Owner/Property Management Company shall determine the allocation of parking spaces for resident tenants and location of guest parking spaces, and assign residential parking spaces accordingly.

6. The Property Owner/Property Management Company, if deemed necessary, may allow resident guest to utilize the valet program identified in Measure No. 4, as an enhanced service. To implement the valet operation, the Property Owner/Property Management Company would engage the services of a well-established valet operations company similar to PMP measure No. 4.

7. Every resident will be required to register their vehicle. The registered owner must be a lease holding resident. This registration will be updated annually at the time of recertification. If valid registration is not obtained from the Property Owner/Property Management Company, the vehicle may be towed at the owners' expense.

8. Vehicles lacking current registration may be towed by the Property Owner/Property Management Company. The storage of inoperable or unregistered vehicles is prohibited.

9. If a resident obtains a new vehicle, the resident must provide new registration (transferring registration is not permissible).

10. Vehicles may not occupy unassigned spaces for more than twenty-four (24) hours, without contacting the leasing office in advance. Violators are subject to towing at the vehicle owner's expense.

11. Resident guests will be able to park, on a first-come-first-served basis, within the spaces designated for guest parking.

12. Violation of the PMP strategies contained herein may result in the towing of the vehicle at the vehicle owner's expense.

13. The enforcement of resident and resident guest parking on-site parking requirements summarized herein will be handled by the Property Owner/Property Management Company to ensure compliance.

Retail/Commercial & Residential Component

14. To enhance efficient and comfortable movement of all users throughout the site, and access to parking spaces and valet pick-up/drop-off staging areas (if implemented), and support "Park Once" strategies, provide a detailed wayfinding/signage program that meets City standards and requirements.

15. The parking conditions for the Project will be reviewed/monitored on a quarterly basis by the Property Owner/Property Management Company and appropriate actions detailed above will be taken to ensure that the necessary PMP measures are being implemented.

16. Designate areas on site for quick and efficient pick-up and drop-off of passengers to facilitate ridesharing and use of rideshare services such as Uber and Lyft.

SUMMARY OF FINDINGS AND CONCLUSIONS

- ***Project Description*** – The First Harbor Mixed-Use Project proposes to develop a nine-story building with 183 multifamily residential units (including studios, 1-bedroom, 2-bedroom, and 3-bedroom units) and 15,182 SF of retail on the ground floor. Of the 183 total units proposed, 15% (28 units) would be designated as low-income housing. The residential and retail uses would wrap around a four-level parking structure, consisting of two subterranean levels, one street/ground level, and a second above-ground level, and provide a total of 333 standard parking spaces.

  As presented previously, *Figure 1-1* is the Vicinity Map, which shows the general location of the Project and surrounding street system. ***Figure 2-1*** is an existing aerial photograph of the Project site.

  The Project is expected to be completed and fully occupied by Year 2028.

  As part of the Project-specific improvements planned at the intersection of Harbor Boulevard and 1st Street (Intersection No. 2) previously approved by the City, the Project will be adding a right-turn pocket (with a total length of 213 feet, comprised of 186 feet of storage length, and 27 feet of transition length) along 1st Street on the westbound approach of the intersection.

- ***Study Scope*** – The following two (2) key study intersections and one (1) key roadway segment were selected for detailed peak hour level of service analyses under Existing Traffic Conditions, Existing Plus Project Traffic Conditions, Year 2028 Cumulative Traffic Conditions and Year 2028 Cumulative plus Project.

  Key Study Intersections
  1. Harbor Boulevard at 5th Street *(City of Santa Ana)*
  2. Harbor Boulevard at 1st Street *(City of Santa Ana)*

  Key Roadway Segments
  A. Figueroa Street, between 5th Street and 1st Street *(City of Santa Ana)*

- ***Existing Traffic Conditions*** – All key study intersections currently operate at an acceptable level of service (LOS) during the AM and PM peak hours when compared to the LOS criteria defined in this report.

- ***Project Trip Generation*** – The proposed Project is forecast to generate approximately 1,575 daily trips, with 100 trips (36 inbound, 64 outbound) produced in the AM peak hour and 131 trips (73 inbound, 58 outbound) produced in the PM peak hour on a "typical" weekday.

- ***Related Projects Traffic Characteristics*** – Ten (10) related projects were considered as part of the cumulative background setting. The ten (10) related projects are forecast to generate 4,705 daily trips, with 245 trips (103 inbound, 142 outbound) anticipated during the AM peak hour and 287 trips (162 inbound, 125 outbound) produced during the PM peak hour.

- ***Existing Plus Project Traffic Conditions*** – The traffic associated with the proposed Project will not require improvements at any of the two (2) key study intersections, when compared to the LOS standards and thresholds specified in this report. The two (2) key study intersections are forecast to operate at LOS D or better during the weekday AM and PM peak hours with the addition of Project traffic.

- ***Year 2028 Cumulative Traffic Conditions Plus Project*** – The traffic associated with the proposed Project will not require improvements at any of the two (2) key study intersections, when compared to the LOS standards and thresholds specified in this report. The two (2) key study intersections are forecast to continue to operate at acceptable levels of service (LOS D or better) during the AM and PM peak hours with the addition of Project traffic to Year 2028 Cumulative traffic conditions.

- ***Site Access Assessment*** – Harbor Boulevard at Project Driveway 1 and Figueroa Street at Project Driveways 2 and 3 are forecast to operate at LOS D or better during the AM peak hour and PM peak hour. As such, Project access will be adequate. Motorists entering and exiting the Project site will be able to do so without undue congestion. Furthermore, the anticipated queues at each of the Project driveways are anticipated to be no more than one (1) vehicle during the AM and PM peak hours.

  To supplement the level of service analysis, a gap analysis has been completed along Harbor Boulevard as well as at the intersection of Figueroa Street at 1st Street to determine if the existing gaps along the main arterial roadways are considered adequate to accommodate ingress and egress at the proposed Project driveways. The gap analysis indicates that there are more gaps than vehicles exiting, therefore, it can be concluded that both right-turning and left-turning vehicles will have adequate gaps along Harbor Boulevard and/or 1st Street when exiting the Project site.

- ***Sight Distance Evaluation*** – Sight lines for the southbound movements at the intersection of Figueroa Street at 1st Street, as well as at Project Driveway 1, along Harbor Boulevard, are expected to be adequate. Sight lines at Project Driveways 2 and 3, along Figueroa Street, will be obstructed by vehicles parked on-street along Figueroa Street. As a result, it is recommended to restrict on-street parking along the Project frontage of Figueroa Street to help facilitate and enhance visibility for outbound vehicles.

- ***Queuing Assessment*** – Adequate queue storage length is currently provided for the northbound left-turn/"U-turn" lane located at the intersection of Harbor Boulevard and 5th Street based on the anticipated maximum 95th percentile queue length under Existing, Existing plus Project, Year 2028 Cumulative and Year 2028 Cumulative plus Project traffic conditions.

  Although the existing and future 95th percentile queues reported for the southbound left-turn/"U-turn" and westbound left-turn movements at the intersection of Harbor Boulevard and 1st Street exceed the existing storage lengths for the respective movements, these are existing queue storage deficiencies not caused by the Project. The 95th percentile queue lengths are

conservative estimates of potential queues. It should be noted further that the Project-generated traffic that could be added to the southbound and westbound left-turn movements are nominal (i.e., southbound left-turn: 15 AM peak hour trips, 36 PM peak hour trips; westbound left-turn: 11 AM peak hour trips, 16 PM peak hour trips), corresponding to a maximum of one vehicle on a given cycle.

Adequate queue storage length would be provided for the planned westbound right-turn pocket at the intersection of Harbor Boulevard and 1st Street based on the anticipated maximum 95th percentile queue length under Existing plus Project, and Year 2028 Cumulative plus Project (during the AM peak hour only) traffic conditions.

Although the future 95th percentile queue length of 232 feet during the PM peak hour would exceed the proposed pocket length of 213 feet, there is an additional 27 feet of queue storage on westbound 1st Street between the end of the future right-turn pocket and Figueroa Street that would result in a total storage length of 240 feet, which could accommodate the forecasted queue length of 232 feet.

Based on the considerations above, improvements are not recommended.

- ***Existing Plus Project Roadway Segment Evaluation*** – The roadway segment at Figueroa Street, between 5th Street and 1st Street is forecast to continue to operate at an acceptable service level on a daily basis with the addition of Project generated traffic to existing traffic and will not require improvements when compared to the LOS standards and thresholds specified in this report.

- ***Year 2028 Cumulative Plus Project Roadway Segment Evaluation*** – The roadway segment at Figueroa Street, between 5th Street and 1st Street is forecast to continue to operate at an acceptable service level on a daily basis with the addition of Project generated traffic in the Year 2028 and will not require improvements when compared to the LOS standards and thresholds specified in this report.

- ***VMT Screening Assessment*** – Based on the application of the City's screening criteria, and using Appendices A, B, and C in the City's guidelines, it was determined that the Project is located in a TPA and is in a low-VMT generating area; and is therefore screened out from further VMT project-level assessment because it can be presumed to have less-than-significant impact on VMT.

- ***Parking Analysis and PMP*** - The application of Specific Plan parking ratios to the various Project components results in a total City Code requirement of 313 spaces. Comparing this Code requirement against the proposed parking supply of 333 standard spaces results in a Code-based surplus of 20 spaces. Based on this, the Project's parking supply provisions would be adequate in meeting the City Code requirements for the Project.

Recommendations for PMP measures are provided in this study to ensure competing parking needs for all Project tenants, guests, and employees are adequately managed and controlled to facilitate parking efficiency.