



CITY OF COSTA MESA

PLANNING COMMISSION

Agenda

Monday, February 12, 2024

6:00 PM

**City Council Chambers
77 Fair Drive**

The Commission meetings are presented in a hybrid format, both in-person at City Hall and as a courtesy virtually via Zoom Webinar. If the Zoom feature is having system outages or experiencing other critical issues, the meeting will continue in person.

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- During the Public Comment Period, use the “raise hand” feature located in the participants’ window and wait for city staff to announce your name and unmute your line when it is your turn to speak. Comments are limited to 3 minutes, or as otherwise directed.

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4. Additionally, members of the public who wish to make a written comment on a specific agenda item, may submit a written comment via email to the PCPublicComments@costamesaca.gov. Comments received by 12:00 p.m. on the date of the meeting will be provided to the Commission, made available to the public, and will be part of the meeting record.

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Note regarding agenda-related documents provided to a majority of the Commission after distribution of the agenda packet (GC §54957.5): Any related documents provided to a majority of the Commission after distribution of the Agenda Packets will be made available for public inspection. Such documents will be posted on the city's website and will be available at the City Clerk's office, 77 Fair Drive, Costa Mesa, CA 92626.

All cell phones and other electronic devices are to be turned off or set to vibrate. Members of the audience are requested to step outside the Council Chambers to conduct a phone conversation.

Free Wi-Fi is available in the Council Chambers during the meetings. The network username available is: CM_Council. The password is: cmcouncil1953.

As a LEED Gold Certified City, Costa Mesa is fully committed to environmental sustainability. A minimum number of hard copies of the agenda will be available in the Council Chambers. For your convenience, a binder of the entire agenda packet will be at the table in the foyer of the Council Chambers for viewing. Agendas and reports can be viewed on the City website at <https://costamesa.legistar.com/Calendar.aspx>.

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PLANNING COMMISSION REGULAR MEETING

FEBRUARY 12, 2024 – 6:00 P.M.

ADAM ERETH
Chair

RUSSELL TOLER
Vice Chair

JOHNNY ROJAS
Planning Commissioner

ANGELY ANDRADE
Planning Commissioner

Karen Klepack
Planning Commissioner

JON ZICH
Planning Commissioner

JIMMY VIVAR
Planning Commissioner

TARQUIN PREZIOSI
Assistant City Attorney

CALL TO ORDER

PLEDGE OF ALLEGIANCE

ROLL CALL

ANNOUNCEMENTS AND PRESENTATIONS

PUBLIC COMMENTS – MATTERS NOT LISTED ON THE AGENDA
Comments are limited to three (3) minutes, or as otherwise directed.

PLANNING COMMISSIONER COMMENTS AND SUGGESTIONS

CONSENT CALENDAR:

All matters listed under the Consent Calendar are considered to be routine and will be acted upon in one motion. There will be no separate discussion of these items unless members of the Planning Commission, staff, or the public request specific items to be discussed and/or removed from the Consent Calendar for discussion. The public can make this request via email at PCPublicComments@costamesaca.gov and should include the item number to be addressed. Items removed from the Consent Calendar will be discussed and voted upon immediately following Planning Commission action on the remainder of the Consent Calendar

1. [JANUARY 22, 2024 UNOFFICIAL MEETING MINUTES](#) [24-060](#)

RECOMMENDATION:

Planning Commission approve the regular meeting minutes for the January 22, 2024 Planning Commission meeting.

Attachments: [JANUARY 22, 2024 UNOFFICIAL MEETING MINUTES](#)

PUBLIC HEARINGS:

1. [MINOR CONDITIONAL USE PERMIT APPLICATION ZA-22-11 FOR A 24-061 DRIVE-THROUGH OPERATION AND A REDUCTION OF REQUIRED PARKING; DEVELOPMENT REVIEW \(PDVR-23-0003\) TO ALLOW THE DEMOLITION OF AN EXISTING 25,159-SQUARE-FOOT COMMERCIAL BUILDING AND TO CONSTRUCT A NEW 2,913-SQUARE-FOOT RAISING CANES RESTAURANT WITH 1,303 SQUARE FEET OF COVERED OUTDOOR PATIO AREA; MINOR MODIFICATION PMND-23-0003 TO ALLOW FOR A DECREASE OF 20% IN REQUIRED FRONT YARD/LANDSCAPE SETBACK; FOR A PROPERTY LOCATED AT 1595 OLD NEWPORT BOULEVARD](#)

RECOMMENDATION:

Staff recommends the Planning Commission adopt a Resolution to:

1. Find that the project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) per CEQA Guidelines Section 15303 (Class 3), New Construction and Conversion of Small Structures and Section 15332 (Class 32 In-fill Development Projects); and
2. Approve ZA-22-011, PDVR-23-0003, and PMND-23-0003 subject to conditions of approval.

Attachments: [Agenda Report](#)

- [1. Draft Planning Commission Resolution](#)
- [2. Applicant Letter](#)
- [3. Vicinity Map](#)
- [4. Zoning Map](#)
- [5. Site Photos](#)
- [6. Air Quality Memorandum](#)
- [7. Noise Memorandum](#)
- [8. Traffic Study](#)
- [9. Project Plans](#)
- [10. Public Comments](#)

OLD BUSINESS: NONE

NEW BUSINESS: NONE

DEPARTMENTAL REPORTS:

1. PUBLIC WORKS REPORT
2. DEVELOPMENT SERVICES REPORT

CITY ATTORNEY REPORTS:

1. CITY ATTORNEY REPORT

ADJOURNMENT

PLANNING COMMISSION MEETING:

Costa Mesa Planning Commission meets on the second and fourth Monday of each month at 6:00 p.m.

APPEAL PROCEDURE:

Unless otherwise indicated, the decision of the Planning Commission is final at 5:00 p.m., seven (7) days following the action, unless an affected party files an appeal to the City Council, or a member of City Council requests a review. Applications for appeals are available through the City Clerk's Office; please call (714) 754-5225 for additional information.

CONTACT CITY STAFF:

77 Fair Drive, Costa Mesa, CA 92626
Planning Division (714) 754-5245
planninginfo@costamesaca.gov



CITY OF COSTA MESA

Agenda Report

77 Fair Drive
Costa Mesa, CA 92626

File #: 24-060

Meeting Date: 2/12/2024

TITLE:

JANUARY 22, 2024 UNOFFICIAL MEETING MINUTES

DEPARTMENT: ECONOMIC AND DEVELOPMENT SERVICES DEPARTMENT/ PLANNING DIVISION

RECOMMENDATION:

Planning Commission approve the regular meeting minutes for the January 22, 2024 Planning Commission meeting.

UNOFFICIAL UNTIL APPROVED

**MEETING MINUTES OF THE CITY OF
COSTA MESA PLANNING COMMISSION**

January 22, 2024

CALL TO ORDER

The Chair called the meeting to order at 6:00 p.m.

PLEDGE OF ALLEGIANCE TO THE FLAG

Chair Ereth led the Pledge of Allegiance.

ROLL CALL

Present: Chair Adam Ereth, Commissioner Angely Andrade, Commissioner Johnny Rojas, Commissioner Vivar, Commissioner Jon Zich

Absent: Vice Chair Russell Toller, Commissioner Karen Klepack,

Officials Present: Director of Economic and Development Services Jennifer Le, Assistant Director of Development Services Scott Drapkin, Assistant City Attorney Tarquin Preziosi, Assistant Planner Caitlyn Curley, Contact Planner Michelle Halligan, City Engineer Seung Yang and Recording Secretary Anna Partida

ANNOUNCEMENTS AND PRESENTATIONS:

None.

PUBLIC COMMENTS – MATTERS NOT LISTED ON THE AGENDA:

None.

COMMISSIONER COMMENTS AND SUGGESTIONS:

Commissioner Vivar thanked those in attendance. He stated he was looking forward to the all the new year and all it has to bring for the Commission.

Commissioner Zich encouraged the public to voice their concerns and opinions.

Commissioner Andrade wished everyone a Happy New Year and reminded the public of the Fairview Development Center feed back session at the Senior Center.

Chair Ereth wished everyone Happy New Year and thanked those joining the meeting on Zoom.

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CONSENT CALENDAR:

No member of the public nor Commissioner requested to pull a Consent Calendar item.

1. APPROVAL OF MEETING MINUTES: DECEMBER 11, 2023.

MOVED/SECOND: Vivar/Rojas

MOTION: Approve recommended action for Consent Calendar Item No. 1.

The motion carried by the following roll call vote:

Ayes: Ereth, Andrade, Rojas, Vivar, Zich

Nays: None

Absent: Toler, Klepack

Abstained: None

Motion carried: 5-0

ACTION: Planning Commission approved the minutes of the regular meeting of the December 11, 2023.

Jennifer Le introduced Cecilia Gallardo, the City's new Assistant City Manager and Administrative Services Director, and Bill Rodrigues the Development Services Departments new Planning and Sustainable Development Manager.

PUBLIC HEARINGS**1. LOCAL HISTORIC REGISTER FOR THE "LEROY ANDERSON HOUSE" (208 MAGNOLIA STREET)**

Project Description: An application for placement of 208 Magnolia Street on the City's local Historic Register, and approval of a Mills Act Contract. The subject property is not currently listed on any historic registers but is identified in the 1999 Historic Resources Survey as eligible for local landmark designation and is also identified as a potential historical resource in the City's General Plan.

Environmental Determination: Exempt from CEQA pursuant to CEQA Guidelines Section 15061(b)(3) ("General Rule") in that there is no possibility that the addition of the Leroy Anderson House to the Local Register will have a significant impact on the environment.

One ex-parte communication reported.

Chair Ereth held a call with Newport-Mesa Unified School District executives, a Parks Commissioner and one member of the Historical Preservation Committee.

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Caitlyn Curley, Assistant Planner, presented the staff report.

The Commission asked questions of staff including discussion of:

Commissioner Viviar asked staff if the entire property would be considered historic or only the structure. Staff responded that the structure would be designated historic. He continued his question by asking if the 1997 garage addition would be part of the historical designation. Staff stated it would be a part of the designation because the architectural integrity of the building was maintained.

Chair Ereth asked staff if the commission was to look at the additions to the property or only the original aspects of the house that were still standing. Staff responded that the historic review included the entire structure.

Commissioner Zich asked staff if the property owner could build an ADU. Staff responded that any changes to any Mills Act properties receive a Certificate of Appropriateness before changes can be made to an historic structure and that an ADU could be considered. Commissioner Zich asked if special permissions were required for all alterations the property owner would like to make. Staff responded that the property owner would need City permission to make any alterations. Zich asked about the required maintenance that needs to be completed on the property under the Mills Act. Staff responded that the owner could choose not to complete the maintenance. However, they would be subject to loss of any historic incentives at Councils' discretion.

Chair Ereth asked staff about the tax reduction the owner would receive for being part of the Mills Act. He stated that the tax reduction and the required property maintenance are not comparable; the owner would be paying more to maintain the historic integrity of the property. Staff responded that the tax reduction is only to assist the owner with the cost of the required maintenance. Chair Ereth asked staff what would happen if the property owner decided to withdraw from their Mills Act Contract before the necessary maintenance is to be completed.

Commissioner Andrade asked staff about how this designation would benefit the city. Staff responded informing the commission that there would be a plaque that would be provided to the property owner and staff would speak more with the historic society on community outreach efforts to encourage other potential historic properties to consider historic program involvement.

Chair Ereth inquired about the inspection fees that could be collected and asked staff if the property owner could pick and choose the required maintenance or do they have to follow the contract completely. Staff stated the maintenance timeline is somewhat flexible. The Chair asked staff about the future of the historic program and what they hoped to accomplish.

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Commissioner Zich asked if the address of the historic sites are publicly available and what the benefits were for the City to enter into the Mills Act Contract with this property owner. Staff responded that the addresses are publicly available on the City's website and the benefit for the city is that it would help to maintain its historical integrity, which is considered a General Plan priority.

Commissioner Vivar asked staff if the last approved Mills Act property also has a plaque and if that property also has additions to the structure. Staff responded stating that the property was relocated, refurbished and a plaque will be offered to them. Commissioner Vivar asked if the Mills Contract runs with the land. Staff confirmed it does.

The Chair opened the Public Hearing.

The Chair opened public comments.

No public comments.

The Chair closed public comments.

The Chair closed the Public Hearing.

Commissioner Andrade made a motion. Seconded by Commissioner Rojas.

The Commission discussed the motion including excitement about maintaining the integrity of the city and those in opposition to the motion their concerns for community benefit and structural integrity.

MOVED/SECOND: Andrade/Rojas

MOTION: Approve staff's recommendation.

The motion carried by the following roll call vote:

Ayes: Ereth, Andrade, Rojas

Nays: Zich, Vivar

Absent: Toler, Klepack

Recused: None

Motion carried: 3-2

ACTION: The Planning Commission adopted a resolution to:

1. Recommend that the City Council designate the property on the City's local Historic Register by adoption of a City Council resolution; and
2. Recommend the City Council direct Planning staff to finalize a draft Mills Act Contract for City Council consideration and approval.

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RESOLUTION PC-2024-01 - A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COSTA MESA, CALIFORNIA RECOMMENDING THAT THE CITY COUNCIL APPROVE THE ADDITION OF 208 MAGNOLIA STREET TO THE LOCAL HISTORIC REGISTER PURSUANT TO TITLE 13, ARTICLE 14 (HISTORIC PRESERVATION) OF THE COSTA MESA MUNICIPAL CODE AND APPROVE A MILLS ACT CONTRACT

The Chair explained the appeal process.

2. ORDINANCE TO AMEND TITLE 13 (PLANNING, ZONING AND DEVELOPMENT) OF THE COSTA MESA MUNICIPAL CODE AND ORDINANCE TO AMEND TITLE 9 (LICENSES AND BUSINESS REGULATIONS) FOR MODIFICATIONS TO THE CITY'S RETAIL CANNABIS PROVISIONS

CMMC CODE AMENDMENT AND ORDINANCE NO. 2023-XX. The proposed code amendment that would modify Title 13 (Planning, Zoning, and Development) of the CMMC regarding the City's retail cannabis provisions and also includes requisite code modifications required in Title 9 (Business Licenses) that are specifically applicable to the City's retail cannabis program.

Environmental Determination: The ordinance is exempt from the provisions of the California Environmental Quality Act (CEQA) per CEQA Guidelines Section 15061(b)(3) (General Rule).

Four ex-parte communications reported.

Commissioner Viviar received emails from two members of the public.

Commissioner Zich received two emails and had telephone conversations with members of the public. He also spoke with a cannabis applicant.

Commissioner Andrade received two emails from members of the public.

Chair Ereth received two emails from members of the public.

Michelle Halligan, Contract Planner, presented the staff report.

The Commission asked questions of staff including discussion of:

Commissioner Vivar asked staff about the Cannabis Business Permit (CBP) cap and if the CBP would be transferrable to a new owner. Staff responded by informing Commissioner Vivar that a new owner would have to go through the application CBP process, that the CBP does not run with the land and the operations require a renewal every two years.

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Commissioner Andrade requested information on the process the city intends to take going from 30 CBPs to 15 CBPs. Staff responded explaining the application process and review requirements.

Commissioner Rojas asked for clarification on how many Cannabis applications are still in CBP process. Staff responded by explaining that the cannabis applications still waiting have the option to continue to wait or to withdraw their application.

Chair Ereth asked how many applications have received a notice to proceed to Planning Commission hearing. Staff stated there were approximately eight. He asked staff for clarification on when and how cannabis businesses report earnings to the city. Mr. Preziosi described that the Code allows staff to make reasonable requests for cannabis sales reports and that staff seeks to provide more clarity regarding quarterly reporting. The Chair also asked about the existing definition of a youth center. Mr. Preziosi responded that the City Council took the basis for the youth center definition from the State Health and Safety Code, which was established long before shopping centers frequently featured youth-oriented businesses, and updated the definition to exempt tutoring, martial arts studios, and similar youth-oriented businesses.

Commissioner Zich expressed that he would like the City Council to reconsider the definition of a youth center and other sensitive use separations. Staff showed a slide of the additional cannabis topics that were described by Commissioner Zich at the December 11, 2023, Planning Commission meeting for the public to see. The list reads as follows: Definition of a youth center; Separation from youth centric businesses; Adding separation from parks (not just playgrounds); Changing the process of evaluating existing nonconforming uses when applying for a conditional use permit; and establishing a separation from cannabis businesses and group and recovery homes.

Then Commissioner Andrade asked staff to investigate how Long Beach and other communities that allow cannabis retail uses define youth serving facilities to present to City Council for their consideration.

Chair Ereth continued his questions for staff and asked if the modifications regarding eligibility for cannabis applicants due to illegal activities could impact the applicant in the process of obtaining a CBP. Mr. Preziosi answered affirmatively, that proposed owners or operators could be determined to be ineligible to obtain a Cannabis Business Permit. The Chair asked staff why the code does not allow physicians to operate from cannabis storefronts. Assistant Director Drapkin responded that disallowing physicians from working and prescribing onsite reduce the issuance of unwarranted medical cannabis cards.

The Chair opened the Public Hearing.

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The Chair opened public comments.

Candace Hawes, asked for the limitation on the number of storefronts, but wished the limit had been established before accepting applications.

Janet Loftus stated she preferred to not have cannabis storefronts in Costa Mesa. However, a limit to the number of dispensaries is an improvement from the current standard. Costa Mesa will have the highest number of cannabis storefronts per capita. She asked for health warnings to be posted on cannabis storefronts.

Priscilla Rocco stated she disapproves of the way the city has allowed multiple cannabis dispensaries in Costa Mesa. She stated there are too many for Costa Mesa's size. She spoke on impaired driving concerns, negative impacts on property values and crime. She commented cannabis will impact lower income neighborhoods the most and asked that cannabis shops not be allowed on paths to schools, parks, and youth centers. She urged the commission to not allow cannabis within 1,000 feet from bedrooms and front yards. Lastly, she stated she agrees with the signage conditions recommended in the staff report.

Alexander Haberbusch stated the excessive concentration of cannabis storefronts threatens Costa Mesa's character, safety, economic stability, quality of life for the residents and viability of businesses. He commented that the potential for saturation exceeds what is reasonable in the community and a limit of 30 is far too high. He asked that the City implement buffer zones immediately to protect residential and commercial areas and establish a cap below 30.

The Chair closed public comments.**The Chair closed the Public Hearing.**

The Commission asked staff further questions:

Andrade asked if staff could add a requirement for businesses to post health warnings in cannabis storefronts.

Commissioner Zich expressed concern that the city might not be the correct entity to create a cannabis health warning.

Chair Ereth motion to recommend first reading to City council. Seconded by Commissioner Rojas.

The Commission discussed the motion including how the proposed amendments do not reflect all the changes that each individual commissioner would like in the ordinance. However, the Commission stated they diligently debated the proposals with a lot of passion and strong supportive arguments.

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MOVED/SECOND: Ereth/Rojas

MOTION: To recommend first reading to City Council.

The motion carried by the following roll call vote:

Ayes: Ereth, Andrade, Rojas, Vivar, Zich

Nays: None

Absent: Toler, Klepack

Recused: None

Motion carried: 5-0

ACTION: The Planning Commission adopted a resolution to:

1. Find that the project is categorically exempt from environmental review under the California Environmental Quality Act ("CEQA") pursuant to CEQA Guidelines Section 15061(b)(3) (General Rule) in that the updates to the City's retail cannabis provisions will not have a significant impact on the environment; and
2. Recommend that the City Council give first reading to ordinances approving Code Amendment No. 2024-XX, amending portions of the Costa Mesa Municipal Code Title 13 (Planning Zoning, and Development), and Code Amendment No. 2024-XX, amending portions of Title 9 (Licenses and Business Regulations), both pertaining to retail cannabis storefront regulations.

RESOLUTION PC-2024-02 - RESOLUTION RECOMMENDING THAT THE CITY COUNCIL GIVE FIRST READING TO AN ORDINANCE TO AMEND THE CANNABIS RETAIL STOREFRONT PROVISIONS IN TITLE 13 (PLANNING, ZONING, AND DEVELOPMENT), CHAPTER IX (SPECIAL LAND USE REGULATIONS), ARTICLE 21 (LOCATION OF CANNABIS DISTRIBUTING, MANUFACTURING, RESEARCH AND DEVELOPMENT, TESTING LABORATOIRES, RETAIL STORERONT AND RETAIL NONSTOREFRONT USES) OF THE COSTA MESA MUNICIPAL CODE

RESOLUTION PC-2024-03- RESOLUTION RECOMMENDING THAT THE CITY COUNCIL GIVE FIRST READING TO AN ORDINANCE TO AMEND THE CANNABIS RETAIL STOREFRONT PROVISIONS IN TITLE 9 (LICENSES AND BUSINESS REGULATIONS), CHAPTER VI (CANNABIS BUSINESS PERMITS) OF THE COSTA MESA MUNICIPAL CODE

The Chair explained the appeal process.

OLD BUSINESS:

None.

NEW BUSINESS:

None.

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DEPARTMENTAL REPORTS

1. Public Works Report – None.
2. Development Services Report – None.

CITY ATTORNEY’S OFFICE REPORT

1. City Attorney – None.

The Commission all wished Jennifer Le farewell and the best of luck.

ADJOURNMENT AT 8:44 PM

Submitted by:

SCOTT DRAPKIN, SECRETARY
COSTA MESA PLANNING COMMISSION



CITY OF COSTA MESA

77 Fair Drive
Costa Mesa, CA 92626

Agenda Report

File #: 24-061

Meeting Date: 2/12/2024

TITLE:

MINOR CONDITIONAL USE PERMIT APPLICATION ZA-22-11 FOR A DRIVE-THROUGH OPERATION AND A REDUCTION OF REQUIRED PARKING; DEVELOPMENT REVIEW (PDVR-23-0003) TO ALLOW THE DEMOLITION OF AN EXISTING 25,159-SQUARE-FOOT COMMERCIAL BUILDING AND TO CONSTRUCT A NEW 2,913-SQUARE-FOOT RAISING CANES RESTAURANT WITH 1,303 SQUARE FEET OF COVERED OUTDOOR PATIO AREA; MINOR MODIFICATION PMND-23-0003 TO ALLOW FOR A DECREASE OF 20% IN REQUIRED FRONT YARD/Landscape SETBACK; FOR A PROPERTY LOCATED AT 1595 old NEWPORT BOULEVARD

DEPARTMENT: ECONOMIC AND DEVELOPMENT SERVICES DEPARTMENT/
PLANNING DIVISION

PRESENTED BY: CHRISTOPHER ALDANA, ASSISTANT PLANNER

CONTACT INFORMATION: CHRISTOPHER ALDANA, 714-754-4868;
Christopher.Aldana@costamesaca.gov

RECOMMENDATION:

Staff recommends the Planning Commission adopt a Resolution to:

1. Find that the project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) per CEQA Guidelines Section 15303 (Class 3), New Construction and Conversion of Small Structures and Section 15332 (Class 32 In-fill Development Projects); and
2. Approve ZA-22-011, PDVR-23-0003, and PMND-23-0003 subject to conditions of approval.



PLANNING COMMISSION AGENDA REPORT

MEETING DATE: FEBRUARY 12, 2024

ITEM NUMBER: PH-1

SUBJECT: MINOR CONDITIONAL USE PERMIT APPLICATION ZA-22-11 FOR A DRIVE-THROUGH OPERATION AND A REDUCTION OF REQUIRED PARKING; DEVELOPMENT REVIEW (PDVR-23-0003) TO ALLOW THE DEMOLITION OF AN EXISTING 25,159-SQUARE-FOOT COMMERCIAL BUILDING AND TO CONSTRUCT A NEW 2,913-SQUARE-FOOT RAISING CANES RESTAURANT WITH 1,303 SQUARE FEET OF COVERED OUTDOOR PATIO AREA; MINOR MODIFICATION PMND-23-0003 TO ALLOW FOR A DECREASE OF 20% IN REQUIRED FRONT YARD/LANDSCAPE SETBACK; FOR A PROPERTY LOCATED AT 1595 OLD NEWPORT BOULEVARD

**FROM: ECONOMIC AND DEVELOPMENT SERVICES DEPARTMENT/
PLANNING DIVISION**

PRESENTATION BY: CHRISTOPHER ALDANA, ASSISTANT PLANNER

**FOR FURTHER INFORMATION CONTACT: CHRISTOPHER ALDANA
714-754-4868
Christopher.Aldana@costamesaca.gov**

RECOMMENDATION:

Staff recommends the Planning Commission adopt a Resolution to:

1. Find that the project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) per CEQA Guidelines Section 15303 (Class 3), New Construction and Conversion of Small Structures and Section 15332 (Class 32 In-fill Development Projects); and
2. Approve ZA-22-011, PDVR-23-0003, and PMND-23-0003 subject to conditions of approval.

APPLICANT OR AUTHORIZED AGENT:

The Authorized Agent is Jay Higgins, on behalf of the Owner, Barry Von Hemert.

PLANNING APPLICATION SUMMARY

Location:	1595 Old Newport Boulevard	Application Numbers:	ZA-22-11, PDVR-23-0003 and PMND-23-0003
Request:	A Minor Conditional Use Permit, Development Review, and Minor Modification, to allow the following: <ol style="list-style-type: none"> (1) Minor Conditional Use Permit request for the reduction of seven code-required parking spaces and drive-through operations with minor design modifications; (2) Development review to allow the demolition of an existing 25,159-square-foot furniture store and to construct a new 2,913-square-foot Raising Cane's restaurant with 1,303-square-foot outdoor dining area; and (3) Minor Modification request to allow for a decrease of 20% in required front yard/landscape setback. 		

SUBJECT PROPERTY:

SURROUNDING PROPERTY:

Zone:	General Business District (C2)	North:	Local Business District (C1)
General Plan:	General Commercial (GC)	South:	C2
Lot Dimensions:	Irregular-shaped lot with approximate dimensions of 35 feet (along E 16 th to the north), 295.03 feet (east), 207.09 feet (south), and 295.20 feet (west)	East:	C2
Lot Area:	1.02 Acres	West:	C2
Existing Development:	Existing and currently vacant 25,159-square-foot furniture store		

DEVELOPMENT STANDARDS COMPARISON

Development Standard	Required/Allowed MP Dev. Standard	Proposed/Provided
Building Height	30 ft.	19 ft. 11 in.
Setbacks:		
Front	20 ft.	16 ft.*
Side (left)	15 ft. on one side / 0 ft. on the other side	21ft. 7in.
Rear	0 ft.	115 ft.11 in.
Landscape Setback – front	20 ft.	16 ft. *
Parking	41 spaces	34 spaces**
Floor area ratio (FAR)	0.20	0.07
Drive-through Length	160 ft.	287 ft.
Drive-through Width	11 ft.	11ft/10ft***
*Minor Modification Request to allow for a decrease of 20% in required front yard depth and to project a maximum of 4' into the required landscape setback. **Proposed parking deviation of seven (7) Code-required spaces. ***Proposed 11' wide lane that converts into a two (2), 10' wide dual lane system		
CEQA Status	Exempt per CEQA Guidelines Section 15303 (Class 3 - New Construction and Conversion of Small Structures) and 15332 (Class 32 – Infill Development Projects)	

BACKGROUND

The subject property is located at the southwest corner of Old Newport Boulevard and East 16th Street. Old Newport Boulevard is a frontage street that is located parallel to Newport Boulevard. The site is located within the “C2 - Commercial Business Zoning District” and has a “General Commercial” land use designation. The property directly abuts commercial properties in the C2 zone to the south and west, and C1 properties to the east and north which are located across East 16th Street and Old Newport Boulevard and Newport Boulevard, respectively. Raising Cane’s proposes to demolish the existing approximate 25,000 square-foot furniture building and construct a new 2,913-square-foot restaurant with drive-through services, outdoor seating, landscaping and a surface parking lot. Uses in the vicinity include light industrial operations such as automotive and motorcycle dealers and repair shops, boat repair/storage, and several retail uses. A 62-unit mobile home park (“The Sea Breeze Villas”) is located approximately one hundred feet to the east.

Raising Cane's is fast-food restaurant chain with locations throughout the United States. The restaurant exclusively serves chicken products and sandwiches. The restaurant chain began operations in 1996, and in 2015, the restaurant chain opened its first California location at 3150 Harbor Blvd (PA-15-02). The subject project would be their second location in Costa Mesa. The proposed restaurant is located approximately 4.5 miles from the Raising Canes at 3150 Harbor Boulevard.

On December 11, 2023, the Planning Commission continued this item to a later date. Public Comments were received and are available online at the following link: <https://costamesa.legistar.com/Calendar.aspx> under Attachment 10 of the agenda report and under the public comments section for the meeting date.

ANALYSIS:

The restaurant includes 828 square feet of interior dining and an additional 1,303 square feet of covered outdoor patio areas. Architectural finishes for the building are similar to the restaurant chain’s other locations and include earth-tone painted cement stucco, brick, and metal accents (see the below Exhibit 1 - Photo Simulation). No alcohol service is proposed.

Exhibit 1 – Photo Simulation



The proposed hours of operation are 9 AM to 2 AM Sunday through Wednesday, and 9 AM to 3:30 AM Thursday through Saturday. Pursuant to Costa Mesa Municipal Code (CMMC) Section 13-47 (Permitted and Conditionally Permitted Uses), restaurants located within 200 feet of a residential zone are subject to closure from 11:00 PM to 6:00 AM, unless modified through the issuance of a Minor Conditional Use Permit (MCUP). Although Sea Breeze Villa mobile home park is located within 200 feet of the proposed use, the mobile home park property is not zoned residential and therefore operation hour limitations are not applicable pursuant to this Code provision.

The maximum number of Raising Canes' staff on-site at any given time is expected to be 12 employees. According to the applicant, employee shifts are typically staffed with two managers with the remaining staff being cashiers and food prep members. During peak times, an employee with a handheld tablet will direct customers into the drive-through to expedite service and assist vehicle queues/parking lot circulation.

The applicant proposes a surface parking lot with 34 parking spaces and a new 312-square-foot trash/recycling enclosure. Two parking spaces will be provided in compliance with accessibility requirements (one standard and one van-accessible spot). The project will provide both employee and customer bicycle parking. Pedestrian access to the site would be provided at the intersection of East 16th Street and Old Newport Blvd with a walkway leading to the restaurant patio area and restaurant entrance.

The applicant has provided a conceptual landscape plan as part of their CUP application that includes a variety of trees, shrubs and groundcover. The conceptual landscaping plan proposes 14,396 square feet of landscape area and includes 50 new trees. If approved, a detailed landscaping plan would be reviewed during the building plan check process for determining consistency with the City's minimum landscaping and irrigation requirements.

Minor Conditional Use Permit Required

Pursuant to the CMMC, eating and drinking establishments with more than 300 square feet of public area are permitted by right in the C2 Zoning District. However, the CMMC requires an MCUP for an eating and drinking establishment with a drive-through. In addition, the applicant is requesting a deviation from the City's drive-through standards relating to obstructing parking and minimum drive-through width. Pursuant to CMMC Section 13-50, the City's drive-through standards can be modified through the issuance of an MCUP. Lastly, the applicant is requesting approval for a reduction in parking requirements. Pursuant to CMMC Section 13-89.5, where it can be shown that the required parking for a nonresidential land use will exceed the demand of the actual use, the Zoning Administrator may, by MCUP, allow a reduction in the amount of required parking.

Although the proposed new restaurant and operations are subject to approval of an MCUP at the discretion of the City's Zoning Administrator, pursuant to CMMC Section 13-11, the

Zoning Administrator can “forward any action to the Planning Commission for review”. Based on the proposed project size and scope, the City’s Zoning Administrator has decided to forward this project for Planning Commission consideration.

To obtain approval of an MCUP, an applicant must show that the proposed use is compatible with the City’s applicable zoning and General Plan provisions/policies, and will not be detrimental to public health, safety, and welfare. The subject site is located within a commercial zone (C2 – General Business District) where commercial development is specifically allowed to include restaurants with drive throughs subject to a minor MCUP and specific standards and conditions of approval. As defined in the CMMC, “this district is intended to meet the local business needs of the community by providing a wide range of goods and services in a variety of locations throughout the City.” Pursuant to the CMMC, the approval of an MCUP requires that specific findings be made related to neighborhood compatibility, health and safety, and land use compatibility. The analysis regarding MCUP findings is provided below in this report.

MCUP to Deviate from Drive-through Standards

The project proposes a single-lane drive-through entrance which then diverges into two lanes after the customer vehicle ordering point (see Exhibit 2 – Site Circulation Plan).

Exhibit 2 – Site Circulation Plan



The below Table 1, provides a development standard summary of the proposed drive-through operations with the City’s Drive-Through Standards:

**Table 1 – Project Compliance with CMMC Section 13-50
(Development Standards for Drive-Through Operations)**

Performance Standard	Code Requirement	Project Complies?
Unobstructed Drive-Through Access	Drive-through lanes shall not obstruct the circulation routes necessary for ingress or egress from the property, parking areas (including back-out of parking spaces), and pedestrian walkways.	No, Deviation requested. Proposed drive-through lanes do not obstruct the circulation routes necessary to enter and exit the property, except for 3 parking stalls located at the drive-through exit. However, staff has conditioned the use of these stalls as employee parking spaces to avoid impacts on customer circulation and to alleviate parking demand in more desired parking lot areas for customers.
Drive-Through Lane Width	Each drive-through lane shall be striped, marked or otherwise distinctly delineated, and shall be a minimum of eleven (11) feet wide.	No, Deviation requested. The single drive-through lane at the entrance measures 11 feet wide. However, when it splits into two lanes the lane width decreases to 10 feet. The decreased width is justified, as Public Works does not see functional or operational issues with the request.
Required Drive-Through Length	On-site entrances to drive-through lanes shall be set back a minimum of twenty-five (25) feet from drive approaches from public or private streets or alleys.	Yes. The entrance to the drive-through lanes from the public driveway is 145 feet, as illustrated on the site plan.
Setback for Drive-Through Entrance	Each drive-through lane shall be a minimum of one hundred sixty (160) feet in length, unless modified by the zoning administrator. The length of the drive-through lane shall be measured from its entrance point to the pick-up window.	Yes. The drive-through lane from the entrance to the drive-through window is shown on the site plan at 287 feet, exceeding the minimum requirement.
Stacking Area Distance from Outdoor Seating and Play Areas	Vehicle stacking areas of drive-through lanes shall be a minimum distance of ten (10) feet from outdoor seating and play areas.	Yes. The site plan indicates the drive-through is located 10.7 feet from the patio and therefore exceeds the minimum requirement.
Emission Control Plan	Application for a minor conditional use permit shall include an operation statement indicating the physical improvements and operational measures proposed to minimize idling vehicle emissions.	Yes. Raising Cane's relies on a number of strategies to move customers through the drive-through quickly as well as minimize idling vehicle emissions. This includes, but is not limited to, a focused menu, tablet and mobile ordering, and pick-up and pay windows.
Development Standards for Nearby Residential Zones	Establishments within two hundred (200) feet of residentially-zoned property shall also be subject to the development standards contained in section 13-49 . Development standards for establishments within two hundred feet of residentially-zoned property.	See discussion "Development Standards for Nearby Residential Zones" on the next page.

The single-lane drive-through width measures 11 feet and narrows to two 10-foot-wide lanes. Pursuant to CMMC Section 13-50(b), the minimum drive-through lane width is 11

feet and therefore the MCUP is specifically required for the proposed width reduction of one-foot for each drive-through lane. In addition, three parking spaces are proposed adjacent to the drive-through lane which would be used by employees who arrive early and thereby alleviate any potential for customer drive-through/parking back-up interference. Pursuant to CMMC Section 13-50(a), drive-through lanes shall not interfere with parking areas (including back-out of parking spaces), unless approved by an MCUP. The City's Transportation Division has reviewed the proposed drive-through operations and parking lot circulation, including proposed deviations in standards, and believes that the project will operate adequately as designed.

Development Standards for Nearby Residential Zones

A 62-unit mobile home park (Sea Breeze Villas) is located approximately 90 feet west of the project site. The mobile home park is located on a commercially zoned property and is considered legal nonconforming due to use. CMMC Section 13-49 contains specific development standards for restaurants located within 200 feet of a residential-zoned parcel; however, and as previously indicated, these standards do not apply because the mobile home site is located in a commercial zone.

Exhibit 3 – Nearby Residential



As further indicated below, despite the mobile home park's commercial zoning, the project will generally comply with CMMC Section 13-49 to ensure compatibility with the nearby residential use with the exception of operating hours:

- All exterior lighting will be shielded away from residential areas;
- No outdoor communication systems other than the drive-thru menu board or amplified music will be used;
- Trash facilities are screened from view, located approximately 200 feet from residences, and designed to City standards;
- Outdoor seating is oriented away from residences. The nearest outdoor, covered patio area is proposed 115 feet from residences;
- Landscape between the residential site and the subject site will not be altered;
- Truck Deliveries will not occur between 8 PM and 7 AM; and
- The City's Police Department have recommended Condition of Approval No. 15, which requires on-site security from 9 P.M. to 3:30 A.M. daily for the first year of operation.

Noise Study

To attenuate noise (specifically in consideration of the mobile home residents located near the project site), the City requested the applicant to conduct a noise analysis (included with this report as Attachment No. 7). As demonstrated in the acoustic analysis prepared by Kimley Horn on September 22, 2023, the proposed project, including consideration of the drive-through operations, is expected to operate in compliance with the CMMC noise standards, would not exceed the City's exterior or interior noise standards, and would not result in a perceptible noise increase at the nearest residential uses.

In addition, staff visited the Raising Canes operations on Harbor Boulevard during the weekday, lunch-hour operations to survey empirical noise conditions. During this site visit, staff specifically surveyed the noise impacts from the restaurant/drive-through operations onto the adjacent residential apartments ("The French Quarter Apartments"). The Harbor Boulevard Raising Canes restaurant is generally located within 100 feet of the nearest French Quarter residential unit. During the staff visit, staff did not witness any perceptible noise from the Raising Canes operations. Condition of Approval Number 16, has been included to assure that the drive-through menu board includes adjustable volume control which would allow for a reduction in volume if necessary.

MCUP to Deviate from Required Parking

The City's off-street parking requirements are specified in CMMC Table 13-89 and requires a parking ratio of 10 spaces for every 1,000 square feet of restaurant gross floor area for the first 3,000 square feet, and 12 spaces for every 1,000 square feet of additional floor area, inclusive of outdoor dining areas. The application includes 2,913 square feet of interior floor area and 1,303 square feet of covered outdoor patio areas, and therefore pursuant to the CMMC Table 13-89 requires 45 parking spaces. The applicant is proposing to provide 34 vehicle parking spaces and one-bike rack for a total

of 35 parking spaces (the CMMC allows for one bike rack to count towards one required vehicle parking space).

CMMC Section 13-89.5 permits with the approval of an MCUP a reduction in required parking when it can be demonstrated that the City's nonresidential parking standard will exceed the demand of the actual use. The applicant has provided a traffic and parking study prepared by Stantec Consulting Services Incorporate (Stantec) that evaluated the actual parking utilization and concluded that the project as designed is anticipated to have a surplus of one parking space. To determine peak parking requirements, the Study evaluated empirical parking demand data from local comparable Raising Canes restaurants located in the cities of Costa Mesa and Laguna Hills. Data collection was taken at roughly five-minute intervals over an eight-hour window (11 AM to 7 PM) on a typical weekday (Thursday) and a weekend day (Saturday) in February 2023. The surveyed restaurants contained 31 and 33 parking spaces, respectively.

During mid-day peak hours, the average parked vehicle count was 19 on weekdays and 17 on Saturdays. During PM peak hours, the parking demand reduced to 15 and 17 respectively. The maximum counts for vehicles parked during mid-day peak hours were 29 on weekdays and 30 on Saturdays, while PM peak hours saw a maximum of 27 and 31 vehicles respectively. By correlating this data with the square footage of the case study sites, the average and maximum parking rates (per thousand square feet) were calculated. This maximum rate was subsequently utilized to determine the expected parking demand for the proposed project. Pursuant to the Study, the proposed project is expected to necessitate a maximum of 33 parking spaces to satisfy anticipated demand, and therefore the project would provide a surplus of one parking space.

As conditioned, any change in operational characteristics, including but not limited to hours of operation or type of services provided, will require an amendment to the minor conditional use permit. If parking shortages or other parking-related problems occur, Condition of Approval No. 6 requires the business operator to institute appropriate operational measures necessary to minimize or eliminate the problem.

Traffic, Circulation and Drive-through Queuing

Pursuant to CMMC Section 13-275 (Development Project Review Procedures), the project required a traffic study to be prepared because it is estimated to generate one-hundred (100) or more vehicle trips during a peak hour period. A Traffic and Parking Study, prepared by Stantec has been completed that evaluates the project's effect on local traffic conditions and circulation. The Study also evaluated on-site and off-site circulation in relationship to potential impacts on the adjacent rights-of-way, and intersection level-of-service (see Attachment No. 8). The Study concludes that the project would not exceed the City's acceptable traffic levels, provides adequate parking, and the restaurant and drive-through operations will not interfere with nearby traffic/circulation. The Public Works Department has reviewed the Study and agrees with its findings and conclusions.

Empirical data was collected from other Raising Cane’s locations for the Traffic Study, including the existing Costa Mesa location at 3150 Harbor Boulevard. A trip generation analysis was completed and concluded that the proposed restaurant would generate 1,051 total daily trips and a maximum of 161 peak hour trips. Additionally, the Study evaluated seven key intersections located nearby the project and concluded that with the additional traffic created by the project, all of the intersection would continue to operate with minimal delays at a level-of-service (LOS) “C” or better (see the Below Table 2).

Table 2 - Intersection LOS Summary – Opening Year (2024) Cumulative Conditions

Int #	Intersection Name	Opening Year (2024) Cumulative Conditions without Project						Opening Year (2024) Cumulative Conditions with Project					
		Weekday				Saturday		Weekday				Saturday	
		Mid-Day		PM		Mid-Day		Mid-Day		PM		Mid-day	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Superior & 17th	23.0	C	23.5	C	19.5	B	23.0	C	23.7	C	19.5	B
2	Superior & E 16th	15.6	C	16.2	C	13.9	B	15.8	C	16.4	C	14.0	B
3	Old Newport W & E 16th	10.1	B	9.4	A	9.6	A	11.1	B	10.1	B	10.5	B
4	Newport & E 16th	17.9	B	18.0	B	18.9	B	19.5	B	20.4	C	22.0	C
5	Superior & W 16th/Industrial	26.1	C	28.9	C	25.8	C	26.2	C	29.2	C	26.1	C
6	Old Newport W & Industrial	11.3	B	10.4	B	10.0	B	12.9	B	12.3	B	11.1	B
7	Newport & Industrial	16.2	B	15.0	B	11.1	B	17.9	B	17.8	B	13.3	B

Note:
 Cumulative background conditions based on traffic counts collected in February 2023 and OCTAM growth projections
 LOS - Level of Service
 Delay - Average vehicle delay (seconds/vehicle) for movements subject to stopping

A queuing analysis for the proposed drive-through was also conducted to establish the project’s maximum amount of vehicle demand. According to the Study, there is sufficient amount of dedicated drive-through space to accommodate the projected maximum demand of vehicles on-site, and without disturbing circulation on Old Newport Boulevard.

Air Quality and Odors

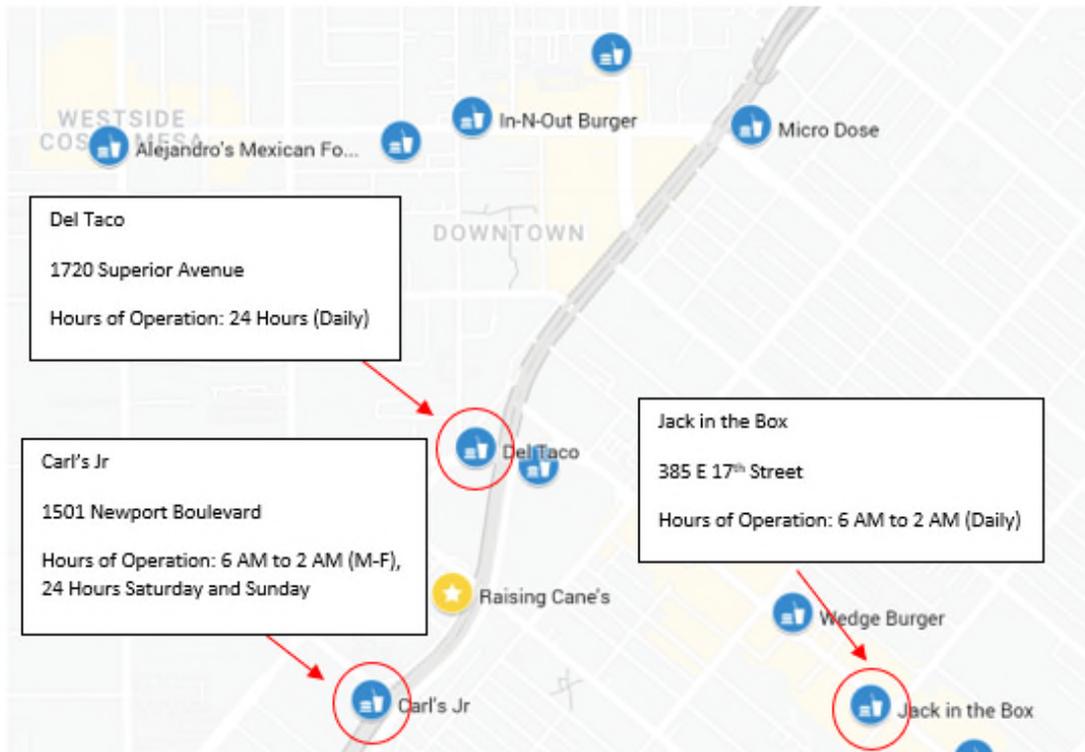
An Air Quality Memorandum dated August 11, 2022, was prepared by Kimley-Horn to evaluate the potential air quality impacts associated with site construction and restaurant operations. The Memorandum concludes that the proposed project would be below all applicable air quality required thresholds, would not conflict with the South Coast Air Quality Management District Air Quality Management Plan, or create objectionable odors.

Hours of Operation

The proposed hours of operation are from 9 AM to 2 AM Sunday through Wednesday, and from 9 AM to 3:30 AM Thursday through Saturday. Pursuant to Costa Mesa Municipal Code (CMMC) Section 13-47 (Permitted and Conditionally Permitted Uses), since the restaurant is not located within 200 feet of a residential zone, the CMMC does not prescribe a limitation on operating hours. However, if the Planning Commission believes that the proposed hours of operations are not compatible with developments in

the same general area and would be materially detrimental to other properties in the area, the Planning Commission could require reduced operation hours.

Exhibit 4 – Similar Establishments Hours of Operation Located Nearby



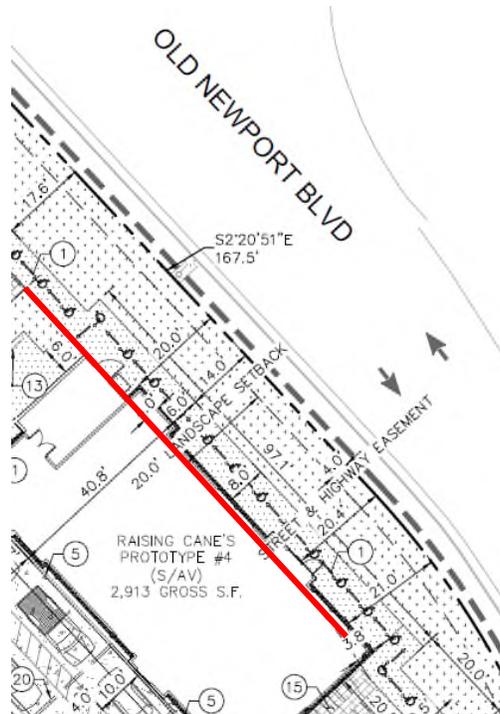
As indicated in Exhibit 4, several similar restaurant establishments are located within close proximity to the proposed Raising Cane's and operate during the early mornings and late evening hours. For example, "Del Taco" is located on Newport Boulevard to the north and is open 24 hours; "Carl's Jr." is located on Newport Boulevard and is open from 6 AM to 2 AM; and "Jack in the Box" is located on East 17th Street and also operates from 6 AM to 2 AM. Staff has consulted with the Costa Mesa Police Department in this regard to obtain their comments in regard to the proposed hours of operation. The City's Police Department was not concerned with the proposed hours of operation; however, suggested that the restaurant provide on-site security after 9 P.M. to closure (daily) for the first year of operation.

Minor Modification

The applicant has requested approval a minor modification for the proposed building to project a maximum of four feet into the required 20-foot front and landscape setbacks. As shown in Exhibit 5, a small portion of the building is proposed to project into the setback (see the red line in Exhibit 5). Pursuant to CMMC Section 13-28 (j), a deviation from the required front setback can be approved a maximum of 20% of the required setback. Therefore, the proposed four-foot encroachment would comply with the City's Minor Modification provisions. A Minor Modification is typically reviewed by the Planning Division; however, since the project as a whole includes other entitlements required to be reviewed

by the Planning Commission, the review authority for the encroachment request is the Planning Commission.

Exhibit 5 – Minor Modification Setback Encroachment



Pursuant to CMMC Section 13-29(g)(6), to approve a minor modification, the Planning Commission must make required findings. The analysis regarding the required findings is provided below in the "Findings: section of this report.

Public Works Improvements

The Public Works Department is conditioning the project to fulfill the mitigation of off-site traffic impacts at the time of issuance of Building Permit by submitting to the Transportation Division the required Traffic Impact Fee according to the prevailing schedule of charges adopted by the City Council. Additionally, the applicant will install a red curb for a distance of 100 feet north of the proposed driveway and approximately eight (8) feet on the south side, between the proposed driveway and the closest existing driveway at the adjacent parcel. Per condition of approval 18, the applicant will also provide a right-of-way improvement consisting of designing and constructing a crosswalk on the south leg of the intersection of Old Newport Boulevard and East 16th Street. The crosswalk design shall include the creation of a bulb out / curb extension on the east end and ADA-compliant ramps for both ends of the crosswalk. The applicant is aware that they must submit the plan for review and approval from the Transportation Services Division before commencing any construction. Furthermore, per condition of approval 20, the applicant must obtain an encroachment permit from the City of Costa

Mesa Engineering Division, at the time of development to widen the sidewalk along Old Newport Boulevard.

GENERAL PLAN CONFORMANCE

The Costa Mesa General Plan establishes the long-range planning and policy direction that guides change and preserves the qualities that define the community. The 2015-2035 General Plan sets forth the vision for Costa Mesa for the next two decades. This vision focuses on protecting and enhancing Costa Mesa's diverse residential neighborhoods, accommodating an array of businesses that both serve local needs and attract regional and international spending, and providing cultural, educational, social, and recreational amenities that contribute to the quality of life in the community. Over the long term, General Plan implementation will ensure that development decisions and improvements to public and private infrastructure are consistent with the goals, objectives, and policies contained in this Plan. The following analysis evaluates the proposed project's consistency with applicable policies and objectives of the 2015-2035 General Plan.

1. **Policy C-5.3:** "Encourage permitted General Plan land uses which generate high traffic volumes to be located near major transit and transportation corridors to minimize vehicle use, congestion, and delay".

Consistency: The proposed restaurant (a high traffic volume use) is located adjacent to Newport Boulevard which is considered one of the City's major transportation corridors, and is served by several bus routes with transit facilities located within walking distances.

2. **Policy C-5.14:** "Require developers of new building and redevelopment/reuse projects as part of the project development review process that are located along bus routes to pay a designated fair share of the cost of providing improved bus stop facilities and related street furniture or, where appropriate, dedicate land for improved bus stop facilities".

Consistency: The proposed restaurant is located near Newport Boulevard and other City streets which offer several local/regional bus routes. Pursuant to the CMMC, the applicant is required to pay a Traffic Impact Fee that is estimated to be approximately \$200,000. This fee can be used to maintain or develop additional bus stop facilities where appropriate in the City.

3. **Policy C-6.12:** "Require that every new development project pay its share of costs associated with the mitigation of project generated impacts".

Consistency: As indicated above, the applicant is required to pay a Traffic Impact Fee that is estimated to be approximately \$200,000. This fee is calculated to be consistent with a payment contribution to mitigate the project's anticipated traffic impacts.

4. **Policy C-7B:** “Provide end-of-trip [bicycle] facilities that support the network”.

Consistency: The proposed project includes the installation of both short-term and long-term bicycle storage.

5. **Objective C-10A:** “Encourage more people to walk and bicycle by supporting programs that foster community support for bicycling and walking, and raise public awareness about active transportation”.

Consistency: Staff does not believe that the proposed restaurant with a drive-through that is primarily focused on vehicle trip demand is a land use that will foster community support for bicycling and walking, and raise public awareness about active transportation.

6. **Policy LU-1.1:** “Provide for the development of a mix and balance of housing opportunities, commercial goods and services, and employment opportunities in consideration of the need of the business and residential segments of the community”.

Consistency: The proposed new restaurant and improvements would re-invest and revitalize an underutilized property in Costa Mesa and provide new employment opportunities.

7. **Policy LU-2.6:** “Encourage increased private market investment in declining or deteriorating neighborhoods”.

Consistency: The proposed use would replace a commercial center that has been underutilized and/or vacant for many years. The proposed project applicant would invest significant amount of capital into the site to establish the use and project design.

8. **Policy LU-3.1:** “Protect existing stabilized residential neighborhoods, including mobile home parks (and manufactured housing parks), from the encroachment of incompatible or potentially disruptive land uses and/or activities”.

Consistency: The subject property is intended for commercial development and an existing retail furniture store currently occupies the site. As described in this report, the project is not expected to create perceptible noise or odor impacts to the nearest residential use and will provide a nearby dining option for these residents.

9. **Policy LU-6.10:** “Encourage a broad range of business uses that provide employment at all income levels and that make a positive contribution to the City’s tax base”.

Consistency: The proposed fast-food restaurant will provide employment opportunities with various income levels, and is expected to generate increased tax revenues that would expand the City's revenue base. This revenue can then be used for community services and infrastructure improvements that serve the community.

PLANNING APPLICATION REVIEW CRITERIA AND FINDINGS

Pursuant to Title 13, Section 13-29(g), Findings, of the Costa Mesa Municipal Code, in order to approve the project, the Planning Commission must find that the evidence presented in the administrative record substantially meets specified findings as follows:

Costa Mesa Municipal Code section 13-29 (e) Review Criteria -

“Compatible and harmonious relationship between the proposed building and site development, and use(s), and the building and site developments, and uses that exist or have been approved for the general neighborhood”.

The proposed use is compatible and harmonious with developments in the same general area in that the restaurant would replace an existing commercial use that is generally surrounded by other commercial and industrial uses. The use as conditioned is not expected to generate excessive noise, traffic, odors or other detrimental effects on the surrounding uses. Per Condition of Approval No. 34, the use shall be conducted, at all times, in a manner that will allow the quiet enjoyment of the surrounding neighborhood. In addition, the applicant and/or business owner shall institute appropriate security and operational measures necessary to comply with this requirement.

“Safety and compatibility of the design of buildings, parking area, landscaping, luminaries and other site features which may include functional aspects of the site development such as automobile and pedestrian circulation”.

The project includes the development of a new building, parking areas and landscaping. Pedestrian access to the site is provided at the intersection of East 16th Street and Old Newport Boulevard with a walkway leading to the restaurant patio area and the restaurant entrance. A traffic study was submitted with the project that determined the proposed drive-through lanes would accommodate the maximum anticipated vehicle queue and the restaurant operations would not result in a significant change in intersection LOS. Pursuant to Condition of Approval No. 6, if parking shortages or other parking-related problems occur, the operator must institute appropriate operational measures necessary to minimize or eliminate the problem. The Police Department has reviewed the proposed project and suggested requiring on-site security guards from 9 P.M. to closure for the first year of operations (the applicant has agreed to provide this security).

“Compliance with any performance standards as prescribed elsewhere in the Zoning Code”.

The proposed project is in compliance with the Zoning Code and the project proposed deviations, as described in this report, are allowed subject to standards and findings.

“Consistency with the general plan and any applicable specific plan”.

The proposed commercial restaurant use is located on an existing commercial property that has a General Plan land use classification of “General Commercial”. The project site is located within the “19 West Plan Urban Plan”; however, the applicant is not applying for a Master Plan Mixed-Use development, so the design guidelines within the Urban Plan do not apply.

“The planning application is for a project-specific case and is not to be construed to be setting a precedent for future development”.

The application is for a project-specific case to construct a fast-food restaurant on an existing commercial lot. The project meets all applicable development standards and design guidelines for commercial structures in the C2 zoning district and is consistent with the general plan land use designation of “General Commercial”. The proposed development would not be precedent-setting as each application is reviewed on a case-by-case basis.

Minor Conditional Use Permit Findings –

The proposed project complies with the applicable Costa Mesa Municipal Code Section 13-29(g)(2) - Minor Conditional Use Permit in that:

“The proposed development or use is substantially compatible with developments in the same general area and would not be materially detrimental to other properties within the area”.

The proposed use is compatible and harmonious with developments in the same general area in that the restaurant would replace an existing commercial use that is surrounded by other commercially zoned properties. The use as conditioned will not generate excessive noise, odor, traffic or other detrimental effects on the surrounding uses. Per Condition of Approval No. 34, the use shall be conducted, at all times, in a manner that will allow the quiet enjoyment of the surrounding neighborhood.

“Granting the minor conditional use permit will not be materially detrimental to the health, safety, and general welfare of the public or otherwise injurious to property or improvements within the immediate neighborhood”.

The project proposes a new commercial use on an existing developed commercial property. The project has been reviewed for potential effects to public health, safety, traffic, parking, noise and odor. Specific analysis was also completed for potential effects to a nearby residential development and concluded that no significant impacts would result.

“Granting the minor conditional use permit will not allow a use, density or intensity which is not in accordance with the general plan designation and any applicable specific plan for the property”.

Granting the minor conditional use permit will not allow a use, density or intensity, which is not in accordance with the general plan designation and the applicable Urban Plan for the property. The project is a permitted use and, as conditioned, the drive-through restaurant will not generate noise, odor, traffic or parking effects unusual for a commercially zoned property. Lastly, the proposed project is consistent with applicable policies and objectives of the 2015-2035 General Plan as previously described in this report.

Minor Modification Findings -

The proposed project complies with the applicable Costa Mesa Municipal Code Section 13-29(g)(6) – Minor Modification:

“The improvement will not be materially detrimental to the health, safety and general welfare of persons residing or working within the immediate vicinity of the project or to property and improvements within the neighborhood”.

The project proposes a minor modification for the new building to encroach into the 20-foot required front/landscape setback. The encroachment is limited to only a small portion of the building, and the encroachment does not result in a perceived shortage in landscaping or significant building mass along the street frontage. Therefore, the proposed encroachment would not result in detrimental effects to public health, safety, and general welfare.

“The improvement is compatible and enhances the architecture and design of the existing and anticipated development in the vicinity. This includes the site planning, land coverage, landscaping, appearance, scale of structures, open space and any other applicable features relative to a compatible and attractive development”.

The project design includes a new building and associated site improvements that enhances the existing and anticipated development in the vicinity. The project site planning, land coverage, landscaping, appearance, scale of structures and open space is not inhibited by the proposed minor modification encroachment.

ENVIRONMENTAL DETERMINATION

The project is categorically exempted from the provisions of the California Environmental Quality Act (CEQA) under CEQA Guidelines Section 15303, Class 3, for new construction or conversion of small structures, and Section 15332, Class 32, for infill development projects. The project proposes to demolish an existing 25,159-square-foot furniture store and construct a new 2,913-square-foot drive-through restaurant with 1,303-square feet of outdoor dining area. The existing site is currently developed and

without environmental resources. In addition, none of the exceptions that bar the application of a categorical exemption pursuant to CEQA Guidelines Section 15300.2 applies. Specifically, the project would not result in a cumulative impact; would not have a significant effect on the environment due to unusual circumstances; would not result in damage to scenic resources; is not located on a hazardous site or location; and would not impact any historic resources.

ALTERNATIVES

The Planning Commission has the following alternatives:

1. **Approve the project.** The Planning Commission may approve the project as proposed, subject to the standard conditions outlined in the attached Resolution.
2. **Approve the project with Conditions of Approval.** The Planning Commission may suggest specific Conditions of Approval that are necessary to alleviate concerns.
3. **Deny the project.** If the Planning Commission believes that there are insufficient facts to support the findings for approval, the Planning Commission must deny the application; provide facts in support of denial, and direct staff to incorporate the findings into a Resolution for denial. If the project is denied, the applicant could not submit substantially the same type of application for six months.

LEGAL REVIEW

The draft resolution has been reviewed and approved as to form by the City Attorney's Office.

PUBLIC NOTICE

Pursuant to Title 13, Section 13-29(d), of the Costa Mesa Municipal Code, three types of public notification have been completed no less than 10 days prior to the date of the public hearing:

1. **Mailed notice.** A public notice was mailed to all property owners and occupants within a 500-foot radius of the project sites. The required notice radius is measured from the external boundaries of the property. (See attached Notification Radius Map.)
2. **On-site posting.** A public notice was posted on the street frontages of the project site.
3. **Newspaper publication.** A public notice was published once in the Daily Pilot newspaper.

CONCLUSION

As proposed and conditioned, the use would be consistent with other commercial uses in the C2 zone, the Zoning Code, and the City's General Plan. The required findings for the MCUP and Minor Modification can be made, as described above, and therefore, staff recommends approval of the Planning Application subject to conditions of approval.

RESOLUTION NO. PC-2024-

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF COSTA MESA, CALIFORNIA APPROVING MINOR CONDITIONAL USE PERMIT APPLICATION ZA-22-11 FOR A DRIVE-THROUGH OPERATION AND A REDUCTION OF REQUIRED PARKING; DEVELOPMENT REVIEW (PDVR-23-0003) TO ALLOW THE DEMOLITION OF AN EXISTING 25,159-SQUARE-FOOT COMMERCIAL BUILDING AND TO CONSTRUCT A NEW 2,913-SQUARE-FOOT RAISING CANES RESTAURANT WITH 1,303-SQUARE-FEET OF COVERED OUTDOOR PATIO AREA; MINOR MODIFICATION PMND-23-0003 TO ALLOW FOR A DECREASE OF 20% IN REQUIRED FRONT/LANDSCAPE DEPTH; FOR A PROPERTY LOCATED AT 1595 OLD NEWPORT BOULEVARD

THE PLANNING COMMISSION OF THE CITY OF COSTA MESA, CALIFORNIA FINDS AND DECLARES AS FOLLOWS:

WHEREAS, Zoning Application 22-11, Development Review PDVR-23-0003, and Minor Modification PMND-23-0003 was filed by Jay Higgins, authorized agent for the property owner, requesting approval of the demolition of an existing 25,159-square-foot furniture store and the construction of a new 2,913-square-foot drive-through restaurant (Raising Cane's) with a drive-thru, and 1,303 square feet of outdoor patio area.

WHEREAS, a duly noticed public hearing held by the Planning Commission on February 12, 2024, with all persons having the opportunity to speak for and against the proposal;

WHEREAS, pursuant to the California Environmental Quality Act (CEQA), the project is exempt from the provisions of the California Environmental Quality Act (CEQA) per Section 15303 (Class 3) for New Construction and Conversion of Small Structures, and Section 15332 (Class 32) in-fill development projects.

WHEREAS, the CEQA categorical exemption for this project reflects the independent judgement of the City of Costa Mesa.

NOW, THEREFORE, based on the evidence in the record and the findings contained in Exhibit A, and subject to the conditions of approval contained within Exhibit B, the Planning Commission hereby approves Zoning Application 22-11, Development

Review PDVR-23-0003, and Minor Modification PMND-23-0003 with respect to the property described above.

BE IT FURTHER RESOLVED that the Costa Mesa Planning Commission does hereby find and determine that adoption of this Resolution is expressly predicated upon the activity as described in the staff report for Zoning Application 22-11 and upon applicant's compliance with each and all of the conditions in Exhibit B, and compliance of all applicable federal, state, and local laws. Any approval granted by this resolution shall be subject to review, modification or revocation if there is a material change that occurs in the operation, or if the applicant fails to comply with any of the conditions of approval.

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

PASSED AND ADOPTED this 12th day of February, 2024.

Adam Ereth, Chair
Costa Mesa Planning Commission

STATE OF CALIFORNIA)
COUNTY OF ORANGE)ss
CITY OF COSTA MESA)

I, Scott Drapkin, Secretary to the Planning Commission of the City of Costa Mesa, do hereby certify that the foregoing Resolution No. PC-2024- __ was passed and adopted at a regular meeting of the City of Costa Mesa Planning Commission held on January 08, 2024 by the following votes:

AYES: COMMISSIONERS

NOES: COMMISSIONERS

ABSENT: COMMISSIONERS

ABSTAIN: COMMISSIONERS

Scott Drapkin, Secretary
Costa Mesa Planning Commission

Resolution No. PC-2024-__

EXHIBIT A

FINDINGS

- A. The proposed project complies with Costa Mesa Municipal Code Section 13-29(e) – Review Criteria in that:

Costa Mesa Municipal Code section 13-29 (e) Review Criteria –

“Compatible and harmonious relationship between the proposed building and site development, and use(s), and the building and site developments, and uses that exist or have been approved for the general neighborhood”.

The proposed use is compatible and harmonious with developments in the same general area in that the restaurant would replace an existing commercial use that is generally surrounded by other commercial and industrial uses. The use as conditioned is not expected to generate excessive noise, traffic, odors or other detrimental effects on the surrounding uses. Per Condition of Approval No. 34, the use shall be conducted, at all times, in a manner that will allow the quiet enjoyment of the surrounding neighborhood. In addition, the applicant and/or business owner shall institute appropriate security and operational measures necessary to comply with this requirement.

“Safety and compatibility of the design of buildings, parking area, landscaping, luminaries and other site features which may include functional aspects of the site development such as automobile and pedestrian circulation”.

The project includes the development of a new building, parking areas and landscaping. Pedestrian access to the site is provided at the intersection of East 16th Street and Old Newport Boulevard with a walkway leading to the restaurant patio area and the restaurant entrance. A traffic study was submitted with the project that determined the proposed drive-through lanes would accommodate the maximum anticipated vehicle queue and the restaurant operations would not result in a significant change in intersection LOS. Pursuant to Condition of Approval No. 6, if parking shortages or other parking-related problems occur, the operator must institute appropriate operational measures necessary to minimize or eliminate the problem. The Police Department has reviewed the proposed project and suggested requiring on-site security guards from 9 P.M. to closure for the first year of operation (the applicant has agreed to provide this security).

“Compliance with any performance standards as prescribed elsewhere in the Zoning Code”.

The proposed project is in compliance with the Zoning Code and the project proposed deviations, as described in this report, are allowed subject to standards and findings.

“Consistency with the general plan and any applicable specific plan”.

The proposed commercial restaurant use is located on an existing commercial property that has a General Plan land use classification of “General Commercial”. The project site is located within the “19 West Plan Urban Plan”; however, the applicant is not applying for a Master Plan Mixed-Use development, so the design guidelines within the Urban Plan do not apply.

“The planning application is for a project-specific case and is not to be construed to be setting a precedent for future development”.

The application is for a project-specific case to construct a fast-food restaurant on an existing commercial lot. The project meets all applicable development standards and design guidelines for commercial structures in the C2 zoning district and is consistent with the general plan land use designation of “General Commercial”. The proposed development would not be precedent-setting as each application is reviewed on a case-by-case basis.

- B. The proposed project complies with Costa Mesa Municipal Code Section 13-29(g)(2) – Minor Conditional Use Permit in that:

“The proposed development or use is substantially compatible with developments in the same general area and would not be materially detrimental to other properties within the area”.

The proposed use is compatible and harmonious with developments in the same general area in that the restaurant would replace an existing commercial use that is surrounded by other commercially zoned properties. The use as conditioned will not generate excessive noise, odor, traffic or other detrimental effects on the surrounding uses. Per Condition of Approval No. 34, the use shall be conducted, at all times, in a manner that will allow the quiet enjoyment of the surrounding neighborhood.

“Granting the minor conditional use permit will not be materially detrimental to the health, safety, and general welfare of the public or otherwise injurious to property or improvements within the immediate neighborhood”.

The project proposes a new commercial use on an existing developed commercial property. The project has been reviewed for potential effects to public health, safety, traffic, parking, noise and odor. Specific analysis was also completed for potential effects to a nearby residential development and concluded that no significant impacts would result.

“Granting the minor conditional use permit will not allow a use, density or intensity which is not in accordance with the general plan designation and any applicable specific plan for the property”.

Granting the minor conditional use permit will not allow a use, density or intensity, which is not in accordance with the general plan designation and the applicable Urban Plan for the property. The project is a permitted use and, as conditioned, the drive-through restaurant will not generate noise, odor, traffic or parking effects unusual for a commercially zoned property. Lastly, the proposed project is consistent with applicable policies and objectives of the 2015-2035 General Plan as previously described in this report.

- C. The proposed project complies with Costa Mesa Municipal Code Section 13-29(g)(6) – Minor Modification in that:

The proposed project complies with the applicable Costa Mesa Municipal Code Section 13-29(g)(6) – Minor Modification:

“The improvement will not be materially detrimental to the health, safety and general welfare of persons residing or working within the immediate vicinity of the project or to property and improvements within the neighborhood”.

The project proposes a minor modification for the new building to encroach into the 20-foot required front/landscape setback. The encroachment is limited to only a small portion of the building, and the encroachment does not result in a perceived shortage in landscaping or significant building mass along the street frontage. Therefore, the proposed encroachment would not result in detrimental effects to public health, safety, and general welfare.

“The improvement is compatible and enhances the architecture and design of the existing and anticipated development in the vicinity. This includes the site planning, land coverage, landscaping, appearance, scale of structures, open space and any other applicable features relative to a compatible and attractive development”.

The project design includes a new building and associated site improvements that enhances the existing and anticipated development in the vicinity. The project site planning, land coverage, landscaping, appearance, scale of structures and open space is not inhibited by the proposed minor modification encroachment.

- D. **Environmental Determination.** The project is categorically exempted from the provisions of the California Environmental Quality Act (CEQA) under CEQA Guidelines Section 15303, Class 3, for new construction or conversion of small structures, and Section 15332, Class 32, for infill development projects. The project proposes to demolish an existing 25,159-square-foot furniture store and construct a new 2,913-square-foot drive-through restaurant with 1,303-square feet of outdoor dining area. The existing site is currently developed and without environmental resources. In addition, none of the exceptions that bar the application of a categorical exemption pursuant to CEQA Guidelines Section 15300.2 applies. Specifically, the project would not result in a cumulative impact; would not have a significant effect on the environment due to unusual circumstances; would not result in damage to scenic

resources; is not located on a hazardous site or location; and would not impact any historic resources.

- E. The project is subject to a traffic impact fee, pursuant to Chapter XII, Article 3 Transportation System Management, of Title 13 of the Costa Mesa Municipal Code.

EXHIBIT B

CONDITIONS OF APPROVAL

1. The use shall be limited to the type of operation as described in the staff report and conditions of approval. Any change in the operational characteristics of any use including, but not limited to, the hours of operation and additional services provided, shall require review by the Planning Division and may require an amendment subject to approval by the Zoning Administrator.
2. The licensee shall not employ or use the services of any full- or part-time active or reserve peace officer currently employed by the City of Costa Mesa or any contiguous agency for security purposes.
3. The use shall be conducted, at all times, in a manner that will allow the quiet enjoyment of the surrounding neighborhood. The applicant and/or business owner shall institute appropriate security and operational measures are necessary to comply with this requirement.
4. The conditions of approval for ZA-22-11 shall be blueprinted on the face of the site plan as part of the plan check submittal package.
5. Odor control devices and techniques shall be incorporated to ensure that odors from the restaurant use are not detected outside the property.
6. If parking shortages or other parking-related problems arise, the operator shall institute appropriate operational measures necessary to minimize or eliminate the problem, including, but not limited to, reducing the operating hours of the restaurant and/or providing additional parking through a valet service or off-site parking (subject to review and approval as outlined in the Municipal Code).
7. Live entertainment and amplified music or sound shall be prohibited.
8. All physical elements (e.g., awnings, covers, furniture, umbrellas, etc.) related to the outdoor dining area that are visible from the public right-of-way shall be compatible with one another and with the overall character and design of the principal structure; as well as, kept in good condition.
9. The maximum occupancy, as determined by provisions of the Uniform Building Code or other applicable codes, shall be posted in public view within the premises, and it shall be the responsibility of management to ensure that this limit is not exceeded at any time. Occupant loads for the open patio area and the enclosed building area shall be calculated and posted separately
10. No modification of the approved building elevations including, but not limited to, changes that increase the building height, removal of building articulation, or a change of the finish materials(s), shall be made during construction without prior Planning Division written approval. Failure to obtain prior Planning Division approval of the modification could result in the requirement of the applicant to reprocess the modification through a discretionary review process such as a minor design review or a variance, or in the requirement to modify the construction to reflect the approved plans.

11. No exterior roof access ladders, roof drain scuppers, or roof drain downspouts are permitted.
12. It is recommended that the project incorporate green building design and construction techniques where feasible. The applicant may contact the Building Safety Division at (714) 754-5273 for additional information.
13. The property owner or applicant shall install bike racks for patrons and employees on the site. The bicycle racks shall be decorative in design. This condition shall be completed prior to final occupancy/start of business, under the direction of the Planning and Building Division.
14. Transformers, backflow preventers, and any other approved above-ground utility improvement shall be located outside of the required street setback area and shall be screened upon view, under direction of Planning staff. Any deviation from this requirement shall be subject to review and approval of the Development Services Director.
15. Outdoor electronic communication systems shall not be audible in adjacent residential areas.
16. The drive-through menu board shall have adjustable volume levels which would allow for lowering the volume during early morning and late evening hours when background traffic noise is also reduced.
17. During all hours of operation of the site, it shall comply with the City's Noise Ordinance.
18. During all hours of operation after 11:00 PM, the patio area will be closed to be sensitive to neighboring residential properties. The owner or business operator will be responsible for maintaining a quiet atmosphere outside of the building.
19. The trash enclosure shall not be moved without the approval of the Development Services Director.
20. The applicant shall implement measures to reduce vehicle queue and idling in the drive-thru lanes at peak times as needed. These measures could include manual order entry by a restaurant staff person outside, or requirements for certain customers to park their vehicles for curbside service.
21. This approval does not include the allowance for live entertainment. Live entertainment may only be permitted subject to the approval of a Conditional Use Permit by the City and issuance of a "public entertainment permit". Contact Planning and Code Enforcement for application information.
22. The project shall comply with all applicable Federal, State, and local laws and guidelines including the South Coast Air Quality Management District. A copy of the applicable Costa Mesa Municipal Code requirements has been forwarded to the Applicant and, where applicable, the Authorized Agent, for reference.
23. While the facility is in operation, all doors and windows remain closed with the exception to allow for shipping and receiving.
24. During peak customer times an employee with a handheld tablet will direct customers into the drive-through lane and facilitate orders.

25. Outdoor activities is limited to drive-through operations and the outdoor patio area as shown on the approved plans.
26. All required parking areas and driveways shall be illuminated under the direction of the Planning Division. Lights used to illuminate parking areas shall be directed away from any adjoining premises located in any residential zone under the direction of the Planning Division.
27. Truck deliveries shall not occur anytime between the hours of 8:00 pm and 7:00 am.
28. Prior to issuance of building permits, applicant shall contact the US Postal Service with regard to location and design of mail delivery facilities. Such facilities shall be shown on the site plan, landscape plan, and/or floor plan.
29. Comply with all waste diversion requirements including food waste and green waste disposal as determined by the State of California
30. The subject property's ultimate finished grade level may not be filled/raised unless necessary to provide proper drainage, and in no case shall it be raised in excess of 30 inches above the finished grade of any abutting property. If additional fill dirt is needed to provide acceptable on-site storm water flow to a public street, an alternative means of accommodating that drainage shall be approved by the City's Building Official prior to issuance of any grading or building permits. Such alternatives may include subsurface tie-in to public storm water facilities, subsurface drainage collection systems and/or sumps with mechanical pump discharge in-lieu of gravity flow. If mechanical pump method is determined appropriate, said mechanical pump(s) shall continuously be maintained in working order. In any case, development of subject property shall preserve or improve the existing pattern of drainage on abutting properties.
31. Demolition permits for existing structure(s) shall be obtained and all work and inspections completed prior to final building inspections. Applicant is notified that written notice to the Air Quality Management District may be required ten (10) days prior to demolition.
32. Concrete wheel stops shall be installed 2' from the front edge of open parking spaces, or where applicable, landscape planters shall be increased 2' in depth to allow curbing to serve as a wheel stop.
33. The use shall be conducted, at all times, in a manner that will allow the quiet enjoyment of the surrounding neighborhood. The applicant and/or operator shall institute whatever security and operational measures are necessary to comply with this requirement.
34. A copy of the conditions of approval for this project must be kept on premises and presented to any authorized City official upon request. New business/property owners shall be notified of conditions of approval upon transfer of business or ownership of land.
35. Prior to the release of occupancy/utilities, the applicant shall contact the Planning Division to arrange a Planning inspection of the site. This inspection is to confirm that the conditions of approval and code requirements have been satisfied.

36. An outdoor closed-circuit security camera system shall be installed to record views of the parking and outdoor dining area.
37. The three (3) parking stalls located at the drive-through exit shall be used as employee parking to avoid impacts on customer circulation.
38. If any section, division, sentence, clause, phrase or portion of this resolution is for any reason held to be invalid or unconstitutional by a decision of any court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions.
39. The applicant, the property owner and the operator (collectively referred to as "indemnitors") shall each jointly and severally defend, indemnify, and hold harmless the City, its elected and appointed officials, agents, officers and employees from any claim, legal action, or proceeding (collectively referred to as "proceeding") brought against the City, its elected and appointed officials, agents, officers or employees arising out of City's approval of the project, including but not limited to any proceeding under the California Environmental Quality Act. The indemnification shall include, but not be limited to, damages, fees and/or costs awarded against the City, if any, and cost of suit, attorney's fees, and other costs, liabilities and expenses incurred in connection with such proceeding whether incurred by the applicant, the City and/or the parties initiating or bringing such proceeding. This indemnity provision shall include the indemnitors' joint and several obligation to indemnify the City for all the City's costs, fees, and damages that the City incurs in enforcing the indemnification provisions set forth in this section.

CODE REQUIREMENTS

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

- PInG. 1. Approval of the planning/zoning application is valid for two (2) years from the effective date of this approval and will expire at the end of that period unless applicant establishes the use by one of the following actions: 1) a building permit has been issued and construction has commenced, and a valid building permit has been maintained by making satisfactory progress as determined by the Building Official; 2) a certificate of occupancy has been issued; or 3) the use has been established and a business license has been issued. A time extension can be requested no less than thirty (30) days or more than sixty (60) days before the expiration date of the permit and submitted with the appropriate fee for review to the Planning Division. The Director of Development Services may extend the time for an approved permit or approval to be exercised up to 180 days subject to specific findings listed in Title 13, Section 13-29 (k) (6). Only one request for an extension of 180 days may be approved by the Director. Any subsequent extension requests shall be considered by the original approval authority.

2. Permits shall be obtained for all signs according to the provisions of the Costa Mesa Sign Ordinance. Permits shall be obtained for landscaping and will require plan check and review from the Planning department and must comply with all applicable CMMC landscaping requirements including but not limited to tree count, shrub count, front setback landscaping and any applicable water conservation measures.
3. Parking stalls shall be double-striped in accordance with City standards.
4. Any mechanical equipment such as air-conditioning equipment and duct work shall be screened from view in a manner approved by the Planning Division.
- Water 5.. Plan check and permit are required from Mesa Water District. Additionally, plumbing plans supporting the 1.5-inch meter need to be provided. A new service and meter will be required to supply the landscaping independent of the domestic supply to the building. Fire protection plans will be required to support the existing 6-inch fire protection point of connection if not they will need to abandon and cap the service in the street. The existing entrance driveway is impacting the existing fire hydrant so that will be addressed during the plan check. Any work in the street will require a permit from Caltrans.
- Bldg. 6. Comply with the requirements of the following adopted codes: 2022 California Building Code, 2022 California Electrical Code, 2022 California Mechanical Code, 2022 California Plumbing Code, 2022 California Green Building Standards Code and 2022 California Energy Code (or the applicable adopted, California Building Code, California Electrical Code, California Mechanical Code, California Plumbing Code, California Green Building Standards and California Energy Code at the time of plan submittal or permit issuance) and California Code of Regulations also known as the California Building Standards Code, as amended by the City of Costa Mesa. Requirements for accessibility to sites, facilities, buildings and elements by individuals with disability shall comply with chapter 11B of the 2019 California Building Code. Provide a plan to the County of Orange Health Dept. for review and approval.
7. Prior to the Building Division issuing any demolition permit, the applicant shall contact South Coast Air Quality Management District located at:
21865 Copley Dr.
Diamond Bar, CA 91765-4178
Tel: 909-396-2000 or Visit their web site
<http://www.costamesaca.gov/modules/showdocument.aspx?documentid=23381>
The Building Division will not issue a demolition permit until an Identification number is provided by AQMD.
- Bus. 8. All contractors and subcontractors must have valid business licenses to do
Lic. business in the City of Costa Mesa. Final inspections, final occupancy and utility releases will not be granted until all such licenses have been obtained.
- Fire 9. Comply with the requirements of the 2022 California Fire Code, including the reference standards, as adopted and amended by Costa Mesa Fire & Rescue.

10. All seating in the assembly area shall be fixed according to the approved building plans.
11. At the time of development submit for approval an Offsite Plan to the Engineering Division and Grading Plan to the Building Division that shows existing parkway improvements and the limits of work on the site. Construction Access approval must be obtained prior to Building or Engineering Permits being issued by the City of Costa Mesa. Pay Offsite Plan Check fee per Section 13-231 of the C.C.M.M.C. and an approved Offsite Plan shall be required prior to Engineering Permits being issued by the City of Costa Mesa.
12. Reconstruct existing driveway approaches per City of Costa Mesa standards to comply with A.D.A requirements.
14. For the first year in operation an on-site security guard is required to patrol between the hours of 9PM – 3AM. This requirement may be extended beyond the first year should there be an increase in service calls in the area related to the business.
15. Fulfill mitigation of off-site traffic impacts at the time of issuance of Building Permit by submitting to the Transportation Division the required Traffic Impact Fee according to the prevailing schedule of charges adopted by the City Council. The Traffic Impact Fee is calculated based on the net trip generation of 847 trip ends for the proposed project and includes a credit for any previously existing use. At the current rate, the Traffic Impact Fee is estimated at \$199,139.00. NOTE: The Traffic Impact Fee will be recalculated at the time of issuance of the Building Permit based upon any changes in the prevailing schedule of charges adopted by the City Council and in effect at that time.
16. Provide operational mitigation during peak demand periods to avoid impacts to the adjacent row of parking and to ensure that no queuing occurs on the adjacent City street. This mitigation includes a parking lot monitor for assisting drive through customers and vehicles entering/exiting parking spaces as well as additional staff taking drive through customer orders.
17. Install red curb for a distance of 100 feet north of the proposed driveway and approximately eight (8) feet on the southside, between the proposed driveway and the closest existing driveway at the adjacent parcel.
18. Design and construct a crosswalk on the south leg of the intersection of the Old Newport Boulevard and East 16th St. The Crosswalk design shall include the creation of a bulb out / curb extension on the east end and ADA-compliant ramps for both ends of the crosswalk. The applicant must submit the plan for review and approval from the Transportation Services Division.
19. Comply with the requirements of the 2022 California Fire Code, including the reference standards, as adopted and amended by Costa Mesa Fire & Rescue.
20. Obtain an encroachment permit from the City of Costa Mesa, Engineering Division, at the time of development and then construct P.C.C. driveway approaches, sidewalks, curbs & gutters, curb ramps, etc., per City of Costa Mesa Standards as shown on the Offsite Plans. For driveways, locations

and dimensions are subject to the approval of the Transportation Services Division.

21. In order to comply with the 2003 Drainage Area Management Plan (DAMP), the proposed project shall prepare a Water Quality Management Plan conforming to the Current National Pollution Discharge Elimination System (NPDES) and the Model WQMP, prepared by a Licensed Civil Engineer which shall be submitted to the Department of Public Works for review and approval.
 - a. A WQMP (Priority or Non-Priority) shall be maintained and updated as needed to satisfy the requirements of the adopted NPDES program. The plan shall ensure that the existing water quality measures for all improved phases of the project are adhered to.
 - b. Location of BMP's shall be within the public right-of-way.
22. Sewer improvements shall meet the approval of the Costa Mesa Sanitary District; call (949)631-1731 for information.
23. Dedicate easements (as needed) for public utilities. Final determination of any easement dedication will be per the City Engineer.
24. Survey monuments shall be preserved and referenced before construction, pursuant to Section 8771 of the Business and Profession Cod



November 6, 2023

City of Costa Mesa
 Development Services Department
 Planning Division
 77 Fair Drive, 2nd Floor
 Costa Mesa, CA 92626

Project Location: 1595 Newport Blvd. Costa Mesa, CA 92627

Supplemental Project Details and Operations

General Project Information

Raising Cane's is proposing to construct a Raising Cane's restaurant with drive through service at the southwest corner of E 16th Street and Newport Blvd, in the City of Costa Mesa, County of Orange, CA.

Project Description

The applicant proposes to demolish the existing home furnishing building (approx. 25,159 SF) and construct a new Raising Cane's, 2,913 SF building, 1,303 SF outdoor patio area, and dual lane drive through. The restaurant entrance faces northeast with the drive through windows facing southwest and the menu boards facing east. The intent of the design is to encourage walkability and bike-ability. By orienting access to and from the property away from the drive through and parking, both pedestrians and bicyclists will be encouraged to access the site/restaurant from the northeast entrance. In addition, the proposed landscaping and pedestrian/bike entranceway will encourage pedestrians and bicyclists to stay off Newport Blvd.

The applicant is proposing a dual-lane drive through and on-site improvements, including: 34 parking spaces, sidewalks, lighting, landscaping, and utilities. Two accessible parking spaces are proposed on-site: one standard and one van accessible. Two single-port EV chargers will be installed on-site south of the proposed restaurant providing two EV Capable spaces. Of the two EV Capable stalls, one stall will be van accessible to meet CA Green Building Code requirements. An additional six parking stalls will be equipped with conduit and infrastructure for future EV Charger installation per CA Green Building 2022. To meet City of Costa Mesa standards, an existing driveway will be demolished and replaced with sidewalk. A new driveway on Newport Blvd will be constructed for primary site access. A trash enclosure will be constructed as part of this project and will be accessible for regular trash pickups.

Project Area

	EXISTING CONDITIONS		PROPOSED CONDITIONS	
TOTAL SITE AREA	43,594 SF	100%	43,594 SF	100%
BUILDING AREA	25,160 SF	57.7%	2,913 SF	6.7%
IMPERVIOUS AREA	12,312 SF	28.2%	26,285 SF	61.0%
PERVIOUS AREA	6,122 SF	14.1%	14,396 SF	32.3%



Building

Raising Cane's prides itself on constructing best-in-class restaurants. This includes using top-grade building materials like real brick – each location is unique, and materials are chosen to fit the specific environment, region, and climate. In addition to following required building codes, there is an emphasis on aesthetic and best practices, including the “1” architectural feature on the front of the building crafted from recycled car metal, and each restaurant's hand-painted mural that reflects the location and culture of the community. For this location in Newport Blvd and 16th Street, a local artist will be used for to hand-painted mural.

Menu

Raising Cane's has a “focused menu” which contributes to the highest ratings in the industry for order accuracy, speed of service, food quality, and value. Raising Cane's serves only fresh chicken tenders, premium center cut fries, homemade coleslaw, “Texas Toast,” fresh-squeezed lemonade, and freshly brewed tea. The restaurant also serves Coke products and premium condiments.

Restaurant Operations

Hours of operation are 9:00 am – 2:00 am Sunday through Wednesday, 9:00 am – 3:30 am Thursday through Saturday, and restaurants are closed on major holidays. The dining room and drive through hours are the same unless there are necessary adjustments. Upon closing time, the doors are locked and the drive through is shut down at either 2:00am or 3:30am depending on the day of the week. It typically then takes approximately two hours to clean and close the restaurant. The restaurant will employ 25 - 30 full and part-time employees, with an average of 12 crewmembers per shift. Raising Cane's prides itself on paying above minimum wage, with restaurant managers earning executive-level salaries. Raising Cane's does not serve alcohol. Daily deliveries occur during early morning hours. Raising Cane's has drive through and dining room service, and its facilities are top of the line in the quick-casual restaurant environment.

Drive Through Operations

Raising Cane's is a leader in drive through speed of service. The current speed of service is 2 minutes and 28 seconds from the time customers place their order to the time they receive their order. On-site cameras showing exterior activity are monitored by the kitchen crew, allowing them to start cooking and stay ahead of the queue.

Speed of service is taken very seriously, and site-specific queueing management plans are deployed to ensure customers receive hot, fresh meals as fast as possible. The restaurant anticipates implementing various operational features to provide an expeditious drive through operation, including handheld tablet ordering, mobile ordering and pickup, trained crewmembers to manage traffic, off-duty police officers (as deemed necessary), and parking management. Raising Cane's also has specialized, cross-functional operations teams available to troubleshoot issues and train onsite crewmembers how to effectively manage drive through operations within the site.



Parking Operations

The site plan proposes to install 34 parking stalls as part of the project¹. There are 3 stalls proposed within the drive through exit which will be used for employee parking to avoid customers exiting the drive through lanes. Trained crewmembers will assist vehicles pulling out of those stalls to mitigate traffic within the drive through exit. The remaining parking stalls will be available for employee and customer parking during all operational hours. The site is located within two blocks of public transportation (bus stops) and has been strategically designed to include 10 short term bike racks and 1 long term bike locker to encourage multi-modal transportation. Based on other similarly located Raising Cane's, between 40 – 50% of crewmembers are expected to utilize carpooling, biking, walking and or public transportation to get to and from the restaurant. This encourages a healthy lifestyle and allows for a majority of the parking onsite to be utilized by customers. During the first 60 - 90 days of the restaurant's opening, Raising Cane's will rely on additional staff for training², and make all efforts to look at available options³ for carpooling, employer-sponsored transit passes and/or offsite employee parking, which may consist of a shuttle service from a nearby offsite parking lot. Raising Cane's will work with city staff prior to opening to finalize an offsite parking plan.

Minor Conditional Use Permit

The project requires approval of a Minor Conditional Use Permit (Minor CUP) for the following items: drive through use, operations after 11pm, and a deviation in parking. The proposed restaurant and drive through is compatible with the surrounding commercial/retail uses, industrial, and the location along an arterial road. The drive through is located at the rear of the property, limiting the view of it from the street. Based on ambient noise conditions from Newport Blvd/Highway 55, and measured noise levels from drive through operations at the proposed project site, the project is not expected to exceed the City's most stringent exterior or interior noise standards. Therefore, noise impacts from project drive through operations would be less than significant and no mitigation or noise abatement features are necessary. Additionally, the menu boards and speakers will not directly face the public street and are six feet away from the immediately adjacent property to the west – reducing noise or light to the surrounding community and public right of way. Lastly, the project requests a deviation from the required 41 parking stalls and is proposing 34 parking stalls along with 10 short term and 1 long term bike parking spaces. Dining trends have shifted significantly post-pandemic, and technology via mobile

¹ The City's parking standards for commercial/retail space are based on traditional parking demand. With drive through uses, and specifically with Raising Cane's, over 50% of customers will use the drive-thru feature.

² Additional staff during the opening 90-day period consists of the following: 1) 10-15 additional staff for 30-days, 2) 5-10 additional staff for an additional 30-days and 3) 5-10 additional staff for the last 30-day period. Staff demands during the opening period are variable and depend on the popularity of the restaurant and the speed at which new employees learn. Therefore, the foregoing figures should be considered estimates. Notably, because there is an existing Raising Cane's in Costa Mesa, the popularity of the new location is not expected to be as significant, compared to the existing Raising Cane's opening period.

³ The applicant expects to propose a 90-day employee transit/parking management plan to the Director within 60-days of the grand opening that will ensure that the added employees during the training/opening period will not overcrowd on site or off-site parking.



ordering has changed how we get our food; based on this and a site design that encourages pedestrian and bicyclists via a safe and separate approach, 34 parking stalls will be sufficient.

Minor Modification

The applicant is also seeking a Minor Modification to encroach four feet into the front setback along Newport Blvd. The proposed minor modification is supported by site design elements that encourage pedestrian and bicyclists use and safe access to the site. The proposed improvement is compatible with the surrounding neighborhood and enhances the architecture and design of the existing and anticipated development within the vicinity.

Landscaping

To encourage safe pedestrian and bicycle access to the site, the landscaping plan is designed with an emphasis on creating an environment that leads them to the restaurant. The result is nearly double the required amount of landscaping, with 14,396 SF provided (7,301 SF required per Landscape Requirements Section 13.105). This results in a significant secondary effect of cooling the site via shade.

Public Outreach Strategy

In 2022, Raising Cane's initiated a community outreach effort and met with city council members, planning commissioners, and immediately adjacent neighbors. Over the last year, both the council members and planning commissioners, who remain, have been kept updated. Additionally, we have engaged with local non-profit organizations, one specifically about hiring local youth from their program. During the next 30 days we will re-engage with our immediately adjacent neighbors, as well as expand our outreach to stakeholders along 16th Street and Newport Blvd. It is our belief that actively engaging with our surrounding community builds strong relationships and establishes a process to address potential shared challenges.

In Closing

Raising Cane's is excited to partner with the City of Costa Mesa, neighboring residents, adjacent businesses, and the community at large to revitalize and beautify an existing vacant commercial lot into a project encouraging pedestrian and multi-modal transportation. This location is anticipated to alleviate the current demand at the existing Raising Cane's on Harbor Blvd. Aside from providing fresh, hot, delicious chicken, Raising Cane's prides itself on being an integral part of the community by supporting programs that promote local education, feeding the hungry, pet welfare, and active lifestyles.

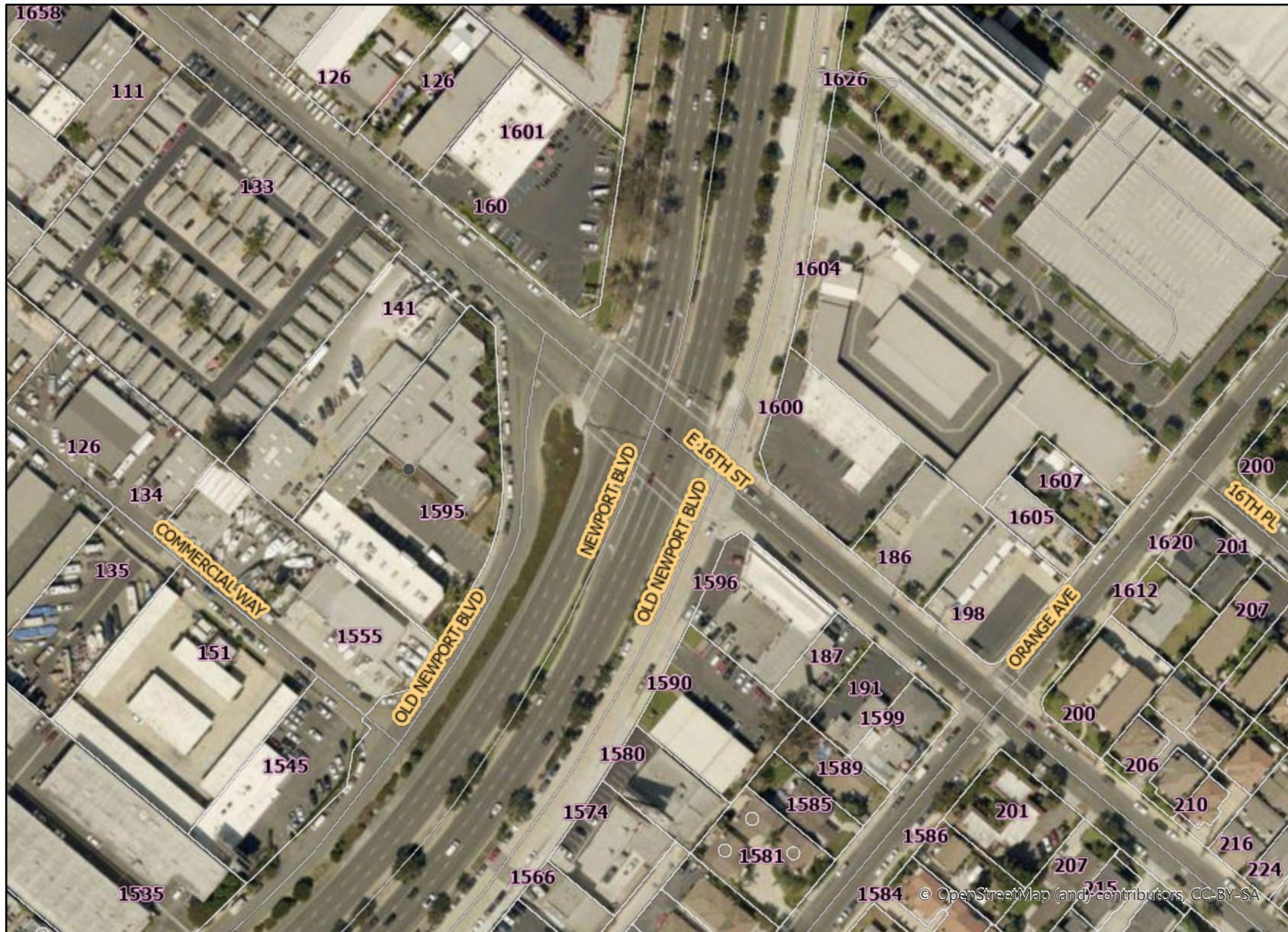
We appreciate the time and attention from city staff regarding our Minor Modification and Minor CUP application and look forward to a successful project.

Sincerely,

A handwritten signature in black ink that reads "KRoberts".

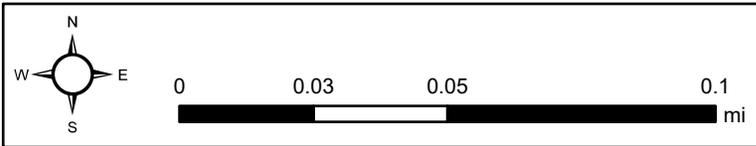
Kristen Roberts
Senior Property Development Manager, Fry Cook & Cashier
kroberts@raisingcanes.com

1595 Old Newport Boulevard Vicinity Map



Legend

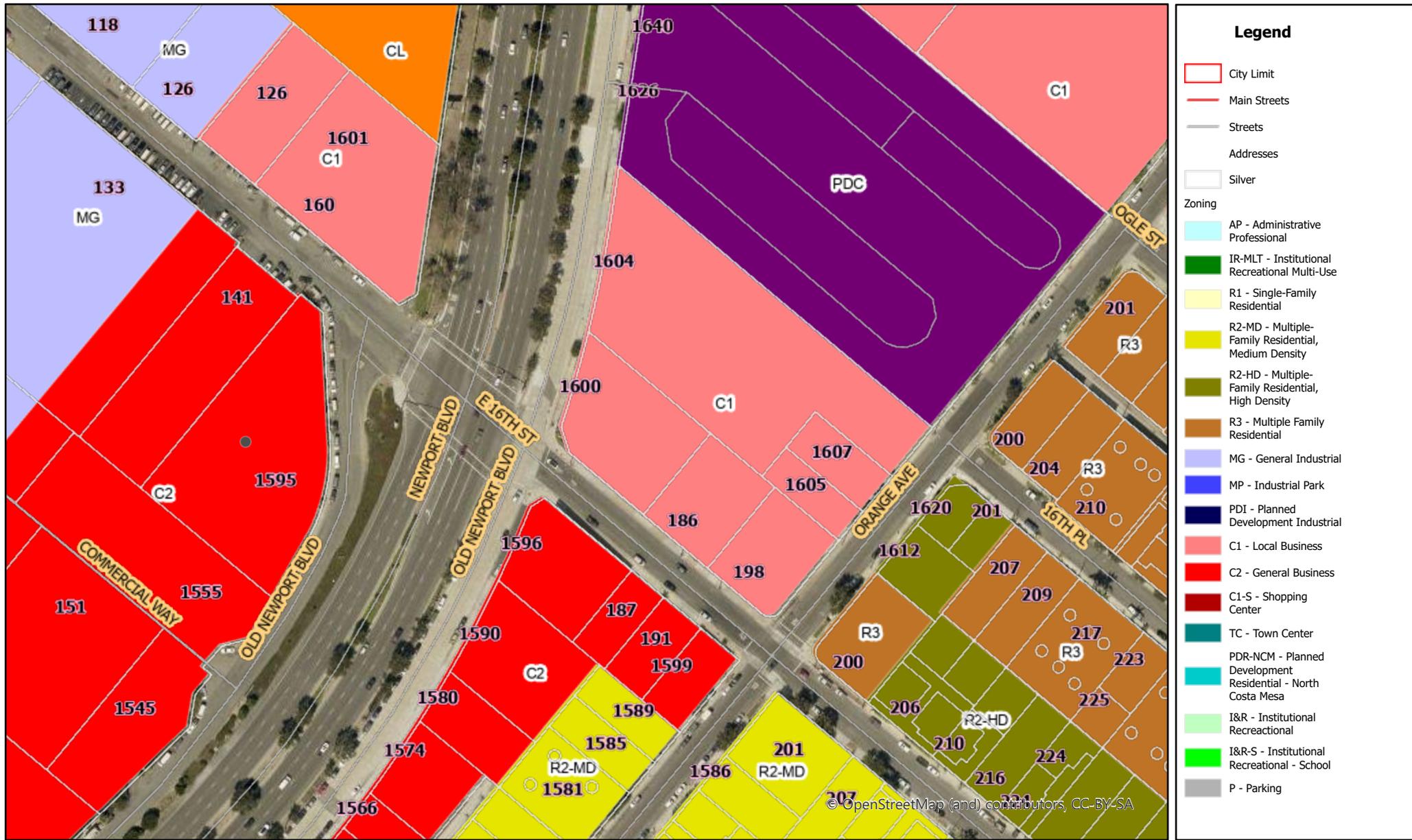
-  City Limit
-  Main Streets
-  Streets
-  Addresses
-  Silver



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Existing Conditions

View from Old Newport Boulevard



View from E 16th Street





MEMORANDUM

To: Amelia Beltran, P.E., Kimley-Horn and Associates, Inc.

From: Ryan Chiene and Tanay Pradhan, Kimley-Horn and Associates, Inc.

Date: August 11, 2022

Subject: Costa Mesa Raising Cane's RC0862 - Air Quality Analysis

This memorandum has been prepared to evaluate the potential air quality impacts associated with construction and operations of the Costa Mesa Raising Cane's RC0862 Project (project), located in the City of Costa Mesa, California.

PROJECT LOCATION AND DESCRIPTION

The project site is located at 1595 West Newport Boulevard west of the Newport Boulevard and 16th Street intersection in the City of Costa Mesa, California (City). The site is surrounded by commercial uses to the north, east and south, and a residential community to the west. The site is currently occupied by an existing furniture store and a surface parking lot. Raising Cane's proposes to demolish the existing store and develop a 2,913 -square-foot fast-food restaurant with two drive-through lanes.

AIR QUALITY IMPACTS

South Coast Air Quality Management District Thresholds

The South Coast Air Quality Management District (SCAQMD) CEQA Air Quality Handbook provides significance thresholds for volatile organic compounds (VOC) (also referred to as reactive organic gases [ROG]), nitrogen oxides (NO_x), carbon monoxide (CO), sulfur oxides (SO_x), particulate matter 10 microns or less in diameter (PM₁₀), and particulate matter 2.5 microns or less in diameter (PM_{2.5}). The thresholds apply to both project construction and operation within the SCAQMD jurisdictional boundaries. If the SCAQMD thresholds are exceeded, a potentially significant impact could result. However, ultimately the lead agency determines the thresholds of significance for impacts. If a project proposes development in excess of the established thresholds, as outlined in [Table 1: South Coast Air Quality Management District Significance Thresholds](#), a significant air quality impact may occur and additional analysis is warranted to fully assess the significance of impacts.

Table 1: South Coast Air Quality Management District Significance Thresholds		
Pollutant	Mass Daily Thresholds (pounds per day)	
	Construction	Operations
Nitrogen Oxides (NO _x)	100	55
Volatile Organic Compounds (VOC) ¹	75	55
Particulate Matter up to 10 Microns (PM ₁₀)	150	150
Particulate Matter up to 2.5 Microns (PM _{2.5})	55	55
Sulphur Oxides (SO _x)	150	150
Carbon Monoxide (CO)	550	550
Notes:		
1. VOCs and reactive organic gases (ROGs) are subsets of organic gases that are emitted from the incomplete combustion of hydrocarbons or other carbon-based fuels. Although they represent slightly different subsets of organic gases, they are used interchangeably for the purposes of this analysis.		
Source: South Coast Air Quality Management District, SCAQMD Air Quality Significance Thresholds, April 2019. Available at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf		

Construction Emissions

Construction results in the temporary generation of emissions resulting from demolition, site grading, road paving, motor vehicle exhaust associated with construction equipment and worker trips, and the movement of construction equipment, especially on unpaved surfaces. Emissions of airborne particulate matter are largely dependent on the amount of ground disturbance associated with site preparation activities as well as weather conditions and the appropriate application of water.

As noted above, the project site is located within a commercial area and would demolish the existing restaurant building and construct a 2,913 square-foot Raising Cane’s drive-through restaurant. Construction is estimated to last approximately 11 months. As the site is already disturbed, demolition, earthwork and grading would be required. Construction-generated emissions are short term and of temporary duration, lasting only as long as construction activities occur.

Construction-generated emissions associated the proposed project were calculated using the California Air Resources Board (CARB)-approved California Emissions Estimator Model version 2020.4.0 (CalEEMod) program, which is designed to model emissions for land use development projects, based on typical construction requirements. See Appendix A: Air Quality Emissions Data for more information regarding the construction assumptions used in this analysis. Predicted maximum daily construction-generated emissions for the proposed project are summarized in in Table 2: Construction-Related Emissions.

As indicated in Table 2, pollutant emissions during project construction would not exceed the SCAQMD thresholds and impacts would be less than significant.

Table 2: Construction-Related Emissions						
Construction Year	Maximum Pounds Per Day ¹					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Coarse Particulate Matter (PM ₁₀)
Summer Emissions²						
2023	0.68	6.20	7.81	0.01	0.35	0.70
2024	1.29	9.98	9.38	0.02	1.50	2.79
Winter Emissions²						
2023	0.68	6.20	7.79	0.01	0.35	0.70
2024	1.30	9.99	9.35	0.02	1.50	2.79
SCAQMD Threshold	75	100	550	150	55	150
<i>Exceed SCAQMD Threshold?</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>	<i>No</i>
Notes:						
1. SCAQMD Rule 403 Fugitive Dust applied. The Rule 403 reduction/credits include the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces three times daily; cover stock piles with tarps; water all haul roads twice daily; and limit speeds on unpaved roads to 15 miles per hour. Reductions percentages from the SCAQMD CEQA Handbook (Tables XI-A through XI-E) were applied. No mitigation was applied to construction equipment.						
2. Emission Rates differ from summer to winter due to the formulation of fuel in California for winter and summer blends						
Source: CalEEMod version 2020.4.0. Refer to Appendix A: Air Quality Emissions Data .						

Operational Emissions

Operational emissions are typically associated with area, energy, and mobile source emissions. Area sources include the use of landscape maintenance equipment, consumer products (such as household cleaners), and architectural coatings; energy source emissions would be generated from electricity and natural gas (non-hearth) usage; and mobile source emissions are generated from vehicle operations associated with the operation of the proposed project. Based on the Project Trip Generation Study prepared by Kimley-Horn (2022), the proposed project would generate approximately 1,162 daily vehicle trips. [Table 3: Operational Emissions](#) summarizes the operational emissions attributable to the proposed project.

Table 3: Operational Emissions						
Source	Maximum Pounds Per Day					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Coarse Particulate Matter (PM ₁₀)
Summer Emissions¹						
Area Source Emissions	0.07	0.00	0.00	0.00	0.00	0.00
Energy Emissions	0.02	0.20	0.17	0.00	0.02	0.02
Mobile Emissions	2.03	1.42	13.39	0.02	0.71	2.60
Total Emissions	2.12	1.62	13.56	0.02	0.73	2.62
SCAQMD Threshold	55	55	550	150	150	55

Table 3: Operational Emissions						
Source	Maximum Pounds Per Day					
	Reactive Organic Gases (ROG)	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Sulfur Dioxide (SO ₂)	Fine Particulate Matter (PM _{2.5})	Coarse Particulate Matter (PM ₁₀)
<i>Exceeds Threshold?</i>	No	No	No	No	No	No
Winter Emissions¹						
Area Source Emissions	0.07	0.00	0.00	0.00	0.00	0.00
Energy Emissions	0.02	0.20	0.17	0.00	0.02	0.02
Mobile Emissions	2.00	1.53	13.91	0.02	0.71	2.60
Total Emissions	2.09	1.73	14.08.	0.02	0.73	2.62
SCAQMD Threshold	55	55	550	150	150	55
<i>Exceeds Threshold?</i>	No	No	No	No	No	No
Notes:						
1. Emissions rates differ from summer to winter due to the formulation of fuel in California for winter and summer blends.						
Source: CalEEMod version 2020.4.0. Refer to Appendix A: Air Quality Emissions Data .						

As shown in [Table 3](#), the project’s emissions would not exceed SCAQMD thresholds. Therefore, regional operations emissions would result in a less than significant long-term regional air quality impact.

Localized Impacts

Localized Construction Significance Analysis

The nearest sensitive receptors to the project site are the multi-family residences located approximately 90 feet (27.5 meters) to the west of the project site. To identify impacts to sensitive receptors, the SCAQMD recommends addressing Localized Significance Thresholds (LSTs) for construction. LSTs were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects.

Since CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily soil disturbance activity possible for each piece of equipment, [Table 4: Equipment-Specific Grading Rates](#) is used to determine the maximum daily disturbed acreage for comparison to LSTs. For this project, the appropriate source receptor area (SRA) for the localized significance thresholds is the North Orange Coastal County (SRA 18) area since this area includes the project site. LSTs apply to NO_x, CO, PM₁₀, and PM_{2.5}. The SCAQMD produced look-up tables for projects that disturb areas less than or equal to 5 acres in size. Based on the daily equipment modeled in CalEEMod, project construction is anticipated to disturb approximately 1.5 acres in a single day. Therefore, the LSTs for 1 acre were conservatively used for this analysis.

Construction Phase	Equipment Type	Equipment Quantity	Acres Graded per 8-Hour Day	Operating Hours per Day	Acres Graded per Day
Grading	Graders	1	0.5	8	0.5
	Dozers	1	0.5	8	0.5
	Scrapers	0	1.0	8	0
	Tractors/Loaders/Backhoes	1	0.5	8	0.5
Total Acres Graded per Day					1.5

Source: CalEEMod version 2020.4.0. Refer to **Air Quality Emissions Data** for model outputs.

The SCAQMD’s methodology states that “off-site mobile emissions from the project should not be included in the emissions compared to LSTs.” Therefore, for the construction LST analysis, only emissions included in the CalEEMod “on-site” emissions outputs were considered. As noted above, the nearest sensitive receptors to the project site are the multi-family residences located approximately 90 feet (27.5 meters) northwest of the project site. LST thresholds are provided for distances to sensitive receptors of 25, 50, 100, 200, and 500 meters. Therefore, as recommended by the SCAQMD, LSTs for receptors located at 25 meters were conservatively utilized in this analysis. Table 5: Localized Significance of Construction Emissions, presents the results of localized emissions during project construction.

Construction Activity	Maximum Pounds Per Day			
	Nitrogen Oxide (NO _x)	Carbon Monoxide (CO)	Fine Particulate Matter (PM _{2.5})	Coarse Particulate Matter (PM ₁₀)
Demolition	5.78	7.39	0.31	0.54
Site Preparation	6.19	3.92	0.23	0.45
Grading	9.73	5.55	1.47	2.67
Building Construction	5.97	7.07	0.26	0.28
Paving	5.23	7.03	0.23	0.24
Architectural Coating	1.22	1.81	0.06	0.06
<i>SCAQMD Localized Screening Threshold (1 acre at 25 meters)</i>	92	647	3	4
Exceed SCAQMD Threshold?	No	No	No	No

Source: CalEEMod version 2020.4.0. Refer to **Air Quality Emissions Data** for model outputs.

Table 5 shows that the emissions of these pollutants on the peak day of project construction would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, the project would result in a less than significant impact concerning LSTs during construction activities.

Localized Operational Significance Analysis

LSTs for receptors located at 25 meters for SRA 18 were utilized in this analysis. As the project site is approximately 1 acre, the 1-acre LST threshold was used. The on-site operational emissions are compared to the LST thresholds in Table 6: Localized Significance of Operational Emissions. Table 6 shows that the maximum daily emissions of on-site pollutants during project operations would not result in significant concentrations of pollutants at nearby sensitive receptors. Therefore, the project would result in a less than significant impact concerning LSTs during operational activities.

Table 6: Localized Significance of Operational Emissions				
Activity	Maximum Pounds Per Day			
	Nitrogen Oxide (NO_x)	Carbon Monoxide (CO)	Coarse Particulate Matter (PM₁₀)	Fine Particulate Matter (PM_{2.5})
On-Site (Area and Energy Sources)	1.73	14.08	2.61	0.72
<i>SCAQMD Localized Screening Threshold (1 acre at 25 meters)</i>	<i>92</i>	<i>647</i>	<i>4</i>	<i>1</i>
Exceed SCAQMD Threshold?	No	No	No	No

Source: CalEEMod version 2020.4.0. Refer to **Air Quality Emissions Data** for model outputs.

Carbon Monoxide Hotspots

An analysis of CO “hot spots” is needed to determine whether the change in the level of service of an intersection resulting from the project would have the potential to cause exceedances of the California Ambient Air Quality Standards (CAAQS) or National Ambient Air Quality Standards (NAAQS). CO exceedances are caused by vehicular emissions, primarily when vehicles are idling at intersections. Vehicle emissions standards have become increasingly stringent in the last 20 years. Currently, the CO standard in California is a maximum of 3.4 grams per mile for passenger cars (requirements for certain vehicles are more stringent). With the turnover of older vehicles, cleaner fuels, and improved control technology on industrial facilities, CO concentrations have steadily declined.

Accordingly, with the steadily decreasing CO emissions from vehicles, even very busy intersections do not result in exceedances of the CO standard. The 2003 Air Quality Management Plan (2013 AQMP) is the most recent version that addresses CO concentrations. As part of the SCAQMD *CO Hotspot Analysis*, the Wilshire Boulevard/Veteran Avenue intersection, one of the most congested intersections in Southern California with an average daily traffic (ADT) volume of approximately 100,000 vehicles per day, was modeled for CO concentrations. This modeling effort identified a CO concentration high of 4.6 ppm, which is well below the 35 ppm Federal standard. The proposed project considered herein would not produce the volume of traffic required to generate a CO hot spot in the context of SCAQMD’s *CO Hotspot Analysis*. As the CO hotspots were not experienced at the Wilshire Boulevard/Veteran Avenue intersection even as it accommodates 100,000 vehicles daily, it can be reasonably inferred that CO hotspots would not be experienced at any vicinity intersections

resulting from a project of this size (generating approximately 1,162 daily vehicle trips for an approximately 2,913 square-foot restaurant). Therefore, impacts would be less than significant.

Air Quality Plan Consistency

As part of its enforcement responsibilities, the Environmental Protection Agency (EPA) requires each state with nonattainment areas to prepare and submit a State Implementation Plan that demonstrates the means to attain the federal standards. The State Implementation Plan must integrate federal, state, and local plan components and regulations to identify specific measures to reduce pollution in nonattainment areas, using a combination of performance standards and market-based programs. Similarly, under state law, the California Clean Air Act (CCAA) requires an air quality attainment plan to be prepared for areas designated as nonattainment regarding the federal and state ambient air quality standards. Air quality attainment plans outline emissions limits and control measures to achieve and maintain these standards by the earliest practical date.

The project site is located within the South Coast Air Basin (SCAB), which is under the jurisdiction of the SCAQMD. The SCAQMD is required, pursuant to the Federal Clean Air Act (FCAA), to reduce emissions of criteria pollutants for which the SCAB is in nonattainment. To reduce such emissions, the SCAQMD drafted the 2016 Air Quality Management Plan (2016 AQMP). The 2016 AQMP establishes a program of rules and regulations directed at reducing air pollutant emissions and achieving state (California) and national air quality standards. The 2016 AQMP is a regional and multi-agency effort including the SCAQMD, the CARB, the Southern California Association of Governments (SCAG), and the EPA. The plan's pollutant control strategies are based on the latest scientific and technical information and planning assumptions, including SCAG's *2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)*, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts. SCAG's latest growth forecasts were defined in consultation with local governments and with reference to local general plans. The project is subject to the SCAQMD's AQMP.

The criteria for determining consistency with the AQMP are defined by the following indicators:

- Consistency Criterion No. 1: The proposed project will not result in an increase in the frequency or severity of existing air quality violations, or cause or contribute to new violations, or delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP.
- Consistency Criterion No. 2: The proposed project will not exceed the assumptions in the AQMP or increments based on the years of the project build-out phase.

The violations to which Consistency Criterion No. 1 refers are CAAQS and NAAQS. As shown in Table 2 and Table 3, the project would not exceed the SCAQMD's short-term construction or long-term operational thresholds. The SCAQMD developed the construction and operational thresholds to determine if individual projects would cause, contribute, or increase the severity of criteria air pollutant exceedances of the CAAQS and NAAQS. As the project would not exceed the SCAQMD's thresholds, it would therefore not violate any air quality standards. Thus, no impact is expected, and the project would be consistent with the first criterion.

Concerning Consistency Criterion No. 2, the AQMP contains air pollutant reduction strategies based on SCAG's latest growth forecasts, and SCAG's growth forecasts were defined in consultation with local governments and with reference to local general plans. The proposed project is consistent with the existing commercial zoning designation for the site, and thus would not exceed the population or job growth projections used by the SCAQMD to develop the AQMP. Thus, no impact would occur, as the project is also consistent with the second criterion.

Odors

Individual responses to odors are highly variable and can result in various effects, including psychological (i.e., irritation, anger, or anxiety) and physiological (i.e., circulatory and respiratory effects, nausea, vomiting, and headache). Generally, the impact of an odor results from a variety of interacting factors such as frequency, duration, offensiveness, location, and sensory perception. Although offensive odors seldom cause physical harm, they can be annoying and cause distress among the public and generate citizen complaints.

Construction

Odors would be potentially generated from vehicles and construction equipment, such as diesel exhaust, and volatile organic compounds from architectural coatings and paving activities. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. Such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Additionally, construction equipment would be dispersed throughout the project site and equipment use would often be sporadic and non-continuous. Therefore, impacts associated with odors during construction would be less than significant.

Operations

CARB's Air Quality and Land Use Handbook (April 2005) identifies the sources of the most common odor complaints received by local air districts. Typical sources include facilities such as sewage treatment plants, landfills, recycling facilities, petroleum refineries, and livestock operations. The project does not contain any of the land uses identified as typically associated with emissions of

objectionable odors. It should be mentioned that the drive-thru operations would contribute to idling tailpipe odor. However, similar to construction tailpipe emissions, the odor would disperse rapidly and would not release at a magnitude that would substantially affect the surrounding area. As such, Project impacts would be less than significant.

CONCLUSION

As discussed above, the construction and operational air emissions from the proposed project would be well below all applicable thresholds and would not conflict with the SCAQMD AQMP or create objectionable odors. Therefore, emissions from the proposed project would also not exceed thresholds and would not result in significant air quality impacts.

Appendix A

Air Quality Emissions Data

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Costa Mesa Raising Cane's
Orange County, Summer**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	34.00	Space	0.58	13,600.00	0
Fast Food Restaurant with Drive Thru	2.91	1000sqft	0.07	2,913.00	0
City Park	0.35	Acre	0.35	15,246.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Parking lot = Impervious Surface
city Park = Landscaping

Construction Phase - Schedule for Construction (anticipated)

Demolition -

Grading -

Vehicle Trips - Calculated Trip Rate

Construction Off-road Equipment Mitigation - Per SCAQMD rules and regulations

Water Mitigation -

Waste Mitigation - Per AB939

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	1.00	45.00
tblConstructionPhase	NumDays	2.00	65.00
tblConstructionPhase	NumDays	100.00	44.00
tblConstructionPhase	NumDays	5.00	62.00
tblConstructionPhase	NumDays	5.00	18.00
tblGrading	MaterialExported	0.00	1,038.00
tblLandUse	LotAcreage	0.31	0.58
tblVehicleTrips	ST_TR	616.12	399.31
tblVehicleTrips	SU_TR	472.58	399.31
tblVehicleTrips	WD_TR	470.95	399.31

2.0 Emissions Summary

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.6804	6.1977	7.8146	0.0145	0.7746	0.2849	1.0595	0.1361	0.2724	0.4085	0.0000	1,426.1426	1,426.1426	0.3059	0.0311	1,441.1514
2024	1.2948	9.9793	9.3838	0.0160	5.4381	0.4021	5.8402	2.6021	0.3700	2.9721	0.0000	1,566.1865	1,566.1865	0.4560	0.0218	1,584.0790
Maximum	1.2948	9.9793	9.3838	0.0160	5.4381	0.4021	5.8402	2.6021	0.3700	2.9721	0.0000	1,566.1865	1,566.1865	0.4560	0.0311	1,584.0790

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.6804	6.1977	7.8146	0.0145	0.4154	0.2849	0.7002	0.0809	0.2724	0.3533	0.0000	1,426.1426	1,426.1426	0.3059	0.0311	1,441.1514
2024	1.2948	9.9793	9.3838	0.0160	2.3897	0.4021	2.7918	1.1299	0.3700	1.4999	0.0000	1,566.1865	1,566.1865	0.4560	0.0218	1,584.0790
Maximum	1.2948	9.9793	9.3838	0.0160	2.3897	0.4021	2.7918	1.1299	0.3700	1.4999	0.0000	1,566.1865	1,566.1865	0.4560	0.0311	1,584.0790

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.85	0.00	49.39	55.78	0.00	45.18	0.00	0.00	0.00	0.00	0.00	0.00

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003
Energy	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815
Mobile	2.0319	1.4209	13.3920	0.0246	2.5794	0.0188	2.5982	0.6875	0.0174	0.7050		2,551.2816	2,551.2816	0.2207	0.1363	2,597.4246
Total	2.1243	1.6232	13.5658	0.0258	2.5794	0.0342	2.6135	0.6875	0.0328	0.7203		2,794.0289	2,794.0289	0.2254	0.1408	2,841.6148

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003
Energy	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815
Mobile	2.0319	1.4209	13.3920	0.0246	2.5794	0.0188	2.5982	0.6875	0.0174	0.7050		2,551.2816	2,551.2816	0.2207	0.1363	2,597.4246
Total	2.1243	1.6232	13.5658	0.0258	2.5794	0.0342	2.6135	0.6875	0.0328	0.7203		2,794.0289	2,794.0289	0.2254	0.1408	2,841.6148

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/19/2023	12/19/2023	5	66	
2	Site Preparation	Site Preparation	12/20/2023	2/20/2024	5	45	
3	Grading	Grading	2/21/2024	5/21/2024	5	65	
4	Building Construction	Building Construction	5/22/2024	7/22/2024	5	44	
5	Architectural Coating	Architectural Coating	5/22/2024	8/15/2024	5	62	
6	Paving	Paving	7/23/2024	8/15/2024	5	18	

Acres of Grading (Site Preparation Phase): 22.5

Acres of Grading (Grading Phase): 48.75

Acres of Paving: 0.58

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,290; Non-Residential Outdoor: 1,097; Striped Parking Area: 816 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	187.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	130.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	7.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6134	0.0000	0.6134	0.0929	0.0000	0.0929			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	0.6463	5.7787	7.3926	0.0120	0.6134	0.2821	0.8956	0.0929	0.2698	0.3627		1,148.4055	1,148.4055	0.2089		1,153.6290

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.9000e-003	0.3377	0.1158	1.5900e-003	0.0494	2.1700e-003	0.0516	0.0135	2.0800e-003	0.0156		181.2060	181.2060	0.0183	0.0291	190.3253
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0282	0.0180	0.3062	9.4000e-004	0.1118	5.7000e-004	0.1124	0.0296	5.3000e-004	0.0302		96.5311	96.5311	2.1000e-003	2.0600e-003	97.1972
Total	0.0341	0.3557	0.4220	2.5300e-003	0.1612	2.7400e-003	0.1639	0.0432	2.6100e-003	0.0458		277.7371	277.7371	0.0204	0.0311	287.5225

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2622	0.0000	0.2622	0.0397	0.0000	0.0397			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	0.6463	5.7787	7.3926	0.0120	0.2622	0.2821	0.5444	0.0397	0.2698	0.3095	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.9000e-003	0.3377	0.1158	1.5900e-003	0.0472	2.1700e-003	0.0493	0.0130	2.0800e-003	0.0151		181.2060	181.2060	0.0183	0.0291	190.3253
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0282	0.0180	0.3062	9.4000e-004	0.1060	5.7000e-004	0.1065	0.0282	5.3000e-004	0.0287		96.5311	96.5311	2.1000e-003	2.0600e-003	97.1972
Total	0.0341	0.3557	0.4220	2.5300e-003	0.1531	2.7400e-003	0.1559	0.0412	2.6100e-003	0.0438		277.7371	277.7371	0.0204	0.0311	287.5225

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e-003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657		942.4317	942.4317	0.3048		950.0517

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0141	9.0100e-003	0.1531	4.7000e-004	0.0559	2.9000e-004	0.0562	0.0148	2.6000e-004	0.0151		48.2655	48.2655	1.0500e-003	1.0300e-003	48.5986
Total	0.0141	9.0100e-003	0.1531	4.7000e-004	0.0559	2.9000e-004	0.0562	0.0148	2.6000e-004	0.0151		48.2655	48.2655	1.0500e-003	1.0300e-003	48.5986

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e-003	0.2267	0.2266	0.4533	0.0245	0.2084	0.2329	0.0000	942.4317	942.4317	0.3048		950.0517

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0141	9.0100e-003	0.1531	4.7000e-004	0.0530	2.9000e-004	0.0533	0.0141	2.6000e-004	0.0144		48.2655	48.2655	1.0500e-003	1.0300e-003	48.5986
Total	0.0141	9.0100e-003	0.1531	4.7000e-004	0.0530	2.9000e-004	0.0533	0.0141	2.6000e-004	0.0144		48.2655	48.2655	1.0500e-003	1.0300e-003	48.5986

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4985	5.6040	3.8921	9.7300e-003		0.2012	0.2012		0.1851	0.1851		942.2742	942.2742	0.3048		949.8930
Total	0.4985	5.6040	3.8921	9.7300e-003	0.5303	0.2012	0.7315	0.0573	0.1851	0.2424		942.2742	942.2742	0.3048		949.8930

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0132	8.1000e-003	0.1427	4.6000e-004	0.0559	2.7000e-004	0.0562	0.0148	2.5000e-004	0.0151		47.1044	47.1044	9.5000e-004	9.6000e-004	47.4152
Total	0.0132	8.1000e-003	0.1427	4.6000e-004	0.0559	2.7000e-004	0.0562	0.0148	2.5000e-004	0.0151		47.1044	47.1044	9.5000e-004	9.6000e-004	47.4152

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.4985	5.6040	3.8921	9.7300e-003		0.2012	0.2012		0.1851	0.1851	0.0000	942.2742	942.2742	0.3048		949.8930
Total	0.4985	5.6040	3.8921	9.7300e-003	0.2267	0.2012	0.4279	0.0245	0.1851	0.2096	0.0000	942.2742	942.2742	0.3048		949.8930

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0132	8.1000e-003	0.1427	4.6000e-004	0.0530	2.7000e-004	0.0532	0.0141	2.5000e-004	0.0144		47.1044	47.1044	9.5000e-004	9.6000e-004	47.4152
Total	0.0132	8.1000e-003	0.1427	4.6000e-004	0.0530	2.7000e-004	0.0532	0.0141	2.5000e-004	0.0144		47.1044	47.1044	9.5000e-004	9.6000e-004	47.4152

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3138	0.0000	5.3138	2.5688	0.0000	2.5688			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681		1,364.662 3	1,364.662 3	0.4414		1,375.696 2
Total	0.9132	9.7297	5.5468	0.0141	5.3138	0.4001	5.7139	2.5688	0.3681	2.9369		1,364.662 3	1,364.662 3	0.4414		1,375.696 2

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1200e-003	0.2366	0.0835	1.1000e-003	0.0349	1.6000e-003	0.0365	9.5500e-003	1.5300e-003	0.0111		126.1572	126.1572	0.0131	0.0203	132.5185
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0212	0.0130	0.2283	7.3000e-004	0.0894	4.4000e-004	0.0899	0.0237	4.0000e-004	0.0241		75.3671	75.3671	1.5200e-003	1.5400e-003	75.8643
Total	0.0253	0.2496	0.3118	1.8300e-003	0.1243	2.0400e-003	0.1263	0.0333	1.9300e-003	0.0352		201.5243	201.5243	0.0146	0.0218	208.3827

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2716	0.0000	2.2716	1.0982	0.0000	1.0982			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681	0.0000	1,364.662 3	1,364.662 3	0.4414		1,375.696 2
Total	0.9132	9.7297	5.5468	0.0141	2.2716	0.4001	2.6717	1.0982	0.3681	1.4663	0.0000	1,364.662 3	1,364.662 3	0.4414		1,375.696 2

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	4.1200e-003	0.2366	0.0835	1.1000e-003	0.0333	1.6000e-003	0.0349	9.1600e-003	1.5300e-003	0.0107		126.1572	126.1572	0.0131	0.0203	132.5185
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0212	0.0130	0.2283	7.3000e-004	0.0848	4.4000e-004	0.0852	0.0226	4.0000e-004	0.0230		75.3671	75.3671	1.5200e-003	1.5400e-003	75.8643
Total	0.0253	0.2496	0.3118	1.8300e-003	0.1181	2.0400e-003	0.1201	0.0317	1.9300e-003	0.0337		201.5243	201.5243	0.0146	0.0218	208.3827

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177
Total	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9800e-003	0.1048	0.0433	5.3000e-004	0.0192	5.6000e-004	0.0198	5.5200e-003	5.4000e-004	6.0600e-003		58.3159	58.3159	3.5600e-003	8.4000e-003	60.9090
Worker	0.0185	0.0113	0.1998	6.4000e-004	0.0782	3.8000e-004	0.0786	0.0208	3.5000e-004	0.0211		65.9462	65.9462	1.3300e-003	1.3500e-003	66.3812
Total	0.0215	0.1162	0.2431	1.1700e-003	0.0974	9.4000e-004	0.0984	0.0263	8.9000e-004	0.0272		124.2621	124.2621	4.8900e-003	9.7500e-003	127.2902

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177
Total	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.9800e-003	0.1048	0.0433	5.3000e-004	0.0184	5.6000e-004	0.0189	5.3200e-003	5.4000e-004	5.8600e-003		58.3159	58.3159	3.5600e-003	8.4000e-003	60.9090
Worker	0.0185	0.0113	0.1998	6.4000e-004	0.0742	3.8000e-004	0.0745	0.0198	3.5000e-004	0.0201		65.9462	65.9462	1.3300e-003	1.3500e-003	66.3812
Total	0.0215	0.1162	0.2431	1.1700e-003	0.0925	9.4000e-004	0.0935	0.0251	8.9000e-004	0.0260		124.2621	124.2621	4.8900e-003	9.7500e-003	127.2902

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.3890					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	0.5697	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6500e-003	1.6200e-003	0.0285	9.0000e-005	0.0112	5.0000e-005	0.0112	2.9600e-003	5.0000e-005	3.0100e-003		9.4209	9.4209	1.9000e-004	1.9000e-004	9.4830
Total	2.6500e-003	1.6200e-003	0.0285	9.0000e-005	0.0112	5.0000e-005	0.0112	2.9600e-003	5.0000e-005	3.0100e-003		9.4209	9.4209	1.9000e-004	1.9000e-004	9.4830

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.3890					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	0.5697	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6500e-003	1.6200e-003	0.0285	9.0000e-005	0.0106	5.0000e-005	0.0107	2.8200e-003	5.0000e-005	2.8700e-003		9.4209	9.4209	1.9000e-004	1.9000e-004	9.4830
Total	2.6500e-003	1.6200e-003	0.0285	9.0000e-005	0.0106	5.0000e-005	0.0107	2.8200e-003	5.0000e-005	2.8700e-003		9.4209	9.4209	1.9000e-004	1.9000e-004	9.4830

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6748	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0477	0.0292	0.5137	1.6400e-003	0.2012	9.8000e-004	0.2022	0.0534	9.0000e-004	0.0543		169.5759	169.5759	3.4200e-003	3.4700e-003	170.6946
Total	0.0477	0.0292	0.5137	1.6400e-003	0.2012	9.8000e-004	0.2022	0.0534	9.0000e-004	0.0543		169.5759	169.5759	3.4200e-003	3.4700e-003	170.6946

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6748	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0477	0.0292	0.5137	1.6400e-003	0.1907	9.8000e-004	0.1917	0.0508	9.0000e-004	0.0517		169.5759	169.5759	3.4200e-003	3.4700e-003	170.6946
Total	0.0477	0.0292	0.5137	1.6400e-003	0.1907	9.8000e-004	0.1917	0.0508	9.0000e-004	0.0517		169.5759	169.5759	3.4200e-003	3.4700e-003	170.6946

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	2.0319	1.4209	13.3920	0.0246	2.5794	0.0188	2.5982	0.6875	0.0174	0.7050		2,551,281 6	2,551,281 6	0.2207	0.1363	2,597,424 6
Unmitigated	2.0319	1.4209	13.3920	0.0246	2.5794	0.0188	2.5982	0.6875	0.0174	0.7050		2,551,281 6	2,551,281 6	0.2207	0.1363	2,597,424 6

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,163.19	1,163.19	1163.19	1,224,127	1,224,127
Parking Lot	0.00	0.00	0.00		
Total	1,163.19	1,163.19	1,163.19	1,224,127	1,224,127

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Parking Lot	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815
NaturalGas Unmitigated	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	2063.28	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	2.06328	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003
Unmitigated	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.6100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5000e-004	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003
Total	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.6100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5000e-004	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005			8.1600e-003	8.1600e-003	2.0000e-005	8.6900e-003
Total	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005			8.1600e-003	8.1600e-003	2.0000e-005	8.6900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

Costa Mesa Raising Cane's - Orange County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Costa Mesa Raising Cane's
Orange County, Winter**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	34.00	Space	0.58	13,600.00	0
Fast Food Restaurant with Drive Thru	2.91	1000sqft	0.07	2,913.00	0
City Park	0.35	Acre	0.35	15,246.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

- Project Characteristics -
- Land Use - Parking lot = Impervious Surface
city Park = Landscaping
- Construction Phase - Schedule for Construction (anticipated)
- Demolition -
- Grading -
- Vehicle Trips - Calculated Trip Rate
- Construction Off-road Equipment Mitigation - Per SCAQMD rules and regulations
- Water Mitigation -
- Waste Mitigation - Per AB939

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	1.00	45.00
tblConstructionPhase	NumDays	2.00	65.00
tblConstructionPhase	NumDays	100.00	44.00
tblConstructionPhase	NumDays	5.00	62.00
tblConstructionPhase	NumDays	5.00	18.00
tblGrading	MaterialExported	0.00	1,038.00
tblLandUse	LotAcreage	0.31	0.58
tblVehicleTrips	ST_TR	616.12	399.31
tblVehicleTrips	SU_TR	472.58	399.31
tblVehicleTrips	WD_TR	470.95	399.31

2.0 Emissions Summary

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.6827	6.1986	7.7949	0.0145	0.7746	0.2849	1.0595	0.1361	0.2724	0.4085	0.0000	1,421.6910	1,421.6910	0.3059	0.0313	1,436.7478
2024	1.2997	9.9907	9.3472	0.0159	5.4381	0.4021	5.8402	2.6021	0.3700	2.9721	0.0000	1,562.7049	1,562.7049	0.4560	0.0219	1,580.6328
Maximum	1.2997	9.9907	9.3472	0.0159	5.4381	0.4021	5.8402	2.6021	0.3700	2.9721	0.0000	1,562.7049	1,562.7049	0.4560	0.0313	1,580.6328

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2023	0.6827	6.1986	7.7949	0.0145	0.4154	0.2849	0.7002	0.0809	0.2724	0.3533	0.0000	1,421.6910	1,421.6910	0.3059	0.0313	1,436.7478
2024	1.2997	9.9907	9.3472	0.0159	2.3897	0.4021	2.7918	1.1299	0.3700	1.4999	0.0000	1,562.7049	1,562.7049	0.4560	0.0219	1,580.6328
Maximum	1.2997	9.9907	9.3472	0.0159	2.3897	0.4021	2.7918	1.1299	0.3700	1.4999	0.0000	1,562.7049	1,562.7049	0.4560	0.0313	1,580.6328

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	54.85	0.00	49.39	55.78	0.00	45.18	0.00	0.00	0.00	0.00	0.00	0.00

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003
Energy	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815
Mobile	1.9975	1.5269	13.9075	0.0237	2.5794	0.0188	2.5982	0.6875	0.0175	0.7050		2,459.3582	2,459.3582	0.2351	0.1428	2,507.7789
Total	2.0900	1.7292	14.0812	0.0250	2.5794	0.0342	2.6136	0.6875	0.0328	0.7204		2,702.1054	2,702.1054	0.2397	0.1472	2,751.9691

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003
Energy	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815
Mobile	1.9975	1.5269	13.9075	0.0237	2.5794	0.0188	2.5982	0.6875	0.0175	0.7050		2,459.3582	2,459.3582	0.2351	0.1428	2,507.7789
Total	2.0900	1.7292	14.0812	0.0250	2.5794	0.0342	2.6136	0.6875	0.0328	0.7204		2,702.1054	2,702.1054	0.2397	0.1472	2,751.9691

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/19/2023	12/19/2023	5	66	
2	Site Preparation	Site Preparation	12/20/2023	2/20/2024	5	45	
3	Grading	Grading	2/21/2024	5/21/2024	5	65	
4	Building Construction	Building Construction	5/22/2024	7/22/2024	5	44	
5	Architectural Coating	Architectural Coating	5/22/2024	8/15/2024	5	62	
6	Paving	Paving	7/23/2024	8/15/2024	5	18	

Acres of Grading (Site Preparation Phase): 22.5

Acres of Grading (Grading Phase): 48.75

Acres of Paving: 0.58

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,290; Non-Residential Outdoor: 1,097; Striped Parking Area: 816 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	187.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	130.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	7.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.6134	0.0000	0.6134	0.0929	0.0000	0.0929			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698		1,148.4055	1,148.4055	0.2089		1,153.6290
Total	0.6463	5.7787	7.3926	0.0120	0.6134	0.2821	0.8956	0.0929	0.2698	0.3627		1,148.4055	1,148.4055	0.2089		1,153.6290

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5600e-003	0.3520	0.1170	1.5900e-003	0.0494	2.1800e-003	0.0516	0.0135	2.0900e-003	0.0156		181.3698	181.3698	0.0183	0.0291	190.4965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0308	0.0198	0.2853	9.0000e-004	0.1118	5.7000e-004	0.1124	0.0296	5.3000e-004	0.0302		91.9157	91.9157	2.1500e-003	2.1900e-003	92.6223
Total	0.0364	0.3718	0.4023	2.4900e-003	0.1612	2.7500e-003	0.1639	0.0432	2.6200e-003	0.0458		273.2854	273.2854	0.0204	0.0313	283.1188

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2622	0.0000	0.2622	0.0397	0.0000	0.0397			0.0000			0.0000
Off-Road	0.6463	5.7787	7.3926	0.0120		0.2821	0.2821		0.2698	0.2698	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290
Total	0.6463	5.7787	7.3926	0.0120	0.2622	0.2821	0.5444	0.0397	0.2698	0.3095	0.0000	1,148.4055	1,148.4055	0.2089		1,153.6290

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	5.5600e-003	0.3520	0.1170	1.5900e-003	0.0472	2.1800e-003	0.0493	0.0130	2.0900e-003	0.0151		181.3698	181.3698	0.0183	0.0291	190.4965
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0308	0.0198	0.2853	9.0000e-004	0.1060	5.7000e-004	0.1065	0.0282	5.3000e-004	0.0287		91.9157	91.9157	2.1500e-003	2.1900e-003	92.6223
Total	0.0364	0.3718	0.4023	2.4900e-003	0.1531	2.7500e-003	0.1559	0.0412	2.6200e-003	0.0438		273.2854	273.2854	0.0204	0.0313	283.1188

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084		942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e-003	0.5303	0.2266	0.7568	0.0573	0.2084	0.2657		942.4317	942.4317	0.3048		950.0517

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	9.9000e-003	0.1426	4.5000e-004	0.0559	2.9000e-004	0.0562	0.0148	2.6000e-004	0.0151		45.9578	45.9578	1.0700e-003	1.1000e-003	46.3111
Total	0.0154	9.9000e-003	0.1426	4.5000e-004	0.0559	2.9000e-004	0.0562	0.0148	2.6000e-004	0.0151		45.9578	45.9578	1.0700e-003	1.1000e-003	46.3111

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.5348	6.1887	3.9239	9.7300e-003		0.2266	0.2266		0.2084	0.2084	0.0000	942.4317	942.4317	0.3048		950.0517
Total	0.5348	6.1887	3.9239	9.7300e-003	0.2267	0.2266	0.4533	0.0245	0.2084	0.2329	0.0000	942.4317	942.4317	0.3048		950.0517

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0154	9.9000e-003	0.1426	4.5000e-004	0.0530	2.9000e-004	0.0533	0.0141	2.6000e-004	0.0144		45.9578	45.9578	1.0700e-003	1.1000e-003	46.3111
Total	0.0154	9.9000e-003	0.1426	4.5000e-004	0.0530	2.9000e-004	0.0533	0.0141	2.6000e-004	0.0144		45.9578	45.9578	1.0700e-003	1.1000e-003	46.3111

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.5303	0.0000	0.5303	0.0573	0.0000	0.0573			0.0000			0.0000
Off-Road	0.4985	5.6040	3.8921	9.7300e-003		0.2012	0.2012		0.1851	0.1851		942.2742	942.2742	0.3048		949.8930
Total	0.4985	5.6040	3.8921	9.7300e-003	0.5303	0.2012	0.7315	0.0573	0.1851	0.2424		942.2742	942.2742	0.3048		949.8930

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0145	8.8900e-003	0.1331	4.3000e-004	0.0559	2.7000e-004	0.0562	0.0148	2.5000e-004	0.0151		44.8558	44.8558	9.7000e-004	1.0200e-003	45.1854
Total	0.0145	8.8900e-003	0.1331	4.3000e-004	0.0559	2.7000e-004	0.0562	0.0148	2.5000e-004	0.0151		44.8558	44.8558	9.7000e-004	1.0200e-003	45.1854

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					0.2267	0.0000	0.2267	0.0245	0.0000	0.0245			0.0000			0.0000
Off-Road	0.4985	5.6040	3.8921	9.7300e-003		0.2012	0.2012		0.1851	0.1851	0.0000	942.2742	942.2742	0.3048		949.8930
Total	0.4985	5.6040	3.8921	9.7300e-003	0.2267	0.2012	0.4279	0.0245	0.1851	0.2096	0.0000	942.2742	942.2742	0.3048		949.8930

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0145	8.8900e-003	0.1331	4.3000e-004	0.0530	2.7000e-004	0.0532	0.0141	2.5000e-004	0.0144		44.8558	44.8558	9.7000e-004	1.0200e-003	45.1854
Total	0.0145	8.8900e-003	0.1331	4.3000e-004	0.0530	2.7000e-004	0.0532	0.0141	2.5000e-004	0.0144		44.8558	44.8558	9.7000e-004	1.0200e-003	45.1854

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					5.3138	0.0000	5.3138	2.5688	0.0000	2.5688			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681		1,364.662 3	1,364.662 3	0.4414		1,375.696 2
Total	0.9132	9.7297	5.5468	0.0141	5.3138	0.4001	5.7139	2.5688	0.3681	2.9369		1,364.662 3	1,364.662 3	0.4414		1,375.696 2

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.8800e-003	0.2467	0.0844	1.1100e-003	0.0349	1.6000e-003	0.0365	9.5500e-003	1.5400e-003	0.0111		126.2734	126.2734	0.0131	0.0203	132.6399
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0232	0.0142	0.2129	7.0000e-004	0.0894	4.4000e-004	0.0899	0.0237	4.0000e-004	0.0241		71.7692	71.7692	1.5600e-003	1.6400e-003	72.2966
Total	0.0271	0.2609	0.2973	1.8100e-003	0.1243	2.0400e-003	0.1263	0.0333	1.9400e-003	0.0352		198.0426	198.0426	0.0146	0.0219	204.9365

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					2.2716	0.0000	2.2716	1.0982	0.0000	1.0982			0.0000			0.0000
Off-Road	0.9132	9.7297	5.5468	0.0141		0.4001	0.4001		0.3681	0.3681	0.0000	1,364.662 3	1,364.662 3	0.4414		1,375.696 2
Total	0.9132	9.7297	5.5468	0.0141	2.2716	0.4001	2.6717	1.0982	0.3681	1.4663	0.0000	1,364.662 3	1,364.662 3	0.4414		1,375.696 2

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	3.8800e-003	0.2467	0.0844	1.1100e-003	0.0333	1.6000e-003	0.0349	9.1600e-003	1.5400e-003	0.0107		126.2734	126.2734	0.0131	0.0203	132.6399
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0232	0.0142	0.2129	7.0000e-004	0.0848	4.4000e-004	0.0852	0.0226	4.0000e-004	0.0230		71.7692	71.7692	1.5600e-003	1.6400e-003	72.2966
Total	0.0271	0.2609	0.2973	1.8100e-003	0.1181	2.0400e-003	0.1201	0.0317	1.9400e-003	0.0337		198.0426	198.0426	0.0146	0.0219	204.9365

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177
Total	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598		1,104.9834	1,104.9834	0.3574		1,113.9177

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8800e-003	0.1095	0.0446	5.3000e-004	0.0192	5.7000e-004	0.0198	5.5200e-003	5.4000e-004	6.0600e-003		58.4038	58.4038	3.5500e-003	8.4200e-003	61.0023
Worker	0.0203	0.0125	0.1863	6.1000e-004	0.0782	3.8000e-004	0.0786	0.0208	3.5000e-004	0.0211		62.7981	62.7981	1.3600e-003	1.4300e-003	63.2596
Total	0.0232	0.1220	0.2310	1.1400e-003	0.0974	9.5000e-004	0.0984	0.0263	8.9000e-004	0.0272		121.2019	121.2019	4.9100e-003	9.8500e-003	124.2618

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177
Total	0.5950	5.9739	7.0675	0.0114		0.2824	0.2824		0.2598	0.2598	0.0000	1,104.9834	1,104.9834	0.3574		1,113.9177

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.8800e-003	0.1095	0.0446	5.3000e-004	0.0184	5.7000e-004	0.0189	5.3200e-003	5.4000e-004	5.8600e-003		58.4038	58.4038	3.5500e-003	8.4200e-003	61.0023
Worker	0.0203	0.0125	0.1863	6.1000e-004	0.0742	3.8000e-004	0.0745	0.0198	3.5000e-004	0.0201		62.7981	62.7981	1.3600e-003	1.4300e-003	63.2596
Total	0.0232	0.1220	0.2310	1.1400e-003	0.0925	9.5000e-004	0.0935	0.0251	8.9000e-004	0.0260		121.2019	121.2019	4.9100e-003	9.8500e-003	124.2618

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.3890					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	0.5697	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-003	1.7800e-003	0.0266	9.0000e-005	0.0112	5.0000e-005	0.0112	2.9600e-003	5.0000e-005	3.0100e-003		8.9712	8.9712	1.9000e-004	2.0000e-004	9.0371
Total	2.9000e-003	1.7800e-003	0.0266	9.0000e-005	0.0112	5.0000e-005	0.0112	2.9600e-003	5.0000e-005	3.0100e-003		8.9712	8.9712	1.9000e-004	2.0000e-004	9.0371

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	0.3890					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	0.5697	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.9000e-003	1.7800e-003	0.0266	9.0000e-005	0.0106	5.0000e-005	0.0107	2.8200e-003	5.0000e-005	2.8700e-003		8.9712	8.9712	1.9000e-004	2.0000e-004	9.0371
Total	2.9000e-003	1.7800e-003	0.0266	9.0000e-005	0.0106	5.0000e-005	0.0107	2.8200e-003	5.0000e-005	2.8700e-003		8.9712	8.9712	1.9000e-004	2.0000e-004	9.0371

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6748	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269		1,036.2393	1,036.2393	0.3019		1,043.7858

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0523	0.0320	0.4791	1.5700e-003	0.2012	9.8000e-004	0.2022	0.0534	9.0000e-004	0.0543		161.4808	161.4808	3.5100e-003	3.6900e-003	162.6674
Total	0.0523	0.0320	0.4791	1.5700e-003	0.2012	9.8000e-004	0.2022	0.0534	9.0000e-004	0.0543		161.4808	161.4808	3.5100e-003	3.6900e-003	162.6674

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.5904	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858
Paving	0.0844					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.6748	5.2297	7.0314	0.0113		0.2429	0.2429		0.2269	0.2269	0.0000	1,036.2393	1,036.2393	0.3019		1,043.7858

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0523	0.0320	0.4791	1.5700e-003	0.1907	9.8000e-004	0.1917	0.0508	9.0000e-004	0.0517		161.4808	161.4808	3.5100e-003	3.6900e-003	162.6674
Total	0.0523	0.0320	0.4791	1.5700e-003	0.1907	9.8000e-004	0.1917	0.0508	9.0000e-004	0.0517		161.4808	161.4808	3.5100e-003	3.6900e-003	162.6674

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.9975	1.5269	13.9075	0.0237	2.5794	0.0188	2.5982	0.6875	0.0175	0.7050		2,459,358 2	2,459,358 2	0.2351	0.1428	2,507.778 9
Unmitigated	1.9975	1.5269	13.9075	0.0237	2.5794	0.0188	2.5982	0.6875	0.0175	0.7050		2,459,358 2	2,459,358 2	0.2351	0.1428	2,507.778 9

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,163.19	1,163.19	1163.19	1,224,127	1,224,127
Parking Lot	0.00	0.00	0.00		
Total	1,163.19	1,163.19	1,163.19	1,224,127	1,224,127

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Parking Lot	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815
NaturalGas Unmitigated	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - Natural Gas

Unmitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	2063.28	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815

Mitigated

	Natural Gas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	2.06328	0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0223	0.2023	0.1699	1.2100e-003		0.0154	0.0154		0.0154	0.0154		242.7391	242.7391	4.6500e-003	4.4500e-003	244.1815

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003
Unmitigated	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.6100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5000e-004	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003
Total	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	6.6100e-003					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0633					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	3.5000e-004	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003
Total	0.0702	3.0000e-005	3.8000e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005		8.1600e-003	8.1600e-003	2.0000e-005		8.6900e-003

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

Costa Mesa Raising Cane's - Orange County, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
----------------	--------	-----------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

**Costa Mesa Raising Cane's
Orange County, Annual**

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	34.00	Space	0.58	13,600.00	0
Fast Food Restaurant with Drive Thru	2.91	1000sqft	0.07	2,913.00	0
City Park	0.35	Acre	0.35	15,246.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	30
Climate Zone	8			Operational Year	2024
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	CH4 Intensity (lb/MWhr)	0.033	N2O Intensity (lb/MWhr)	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics -
 Land Use - Parking lot = Impervious Surface
 city Park = Landscaping
 Construction Phase - Schedule for Construction (anticipated)
 Demolition -
 Grading -
 Vehicle Trips - Calculated Trip Rate
 Construction Off-road Equipment Mitigation - Per SCAQMD rules and regulations
 Water Mitigation -
 Waste Mitigation - Per AB939

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Table Name	Column Name	Default Value	New Value
tblConstDustMitigation	CleanPavedRoadPercentReduction	0	6
tblConstDustMitigation	WaterUnpavedRoadMoistureContent	0	12
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	10.00	66.00
tblConstructionPhase	NumDays	1.00	45.00
tblConstructionPhase	NumDays	2.00	65.00
tblConstructionPhase	NumDays	100.00	44.00
tblConstructionPhase	NumDays	5.00	62.00
tblConstructionPhase	NumDays	5.00	18.00
tblGrading	MaterialExported	0.00	1,038.00
tblLandUse	LotAcreage	0.31	0.58
tblVehicleTrips	ST_TR	616.12	399.31
tblVehicleTrips	SU_TR	472.58	399.31
tblVehicleTrips	WD_TR	470.95	399.31

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0247	0.2279	0.2737	5.2000e-004	0.0376	0.0103	0.0479	5.8100e-003	9.8200e-003	0.0156	0.0000	46.1846	46.1846	7.9800e-003	9.4000e-004	46.6645
2024	0.0778	0.6479	0.5499	1.1900e-003	0.1938	0.0271	0.2210	0.0872	0.0251	0.1124	0.0000	105.1336	105.1336	0.0288	9.0000e-004	106.1197
Maximum	0.0778	0.6479	0.5499	1.1900e-003	0.1938	0.0271	0.2210	0.0872	0.0251	0.1124	0.0000	105.1336	105.1336	0.0288	9.4000e-004	106.1197

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2023	0.0247	0.2279	0.2737	5.2000e-004	0.0189	0.0103	0.0292	3.2500e-003	9.8200e-003	0.0131	0.0000	46.1846	46.1846	7.9800e-003	9.4000e-004	46.6644
2024	0.0778	0.6479	0.5499	1.1900e-003	0.0877	0.0271	0.1148	0.0386	0.0251	0.0637	0.0000	105.1335	105.1335	0.0288	9.0000e-004	106.1195
Maximum	0.0778	0.6479	0.5499	1.1900e-003	0.0877	0.0271	0.1148	0.0386	0.0251	0.0637	0.0000	105.1335	105.1335	0.0288	9.4000e-004	106.1195

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	53.94	0.00	46.43	55.03	0.00	40.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-19-2023	12-18-2023	0.2220	0.2220
2	12-19-2023	3-18-2024	0.2483	0.2483
3	3-19-2024	6-18-2024	0.3346	0.3346
4	6-19-2024	9-18-2024	0.1698	0.1698
		Highest	0.3346	0.3346

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0128	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Energy	4.0600e-003	0.0369	0.0310	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003	0.0000	59.3977	59.3977	2.3900e-003	9.3000e-004	59.7357
Mobile	0.3514	0.2791	2.5214	4.3600e-003	0.4611	3.4200e-003	0.4646	0.1231	3.1700e-003	0.1263	0.0000	409.6781	409.6781	0.0384	0.0235	417.6457
Waste						0.0000	0.0000		0.0000	0.0000	5.1215	0.0000	5.1215	0.3027	0.0000	12.6882
Water						0.0000	0.0000		0.0000	0.0000	0.2109	1.6186	1.8295	0.0218	5.3000e-004	2.5318
Total	0.3682	0.3160	2.5529	4.5800e-003	0.4611	6.2300e-003	0.4674	0.1231	5.9800e-003	0.1291	5.3324	470.6954	476.0278	0.3652	0.0250	492.6023

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.0128	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Energy	4.0600e-003	0.0369	0.0310	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003	0.0000	59.3977	59.3977	2.3900e-003	9.3000e-004	59.7357
Mobile	0.3514	0.2791	2.5214	4.3600e-003	0.4611	3.4200e-003	0.4646	0.1231	3.1700e-003	0.1263	0.0000	409.6781	409.6781	0.0384	0.0235	417.6457
Waste						0.0000	0.0000		0.0000	0.0000	2.5607	0.0000	2.5607	0.1513	0.0000	6.3441
Water						0.0000	0.0000		0.0000	0.0000	0.1687	1.3065	1.4752	0.0174	4.2000e-004	2.0371
Total	0.3682	0.3160	2.5529	4.5800e-003	0.4611	6.2300e-003	0.4674	0.1231	5.9800e-003	0.1291	2.7294	470.3833	473.1127	0.2095	0.0249	485.7635

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	48.81	0.07	0.61	42.63	0.44	1.39

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/19/2023	12/19/2023	5	66	
2	Site Preparation	Site Preparation	12/20/2023	2/20/2024	5	45	
3	Grading	Grading	2/21/2024	5/21/2024	5	65	

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	5/22/2024	7/22/2024	5	44
5	Architectural Coating	Architectural Coating	5/22/2024	8/15/2024	5	62
6	Paving	Paving	7/23/2024	8/15/2024	5	18

Acres of Grading (Site Preparation Phase): 22.5

Acres of Grading (Grading Phase): 48.75

Acres of Paving: 0.58

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 3,290; Non-Residential Outdoor: 1,097; Striped Parking Area: 816 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	4	6.00	9	0.56
Paving	Pavers	1	7.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	187.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	2	5.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	130.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	5	7.00	3.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	1.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Replace Ground Cover

Water Exposed Area

Water Unpaved Roads

Reduce Vehicle Speed on Unpaved Roads

Clean Paved Roads

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0202	0.0000	0.0202	3.0700e-003	0.0000	3.0700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.1907	0.2440	4.0000e-004		9.3100e-003	9.3100e-003		8.9000e-003	8.9000e-003	0.0000	34.3799	34.3799	6.2500e-003	0.0000	34.5363
Total	0.0213	0.1907	0.2440	4.0000e-004	0.0202	9.3100e-003	0.0296	3.0700e-003	8.9000e-003	0.0120	0.0000	34.3799	34.3799	6.2500e-003	0.0000	34.5363

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-004	0.0117	3.8400e-003	5.0000e-005	1.6100e-003	7.0000e-005	1.6800e-003	4.4000e-004	7.0000e-005	5.1000e-004	0.0000	5.4268	5.4268	5.5000e-004	8.7000e-004	5.7000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	6.7000e-004	9.6300e-003	3.0000e-005	3.6200e-003	2.0000e-005	3.6400e-003	9.6000e-004	2.0000e-005	9.8000e-004	0.0000	2.7890	2.7890	6.0000e-005	7.0000e-005	2.8104
Total	1.1200e-003	0.0124	0.0135	8.0000e-005	5.2300e-003	9.0000e-005	5.3200e-003	1.4000e-003	9.0000e-005	1.4900e-003	0.0000	8.2158	8.2158	6.1000e-004	9.4000e-004	8.5104

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					8.6500e-003	0.0000	8.6500e-003	1.3100e-003	0.0000	1.3100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.1907	0.2440	4.0000e-004		9.3100e-003	9.3100e-003		8.9000e-003	8.9000e-003	0.0000	34.3799	34.3799	6.2500e-003	0.0000	34.5363
Total	0.0213	0.1907	0.2440	4.0000e-004	8.6500e-003	9.3100e-003	0.0180	1.3100e-003	8.9000e-003	0.0102	0.0000	34.3799	34.3799	6.2500e-003	0.0000	34.5363

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9000e-004	0.0117	3.8400e-003	5.0000e-005	1.5300e-003	7.0000e-005	1.6000e-003	4.2000e-004	7.0000e-005	4.9000e-004	0.0000	5.4268	5.4268	5.5000e-004	8.7000e-004	5.7000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.3000e-004	6.7000e-004	9.6300e-003	3.0000e-005	3.4300e-003	2.0000e-005	3.4500e-003	9.2000e-004	2.0000e-005	9.3000e-004	0.0000	2.7890	2.7890	6.0000e-005	7.0000e-005	2.8104
Total	1.1200e-003	0.0124	0.0135	8.0000e-005	4.9600e-003	9.0000e-005	5.0500e-003	1.3400e-003	9.0000e-005	1.4200e-003	0.0000	8.2158	8.2158	6.1000e-004	9.4000e-004	8.5104

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3.3 Site Preparation - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0119	0.0000	0.0119	1.2900e-003	0.0000	1.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1400e-003	0.0248	0.0157	4.0000e-005		9.1000e-004	9.1000e-004		8.3000e-004	8.3000e-004	0.0000	3.4198	3.4198	1.1100e-003	0.0000	3.4475
Total	2.1400e-003	0.0248	0.0157	4.0000e-005	0.0119	9.1000e-004	0.0128	1.2900e-003	8.3000e-004	2.1200e-003	0.0000	3.4198	3.4198	1.1100e-003	0.0000	3.4475

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.8000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1690	0.1690	0.0000	0.0000	0.1703
Total	6.0000e-005	4.0000e-005	5.8000e-004	0.0000	2.2000e-004	0.0000	2.2000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1690	0.1690	0.0000	0.0000	0.1703

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3.3 Site Preparation - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.1000e-003	0.0000	5.1000e-003	5.5000e-004	0.0000	5.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1400e-003	0.0248	0.0157	4.0000e-005		9.1000e-004	9.1000e-004		8.3000e-004	8.3000e-004	0.0000	3.4198	3.4198	1.1100e-003	0.0000	3.4475
Total	2.1400e-003	0.0248	0.0157	4.0000e-005	5.1000e-003	9.1000e-004	6.0100e-003	5.5000e-004	8.3000e-004	1.3800e-003	0.0000	3.4198	3.4198	1.1100e-003	0.0000	3.4475

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.0000e-005	4.0000e-005	5.8000e-004	0.0000	2.1000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1690	0.1690	0.0000	0.0000	0.1703
Total	6.0000e-005	4.0000e-005	5.8000e-004	0.0000	2.1000e-004	0.0000	2.1000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1690	0.1690	0.0000	0.0000	0.1703

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0119	0.0000	0.0119	1.2900e-003	0.0000	1.2900e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2200e-003	0.1037	0.0720	1.8000e-004		3.7200e-003	3.7200e-003		3.4200e-003	3.4200e-003	0.0000	15.8141	15.8141	5.1100e-003	0.0000	15.9420
Total	9.2200e-003	0.1037	0.0720	1.8000e-004	0.0119	3.7200e-003	0.0157	1.2900e-003	3.4200e-003	4.7100e-003	0.0000	15.8141	15.8141	5.1100e-003	0.0000	15.9420

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.7000e-004	2.5200e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0200e-003	2.7000e-004	0.0000	2.7000e-004	0.0000	0.7630	0.7630	2.0000e-005	2.0000e-005	0.7686
Total	2.5000e-004	1.7000e-004	2.5200e-003	1.0000e-005	1.0200e-003	1.0000e-005	1.0200e-003	2.7000e-004	0.0000	2.7000e-004	0.0000	0.7630	0.7630	2.0000e-005	2.0000e-005	0.7686

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3.3 Site Preparation - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					5.1000e-003	0.0000	5.1000e-003	5.5000e-004	0.0000	5.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.2200e-003	0.1037	0.0720	1.8000e-004		3.7200e-003	3.7200e-003		3.4200e-003	3.4200e-003	0.0000	15.8141	15.8141	5.1100e-003	0.0000	15.9420
Total	9.2200e-003	0.1037	0.0720	1.8000e-004	5.1000e-003	3.7200e-003	8.8200e-003	5.5000e-004	3.4200e-003	3.9700e-003	0.0000	15.8141	15.8141	5.1100e-003	0.0000	15.9420

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e-004	1.7000e-004	2.5200e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	0.0000	2.6000e-004	0.0000	0.7630	0.7630	2.0000e-005	2.0000e-005	0.7686
Total	2.5000e-004	1.7000e-004	2.5200e-003	1.0000e-005	9.6000e-004	1.0000e-005	9.7000e-004	2.6000e-004	0.0000	2.6000e-004	0.0000	0.7630	0.7630	2.0000e-005	2.0000e-005	0.7686

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3.4 Grading - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1727	0.0000	0.1727	0.0835	0.0000	0.0835	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0297	0.3162	0.1803	4.6000e-004		0.0130	0.0130		0.0120	0.0120	0.0000	40.2350	40.2350	0.0130	0.0000	40.5604
Total	0.0297	0.3162	0.1803	4.6000e-004	0.1727	0.0130	0.1857	0.0835	0.0120	0.0955	0.0000	40.2350	40.2350	0.0130	0.0000	40.5604

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	8.0900e-003	2.7300e-003	4.0000e-005	1.1200e-003	5.0000e-005	1.1700e-003	3.1000e-004	5.0000e-005	3.6000e-004	0.0000	3.7210	3.7210	3.9000e-004	6.0000e-004	3.9086
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.7000e-004	7.0800e-003	2.0000e-005	2.8500e-003	1.0000e-005	2.8700e-003	7.6000e-004	1.0000e-005	7.7000e-004	0.0000	2.1446	2.1446	5.0000e-005	5.0000e-005	2.1604
Total	8.2000e-004	8.5600e-003	9.8100e-003	6.0000e-005	3.9700e-003	6.0000e-005	4.0400e-003	1.0700e-003	6.0000e-005	1.1300e-003	0.0000	5.8656	5.8656	4.4000e-004	6.5000e-004	6.0690

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0738	0.0000	0.0738	0.0357	0.0000	0.0357	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0297	0.3162	0.1803	4.6000e-004		0.0130	0.0130		0.0120	0.0120	0.0000	40.2350	40.2350	0.0130	0.0000	40.5603
Total	0.0297	0.3162	0.1803	4.6000e-004	0.0738	0.0130	0.0868	0.0357	0.0120	0.0477	0.0000	40.2350	40.2350	0.0130	0.0000	40.5603

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.3000e-004	8.0900e-003	2.7300e-003	4.0000e-005	1.0700e-003	5.0000e-005	1.1200e-003	2.9000e-004	5.0000e-005	3.4000e-004	0.0000	3.7210	3.7210	3.9000e-004	6.0000e-004	3.9086
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.9000e-004	4.7000e-004	7.0800e-003	2.0000e-005	2.7100e-003	1.0000e-005	2.7200e-003	7.2000e-004	1.0000e-005	7.3000e-004	0.0000	2.1446	2.1446	5.0000e-005	5.0000e-005	2.1604
Total	8.2000e-004	8.5600e-003	9.8100e-003	6.0000e-005	3.7800e-003	6.0000e-005	3.8400e-003	1.0100e-003	6.0000e-005	1.0700e-003	0.0000	5.8656	5.8656	4.4000e-004	6.5000e-004	6.0690

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3.5 Building Construction - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0131	0.1314	0.1555	2.5000e-004		6.2100e-003	6.2100e-003		5.7200e-003	5.7200e-003	0.0000	22.0533	22.0533	7.1300e-003	0.0000	22.2316
Total	0.0131	0.1314	0.1555	2.5000e-004		6.2100e-003	6.2100e-003		5.7200e-003	5.7200e-003	0.0000	22.0533	22.0533	7.1300e-003	0.0000	22.2316

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.4200e-003	9.7000e-004	1.0000e-005	4.2000e-004	1.0000e-005	4.3000e-004	1.2000e-004	1.0000e-005	1.3000e-004	0.0000	1.1646	1.1646	7.0000e-005	1.7000e-004	1.2164
Worker	4.1000e-004	2.8000e-004	4.1900e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.7000e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.2703	1.2703	3.0000e-005	3.0000e-005	1.2796
Total	4.7000e-004	2.7000e-003	5.1600e-003	2.0000e-005	2.1100e-003	2.0000e-005	2.1300e-003	5.7000e-004	2.0000e-005	5.9000e-004	0.0000	2.4349	2.4349	1.0000e-004	2.0000e-004	2.4960

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3.5 Building Construction - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0131	0.1314	0.1555	2.5000e-004		6.2100e-003	6.2100e-003		5.7200e-003	5.7200e-003	0.0000	22.0533	22.0533	7.1300e-003	0.0000	22.2316
Total	0.0131	0.1314	0.1555	2.5000e-004		6.2100e-003	6.2100e-003		5.7200e-003	5.7200e-003	0.0000	22.0533	22.0533	7.1300e-003	0.0000	22.2316

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	6.0000e-005	2.4200e-003	9.7000e-004	1.0000e-005	4.0000e-004	1.0000e-005	4.1000e-004	1.2000e-004	1.0000e-005	1.3000e-004	0.0000	1.1646	1.1646	7.0000e-005	1.7000e-004	1.2164
Worker	4.1000e-004	2.8000e-004	4.1900e-003	1.0000e-005	1.6000e-003	1.0000e-005	1.6100e-003	4.3000e-004	1.0000e-005	4.4000e-004	0.0000	1.2703	1.2703	3.0000e-005	3.0000e-005	1.2796
Total	4.7000e-004	2.7000e-003	5.1600e-003	2.0000e-005	2.0000e-003	2.0000e-005	2.0200e-003	5.5000e-004	2.0000e-005	5.7000e-004	0.0000	2.4349	2.4349	1.0000e-004	2.0000e-004	2.4960

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3.6 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0121					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6000e-003	0.0378	0.0561	9.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	7.9151	7.9151	4.5000e-004	0.0000	7.9262
Total	0.0177	0.0378	0.0561	9.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	7.9151	7.9151	4.5000e-004	0.0000	7.9262

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	8.4000e-004	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2557	0.2557	1.0000e-005	1.0000e-005	0.2576
Total	8.0000e-005	6.0000e-005	8.4000e-004	0.0000	3.4000e-004	0.0000	3.4000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2557	0.2557	1.0000e-005	1.0000e-005	0.2576

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Architectural Coating - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.0121					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6000e-003	0.0378	0.0561	9.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	7.9151	7.9151	4.5000e-004	0.0000	7.9262
Total	0.0177	0.0378	0.0561	9.0000e-005		1.8900e-003	1.8900e-003		1.8900e-003	1.8900e-003	0.0000	7.9151	7.9151	4.5000e-004	0.0000	7.9262

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e-005	6.0000e-005	8.4000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2557	0.2557	1.0000e-005	1.0000e-005	0.2576
Total	8.0000e-005	6.0000e-005	8.4000e-004	0.0000	3.2000e-004	0.0000	3.2000e-004	9.0000e-005	0.0000	9.0000e-005	0.0000	0.2557	0.2557	1.0000e-005	1.0000e-005	0.2576

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3100e-003	0.0471	0.0633	1.0000e-004		2.1900e-003	2.1900e-003		2.0400e-003	2.0400e-003	0.0000	8.4605	8.4605	2.4600e-003	0.0000	8.5222
Paving	7.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.0700e-003	0.0471	0.0633	1.0000e-004		2.1900e-003	2.1900e-003		2.0400e-003	2.0400e-003	0.0000	8.4605	8.4605	2.4600e-003	0.0000	8.5222

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.9000e-004	4.4100e-003	1.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3363	1.3363	3.0000e-005	3.0000e-005	1.3461
Total	4.3000e-004	2.9000e-004	4.4100e-003	1.0000e-005	1.7800e-003	1.0000e-005	1.7900e-003	4.7000e-004	1.0000e-005	4.8000e-004	0.0000	1.3363	1.3363	3.0000e-005	3.0000e-005	1.3461

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Paving - 2024

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	5.3100e-003	0.0471	0.0633	1.0000e-004		2.1900e-003	2.1900e-003		2.0400e-003	2.0400e-003	0.0000	8.4605	8.4605	2.4600e-003	0.0000	8.5222
Paving	7.6000e-004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.0700e-003	0.0471	0.0633	1.0000e-004		2.1900e-003	2.1900e-003		2.0400e-003	2.0400e-003	0.0000	8.4605	8.4605	2.4600e-003	0.0000	8.5222

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.3000e-004	2.9000e-004	4.4100e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.3363	1.3363	3.0000e-005	3.0000e-005	1.3461
Total	4.3000e-004	2.9000e-004	4.4100e-003	1.0000e-005	1.6900e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.3363	1.3363	3.0000e-005	3.0000e-005	1.3461

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3514	0.2791	2.5214	4.3600e-003	0.4611	3.4200e-003	0.4646	0.1231	3.1700e-003	0.1263	0.0000	409.6781	409.6781	0.0384	0.0235	417.6457
Unmitigated	0.3514	0.2791	2.5214	4.3600e-003	0.4611	3.4200e-003	0.4646	0.1231	3.1700e-003	0.1263	0.0000	409.6781	409.6781	0.0384	0.0235	417.6457

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	1,163.19	1,163.19	1163.19	1,224,127	1,224,127
Parking Lot	0.00	0.00	0.00		
Total	1,163.19	1,163.19	1,163.19	1,224,127	1,224,127

4.3 Trip Type Information

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive	16.60	8.40	6.90	2.20	78.80	19.00	29	21	50
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869
Parking Lot	0.546200	0.059546	0.185910	0.127866	0.024295	0.006605	0.014499	0.004906	0.000657	0.000381	0.024552	0.000713	0.003869

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	19.2096	19.2096	1.6200e-003	2.0000e-004	19.3087
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	19.2096	19.2096	1.6200e-003	2.0000e-004	19.3087
Natural Gas Mitigated	4.0600e-003	0.0369	0.0310	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003	0.0000	40.1882	40.1882	7.7000e-004	7.4000e-004	40.4270
Natural Gas Unmitigated	4.0600e-003	0.0369	0.0310	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003	0.0000	40.1882	40.1882	7.7000e-004	7.4000e-004	40.4270

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	753098	4.0600e-003	0.0369	0.0310	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003	0.0000	40.1882	40.1882	7.7000e-004	7.4000e-004	40.4270
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.0600e-003	0.0369	0.0310	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003	0.0000	40.1882	40.1882	7.7000e-004	7.4000e-004	40.4270

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Fast Food Restaurant with Drive Thru	753098	4.0600e-003	0.0369	0.0310	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003	0.0000	40.1882	40.1882	7.7000e-004	7.4000e-004	40.4270
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		4.0600e-003	0.0369	0.0310	2.2000e-004		2.8100e-003	2.8100e-003		2.8100e-003	2.8100e-003	0.0000	40.1882	40.1882	7.7000e-004	7.4000e-004	40.4270

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	103557	18.3654	1.5500e-003	1.9000e-004	18.4601
Parking Lot	4760	0.8442	7.0000e-005	1.0000e-005	0.8485
Total		19.2096	1.6200e-003	2.0000e-004	19.3087

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with Drive Thru	103557	18.3654	1.5500e-003	1.9000e-004	18.4601
Parking Lot	4760	0.8442	7.0000e-005	1.0000e-005	0.8485
Total		19.2096	1.6200e-003	2.0000e-004	19.3087

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.0128	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Unmitigated	0.0128	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Total	0.0128	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	1.2100e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0116					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.0000e-005	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004
Total	0.0128	0.0000	4.7000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	9.2000e-004	9.2000e-004	0.0000	0.0000	9.9000e-004

7.0 Water Detail

7.1 Mitigation Measures Water

- Install Low Flow Bathroom Faucet
- Install Low Flow Kitchen Faucet
- Install Low Flow Toilet
- Install Low Flow Shower
- Use Water Efficient Irrigation System

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	1.4752	0.0174	4.2000e-004	2.0371
Unmitigated	1.8295	0.0218	5.3000e-004	2.5318

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.664739 / 0.0424301	1.8295	0.0218	5.3000e-004	2.5318
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.8295	0.0218	5.3000e-004	2.5318

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with Drive Thru	0.531791 / 0.0398419	1.4752	0.0174	4.2000e-004	2.0371
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		1.4752	0.0174	4.2000e-004	2.0371

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	2.5607	0.1513	0.0000	6.3441
Unmitigated	5.1215	0.3027	0.0000	12.6882

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	25.23	5.1215	0.3027	0.0000	12.6882
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		5.1215	0.3027	0.0000	12.6882

Costa Mesa Raising Cane's - Orange County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with Drive Thru	12.615	2.5607	0.1513	0.0000	6.3441
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		2.5607	0.1513	0.0000	6.3441

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation



MEMORANDUM

To: Hannah Luevano, Project Manager
Kimley-Horn and Associates, Inc.

From: Ryan Chiene and Jacqueline Tran
Kimley-Horn and Associates, Inc.

Date: September 22, 2023

Subject: Raising Cane's C0843, Costa Mesa, CA – Drive-Thru Noise Analysis

PURPOSE

The purpose of this memorandum is to evaluate potential noise impacts from drive-thru operations associated with the proposed Raising Cane's Project (project), located in the City of Costa Mesa, California.

PROJECT DESCRIPTION

The project site is located at 1595 West Newport Boulevard west of the Newport Boulevard and 16th Street intersection in the City of Costa Mesa, California (City). The site is surrounded by commercial uses to the north, east and south, and a residential community to the west. The site is currently occupied by an existing furniture store and a surface parking lot. Raising Cane's proposes to demolish the existing store and develop a 2,913 -square-foot fast-food restaurant with two drive-through lanes; see [Exhibit 1: Site Plan](#).

NOISE BACKGROUND

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Exhibit 1: Site Plan

K:\094_L12E\Working_Care's\094797132 - Costa Mesa (Newport & 16th) 862\CADD\References\c0862-094797132.dwg Layout1 May 09, 2022 8:23am By: Nathan Coronado



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 1100 W TOWN AND COUNTRY ROAD, SUITE 700 |
 ORANGE, CA 92868
 PHONE: (714) 939-1030 | www.kimley-horn.com

TITLE:
SITE PLAN

PROJECT:
 C0862 - COSTA MESA

LOCATION:
 NEWPORT & 16TH STREET

JOB NUMBER:	094797132
SCALE:	1" = 20'
DATE:	5/09/2022
SHEET:	1 OF 1

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Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of various distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from traffic on a major highway.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise on people is largely dependent on the total acoustical energy content of the noise as well as the time of day when the noise occurs. For example, the equivalent continuous sound level (L_{eq}) is the average acoustic energy content of noise for a stated period of time; thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. The Day-Night Sound level (L_{dn}) is a 24-hour average L_{eq} with a 10 dBA “weighting” added to noise during the hours of 10:00 p.m. to 7:00 a.m. to account for noise sensitivity in the nighttime. The Community Noise Equivalent Level (CNEL) is a 24-hour average L_{eq} with a 10 dBA weighting added to noise during the hours of 10:00 p.m. to 7:00 a.m. and an additional 5 dBA weighting during the hours of 7:00 p.m. to 10:00 p.m. to account for noise sensitivity in the evening and nighttime.

REGULATORY SETTING

City of Costa Mesa General Plan

The Costa Mesa General Plan identifies goals, policies, and objectives in the Noise Element. The Noise Element provides standards and metrics to regulate environmental noise and protect citizens from excessive exposure. Table 1: Noise and Land Use Compatibility Matrix for Noise in Costa Mesa highlights land use categories and the community noise compatibility guidelines.

The Costa Mesa General Plan also includes the following policies for noise that are relevant to the Project:

- Policy N-2.4:** Require that all proposed projects are compatible with adopted noise/land use compatibility criteria.
- Policy N-2.5:** Enforce applicable interior and exterior noise standards.
- Policy N-2.9:** Limit hours and/or require attenuation of commercial/entertainment operations adjacent to residential and other noise sensitive uses in order to minimize excessive noise to these receptors.

Table 1: Noise and Land Use Compatibility Matrix for Noise in Costa Mesa				
Land-Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable¹	Conditionally Acceptable²	Normally Unacceptable³	Clearly Unacceptable⁴
Residential: Low Density	50-60	60-70	70-75	≥ 75
Residential: Multiple Family	50-65	65-70	70-75	≥ 75
Mixed use	50-65	65-70	70-75	≥ 75
Transient Lodging-Motel, Hotels	50-65	65-70	70-80	≥ 80
Schools, Libraries, Churches, Hospitals, Nursing Homes	50-60	60-65	65-80	≥ 80
Auditoriums, Concert Halls, Amphitheaters	N/A	50-70	N/A	≥ 80
Sports Arenas, Outdoor Spectator Sports	N/A	50-75	N/A	≥ 80
Playgrounds, Neighborhood Parks	50-67.5	N/A	67.5-75	≥ 75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50-70	N/A	70-80	≥ 80
Office Buildings, Business Commercial and Professional	50-67.5	67.5-77.5	77.5-85	≥ 85 unless appropriately insulated
Industrial, Manufacturing, Utilities, Agriculture	50-70	70-80	80-85	N/A
Notes:				
1. Normally Acceptable – Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.				
2. Conditionally Acceptable – New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Convention construction but with closed windows and fresh air supply systems or air conditioning will normally suffice.				
3. Normally Acceptable – New construction or development should be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.				
4. New construction or development should generally not be undertaken.				
Source: City of Costa Mesa, 2015-2035 General Plan, Chapter 7: Noise Element.				

City of Costa Mesa Municipal Code

The City of Costa Mesa has established citywide interior and exterior noise level standards in a comprehensive Noise Control chapter within the Costa Mesa Municipal Code (CMMC). The purpose of the Noise Control chapter is to prohibit unnecessary, excessive, and annoying noises that are detrimental to the health, comfort, safety, peace, enjoyment, and welfare of the citizenry. The Noise Control chapter establishes daytime and nighttime permissible sound limits or levels for all residentially zoned properties in the City as well as prohibited noises.¹

13-280. Exterior Noise Standards

The noise, sound, or vibration limits or levels imposed by this section shall apply to all residentially zoned properties in the City:

Table 2: Residential Exterior Noise Standards	
Noise Level	Time Period
55 dBA	7:00 A.M. – 11:00 p.m.
50 dBA	11:00 p.m. – 7:00 AM

Source: City of Costa Mesa, *Costa Mesa Municipal Code*, Title 13 Chapter 13: Noise Control.

In the event the alleged offensive noise consists entirely of impact noise, simple tone music, speech, music, or any combination thereof, each of the above noise levels shall be reduced by five (5) dBA.

Furthermore, it is unlawful for any persons to create or allow any noise at the residential receptor to exceed:

- 1) The noise standard for a cumulative period of more than thirty (30) minutes in any hour; or
- 2) The noise standard plus five (5) dB(A) for a cumulative period of more than fifteen (15) minutes in any hour; or
- 3) The noise standard plus ten (10) dB(A) for a cumulative period of more than five (5) minutes in any hour; or
- 4) The noise standard plus fifteen (15) dB(A) for a cumulative period of more than one (1) minute in any hour; or
- 5) The noise standard plus twenty (20) dB(A) for any period of time.

In the event the ambient noise level exceeds either of the first two (2) noise limit categories above, the cumulative period applicable to said category shall be increased to reflect said ambient noise level. In the event the ambient noise level exceeds the third noise limit category the maximum allowable noise level under said category shall be increased to reflect the maximum ambient noise level.

¹ City of Costa Mesa, *Costa Mesa, California Municipal Code*, Title 13, Chapter 13: Noise Control, https://library.qcode.us/lib/costa_mesa_ca/pub/municipal_code/item/title_13-chapter_xiii?view=all, accessed September 2023.

13-281 Interior Noise Standards

The following interior noise standards, unless otherwise specifically indicated, shall apply to all residential property within the City:

Table 3: Residential Interior Noise Standards	
Noise Level	Time Period
55 dBA	7:00 a.m. – 11:00 p.m.
45 dBA	11:00 p.m. – 7:00 a.m.
City of Costa Mesa, <i>Costa Mesa Municipal Code</i> , Title 13 Chapter 13: Noise Control.	

In the event the alleged offensive noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shall be reduced by five (5) dBA.

Furthermore, it is unlawful for any persons to cause the noise level at a residential receptor to exceed:

- 1) The interior noise standard for a cumulative period of more than five (5) minutes in any hour; or
- 2) The interior noise standard plus five (5) dBA for a cumulative period of more than one (1) minute in any hour; or
- 3) The interior noise standard plus ten (10) dBA for any period of time.

EXISTING CONDITIONS

Existing Noise Sources

The project site is impacted by various noise sources. Mobile sources, especially cars and trucks, are the most common and significant sources of noise in the City. Other sources of noise are the various land uses (i.e., residential, commercial, institutional, and recreational and parks activities) throughout the City that generate stationary-source noise. Mobile sources of noise including traffic along SR-55 to the east and E 16th Street to the north are the most common and prominent sources of noise in the project vicinity. The primary sources of stationary noise near the project site include parking lot noise at the nearby commercial properties, mechanical equipment (e.g., heating, ventilation, and air conditioning [HVAC] units) operating at the nearby commercial and residential uses, and other urban-related activities (e.g., idling cars/trucks, pedestrians, car radios and music playing, dogs barking, etc.). The noise associated with these sources may represent a single-event noise occurrence or short-term noise.

Noise Measurements

To quantify existing ambient noise levels in the project area, Kimley-Horn conducted four short-term (10-minute) measurements on September 13, 2023, and one long-term noise measurement (24 hours in duration) starting on September 14, 2023, and ending September 15, 2023; see Appendix A: Noise Measurement Data. The noise measurement sites were representative of typical existing noise exposure

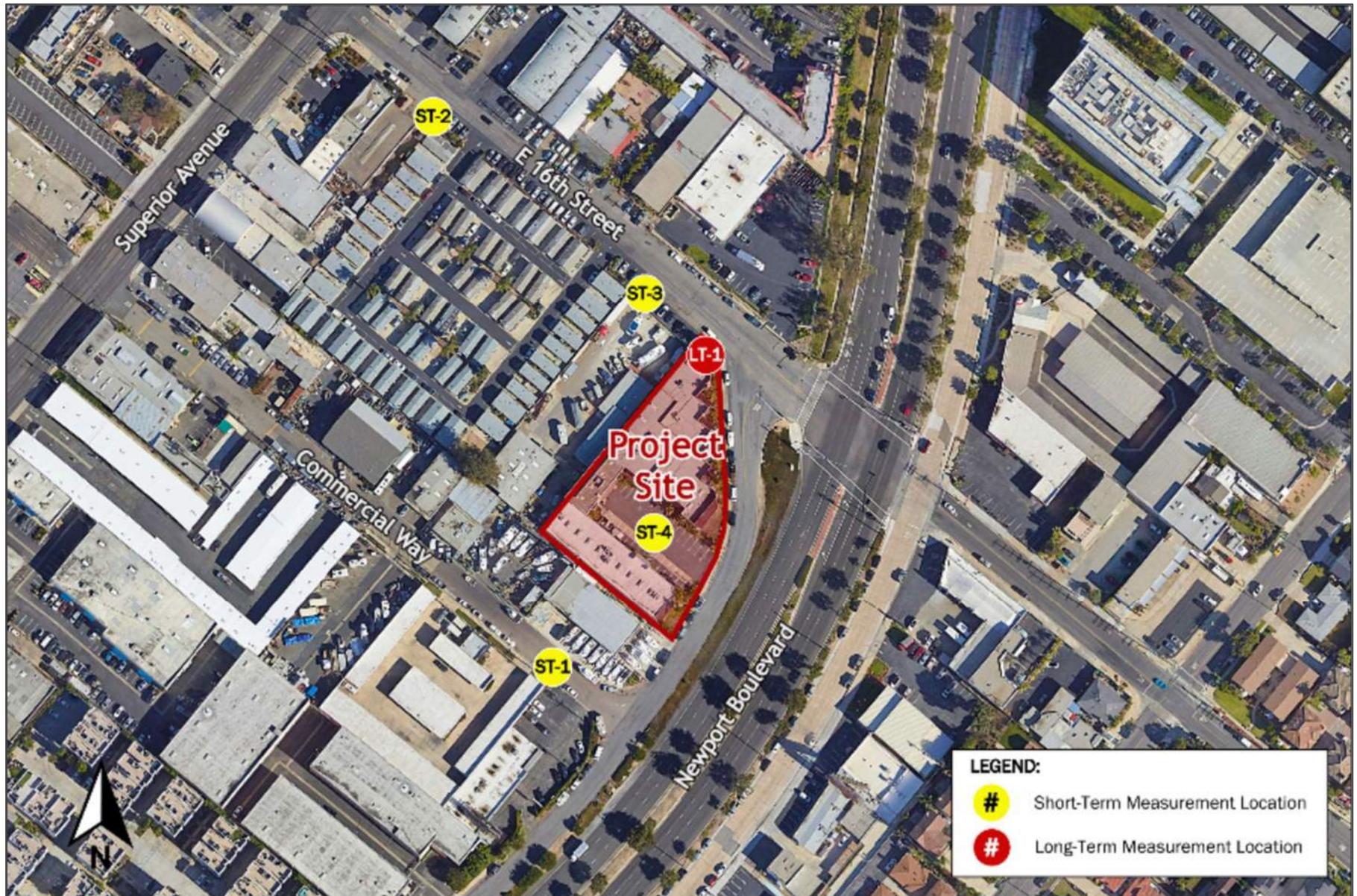
within and immediately adjacent to the project site. The 10-minute daytime measurements were taken between Measurements of L_{eq} are considered representative of the noise levels throughout the day. The average noise levels and sources of noise measured at each location are listed in Table 4: Existing Noise Measurements and shown on Exhibit 2: Noise Measurement Locations.

Table 4: Existing Noise Measurements					
Site	Location	Measurement Period	Duration	Daytime Average L_{eq} (dBA) ¹	Nighttime Average L_{eq} (dBA) ¹
Short-Term Noise Measurements (10-minute measurements)					
ST-1	Near the intersection of Newport Boulevard and Commercial Way	9:26 a.m., Thursday, September 14, 2023	10 min	61.2	-
ST-2	E 16 th Street at the northern corner of the residential mobile home park	9:59 a.m., Thursday, September 14, 2023	10 min	57.8	-
ST-3	E 16 th Street at the eastern corner of the residential mobile home park	10:12 a.m., Thursday, September 14, 2023	10 min	57.6	-
ST-4	Central portion of the project site in existing driveway/parking area adjacent to Newport Boulevard	10:41 a.m., Thursday, September 14, 2023	10 min	59.5	-
Long-Term Noise Measurements (continuous 24-hour measurement)					
LT-1	At the northern corner of the project site	Thursday, September 14, 2023, to Friday, September 15, 2023	24 hr	64.6	58.6
		Average L_{eq}		61.6	
Notes:					
1. Daytime hours are from 7:00 a.m. to 10:00 p.m., and nighttime hours are from 10:00 p.m. to 7:00 a.m. The 15-hour daytime average (15-hour L_{eq}) and 9-hour nighttime average were calculated from 24-hour measurements taken at LT-1. The 10-minute L_{eq} is listed from short-term measurement data.					
Source: Noise measurements taken by Kimley-Horn and Associates, September 14-15, 2023. See <u>Appendix A</u> for noise measurement results.					

Sensitive Receptors

Noise exposure standards and guidelines for various types of land uses reflect the varying noise sensitivities associated with each of these uses. Residences, hospitals, schools, guest lodging, libraries, and churches are treated as the most sensitive to noise intrusion and therefore have more stringent noise exposure targets than do other uses, such as manufacturing or agricultural uses that are not subject to impacts such as sleep disturbance. The nearest sensitive receptors are the residential mobile homes located approximately 100 feet to the west of the project site.

Exhibit 2: Noise Measurement Locations



NOISE IMPACTS

Drive-Thru Operations

The project proposes to construct a Raising Cane’s restaurant with drive-thru access and an outdoor seating area. The primary noise source associated with the proposed Raising Cane’s restaurant would consist of drive-thru operations (i.e., sound from the ordering intercom and vehicles idling/queuing in the drive-thru lanes). Standard operating hours for the proposed restaurant are 9:00 a.m. to 3:00 a.m. One drive-thru menu board and intercom would be located on the western side of the drive-thru lane, to the west of the proposed restaurant building. Project noise sources from drive-thru operations include amplified speech from the intercom, idling vehicles, and vehicles circulating along the drive-thru lanes. The measured noise level associated with active drive-thru operations is 64 dBA at a distance of 20 feet.² The closest sensitive receptors (mobile homes to the northwest) would be located approximately 105 feet northwest of the menu board and intercom. At this distance and not accounting for attenuation from intervening walls or structures, drive-thru noise levels from the project would be approximately 49.6 dBA³ at the exterior and 39.6 dBA⁴ at the interior of the residential mobile homes to the west. As such, project drive-thru noise levels would not exceed the City’s nighttime exterior and interior noise standards of 50 dBA and 45 dBA, respectively, for residential uses.

Composite Noise Levels

Table 5: Composite Project Operational Noise shows the levels from project drive-thru operations combined with existing ambient levels at the residential mobile homes to the west. As shown in Table 5, the maximum noise level increase at the nearest residential uses from project drive-thru operations would be 2.1 dBA during nighttime hours and would be below the 3 dBA barely perceptible noise increase standard.⁵ Therefore, noise from drive-thru operations at the project site would be imperceptible at the nearest residential uses. A less than significant impact would occur in this regard.

Receptor/ Land Use	Direction from Drive- Thru Area	Distance to Drive-Thru Area (feet)	Drive-Thru Noise Level at Receptor (dBA)	Daytime			Nighttime		
				Ambient Noise Level (dBA L _{eq}) ¹	Ambient + Project Operations ²	Increase	Ambient Noise Level (dBA L _{eq}) ¹	Ambient + Project Operations ²	Increase
Residential	West	105	49.6	57.6	58.2	0.6	51.6 ³	53.7	2.1

Notes:

- See Table 4 for ambient noise level data.
- Calculated using the logarithmic addition of decibels.
- The measured ambient nighttime noise level for LT-1 (see Table 4) was adjusted to represent the nighttime level at the residential mobile homes to the west.

² Drive-thru noise sample collected at Raising Cane’s restaurant by Kimley-Horn on August 17, 2018.

³ Based on the logarithmic addition of noise levels from one drive-thru lane and one menu board, the noise level would be approximately 49.0 dBA at 113 feet from the source. Noise levels were calculated based on sound prorogation characteristics of 6 dBA per doubling of distance.

⁴ Noise attenuation from exterior to interior is reduced by 10 dBA for open doors or windows of residential homes.

⁵ According to the California Department of Transportation (Caltrans) *Technical Noise Supplement to the Traffic Noise Analysis Protocol* (2013), a noise level increase of 3 dBA is regarded as barely perceivable and a 5 dBA is readily noticeable.

CONCLUSION

As discussed above, noise levels from drive-thru operations at the proposed project site would not exceed the City's most stringent exterior or interior noise standards and would result in an imperceptible noise increase at the nearest residential uses. Therefore, noise impacts from project drive-thru operations would be less than significant. No mitigation or noise abatement features are necessary.

Appendix A

NOISE MEASUREMENT DATA

Noise Measurement Field Data

Project:	Cane's Costa Mesa	Job Number:	094797132
Site No.:	LT-1	Date:	9/14/23-9/15/23
Analyst:	Daisy Pineda and Damian Arnaiz	Time:	11:18 AM-11:20
Location:	At the northern corner of the project site		
Noise Sources:	nearby traffic		
Comments:			

Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	63.2	37.0	99.1	114.3

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	73°
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.96"
Humidity:	79%

Photo:



Measurement Report

Report Summary

Meter's File Name	ST-1.009.s	Computer's File Name	LxTse_0007061-20230914 092647-ST-1.009.ldbin		
Meter	LxT SE 0007061	Firmware	2.404		
User		Location			
Job Description					
Note					
Start Time	2023-09-14 09:26:47	Duration	0:10:00.0	Pause Time	0:00:00.0
End Time	2023-09-14 09:36:47	Run Time	0:10:00.0	Calibration Deviation	---
Pre-Calibration	2023-09-14 09:22:32	Post-Calibration	None		

Results

Overall Metrics

LA _{eq}	61.2 dB		
LAE	89.0 dB	SEA	--- dB
EA	87.9 μPa²h		
LA _{peak}	108.1 dB		2023-09-14 09:36:04
LAS _{max}	80.3 dB		2023-09-14 09:36:04
LAS _{min}	50.3 dB		2023-09-14 09:33:22
LA _{eq}	61.2 dB		
LC _{eq}	79.0 dB	LC _{eq} - LA _{eq}	17.8 dB
LA _{Ieq}	68.4 dB	LA _{Ieq} - LA _{eq}	7.2 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
61.2 dB	61.2 dB	0.0 dB	
LDEN	LDay	LEve	LNight
61.2 dB	61.2 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	61.2 dB		79.0 dB		--- dB	
L _{q(max)}	80.3 dB	2023-09-14 09:36:04	--- dB	None	--- dB	None
L _{q(min)}	50.3 dB	2023-09-14 09:33:22	--- dB	None	--- dB	None
L _{Peak(max)}	108.1 dB	2023-09-14 09:36:04	--- dB	None	--- dB	None

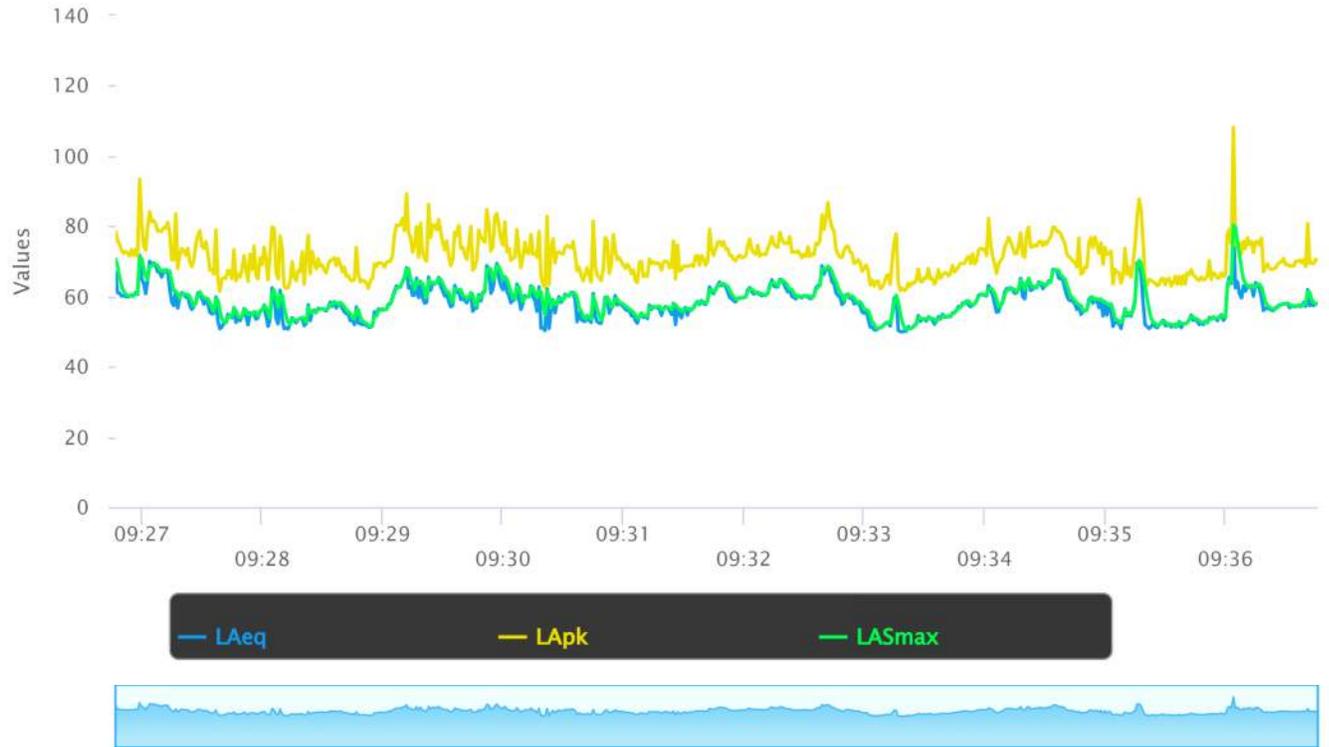
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	66.6 dB
LAS 10.0	63.9 dB
LAS 33.3	60.1 dB
LAS 50.0	58.0 dB
LAS 66.6	56.2 dB
LAS 90.0	52.7 dB

Time History



Noise Measurement Field Data			
Project:	Cane's Costa Mesa	Job Number:	094797132
Site No.:	ST-2	Date:	9/14/2023
Analyst:	Daisy Pineda and Damian Arnaiz	Time:	9:59AM
Location:	E 16th Street at the northern corner of the residential mobile home park		
Noise Sources:	Nearby traffic		
Comments:			
Results (dBA):			
	Leq:	Lmin:	Lmax:
	57.8	42.1	72.3
			Peak:
			85.7
Equipment		Weather	
Sound Level Meter:	LD SoundExpert LxT	Temp. (degrees F):	71°
Calibrator:	CAL200	Wind (mph):	< 5
Response Time:	Slow	Sky:	Partly Cloudy
Weighting:	A	Bar. Pressure:	29.96"
Microphone Height:	5 feet	Humidity:	73%
Photo:			
Kimley»Horn			

Measurement Report

Report Summary

Meter's File Name	ST-1.010.s	Computer's File Name	LxTse_0007061-20230914 095938-ST-1.010.ldbin		
Meter	LxT SE 0007061	Firmware	2.404		
User		Location			
Job Description					
Note					
Start Time	2023-09-14 09:59:38	Duration	0:10:00.0	Pause Time	0:00:00.0
End Time	2023-09-14 10:09:38	Run Time	0:10:00.0	Calibration Deviation	---
Pre-Calibration	2023-09-14 09:22:27	Post-Calibration	None		

Results

Overall Metrics

LA _{eq}	57.8 dB		
LAE	85.6 dB	SEA	--- dB
EA	40.2 μPa²h		
LA _{peak}	85.7 dB		2023-09-14 10:00:53
LAS _{max}	72.3 dB		2023-09-14 10:04:24
LAS _{min}	42.1 dB		2023-09-14 10:08:06
LA _{eq}	57.8 dB		
LC _{eq}	68.5 dB	LC _{eq} - LA _{eq}	10.7 dB
LA _l _{eq}	59.5 dB	LA _l _{eq} - LA _{eq}	1.7 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
57.8 dB	57.8 dB	0.0 dB	
LDEN	LDay	LEve	LNight
57.8 dB	57.8 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	57.8 dB		68.5 dB		--- dB	
L _{q(max)}	72.3 dB	2023-09-14 10:04:24	--- dB	None	--- dB	None
L _{q(min)}	42.1 dB	2023-09-14 10:08:06	--- dB	None	--- dB	None
L _{Peak(max)}	85.7 dB	2023-09-14 10:00:53	--- dB	None	--- dB	None

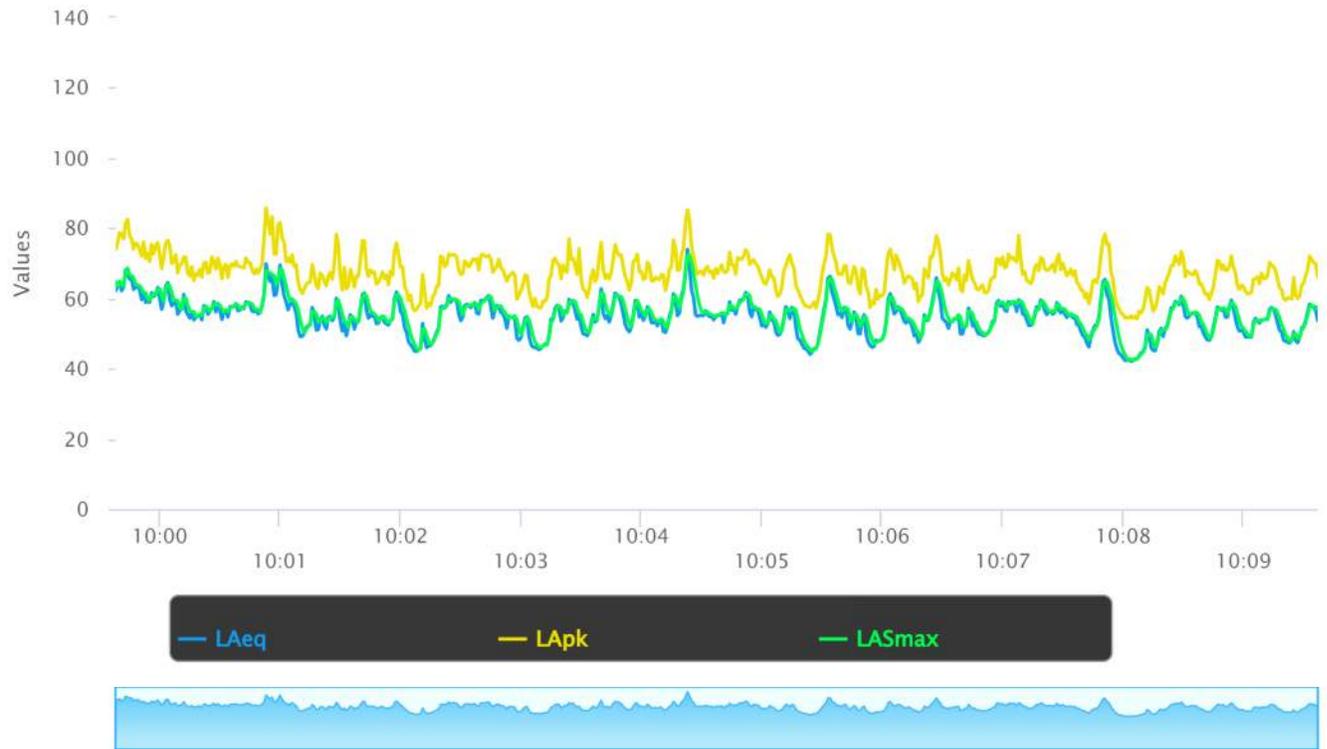
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	63.3 dB
LAS 10.0	60.5 dB
LAS 33.3	56.9 dB
LAS 50.0	55.3 dB
LAS 66.6	53.5 dB
LAS 90.0	48.5 dB

Time History



Noise Measurement Field Data			
Project:	Cane's Costa Mesa	Job Number:	094797132
Site No.:	ST-3	Date:	9/14/2023
Analyst:	Daisy Pineda and Damian Arnaiz	Time:	10:12 AM
Location:	E 16th Street at the eastern corner of the residential mobile home park		
Noise Sources:	nearby traffic, cars		
Comments:			
Results (dBA):			
	Leq:	Lmin:	Lmax:
	57.6	43.7	70.3
			Peak:
			86.7
Equipment		Weather	
Sound Level Meter:	LD SoundExpert LxT	Temp. (degrees F):	69°
Calibrator:	CAL200	Wind (mph):	< 5
Response Time:	Slow	Sky:	Partly Cloudy
Weighting:	A	Bar. Pressure:	29.96"
Microphone Height:	5 feet	Humidity:	79%
Photo:			
			
			

Measurement Report

Report Summary

Meter's File Name	ST-1.011.s	Computer's File Name	LxTse_0007061-20230914 101254-ST-1.011.ldbin		
Meter	LxT SE 0007061	Firmware	2.404		
User		Location			
Job Description					
Note					
Start Time	2023-09-14 10:12:54	Duration	0:10:00.0	Pause Time	0:00:00.0
End Time	2023-09-14 10:22:54	Run Time	0:10:00.0	Calibration Deviation	---
Pre-Calibration	2023-09-14 09:22:27	Post-Calibration	None		

Results

Overall Metrics

LA _{eq}	57.6 dB		
LAE	85.4 dB	SEA	--- dB
EA	38.4 μPa²h		
LA _{peak}	86.7 dB		2023-09-14 10:21:34
LAS _{max}	70.3 dB		2023-09-14 10:17:44
LAS _{min}	43.7 dB		2023-09-14 10:20:34
LA _{eq}	57.6 dB		
LC _{eq}	69.4 dB	LC _{eq} - LA _{eq}	11.8 dB
LA _{Ieq}	59.9 dB	LA _{Ieq} - LA _{eq}	2.3 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
57.6 dB	57.6 dB	0.0 dB	
LDEN	LDay	LEve	LNight
57.6 dB	57.6 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	57.6 dB		69.4 dB		--- dB	
L _{q(max)}	70.3 dB	2023-09-14 10:17:44	--- dB	None	--- dB	None
L _{q(min)}	43.7 dB	2023-09-14 10:20:34	--- dB	None	--- dB	None
L _{Peak(max)}	86.7 dB	2023-09-14 10:21:34	--- dB	None	--- dB	None

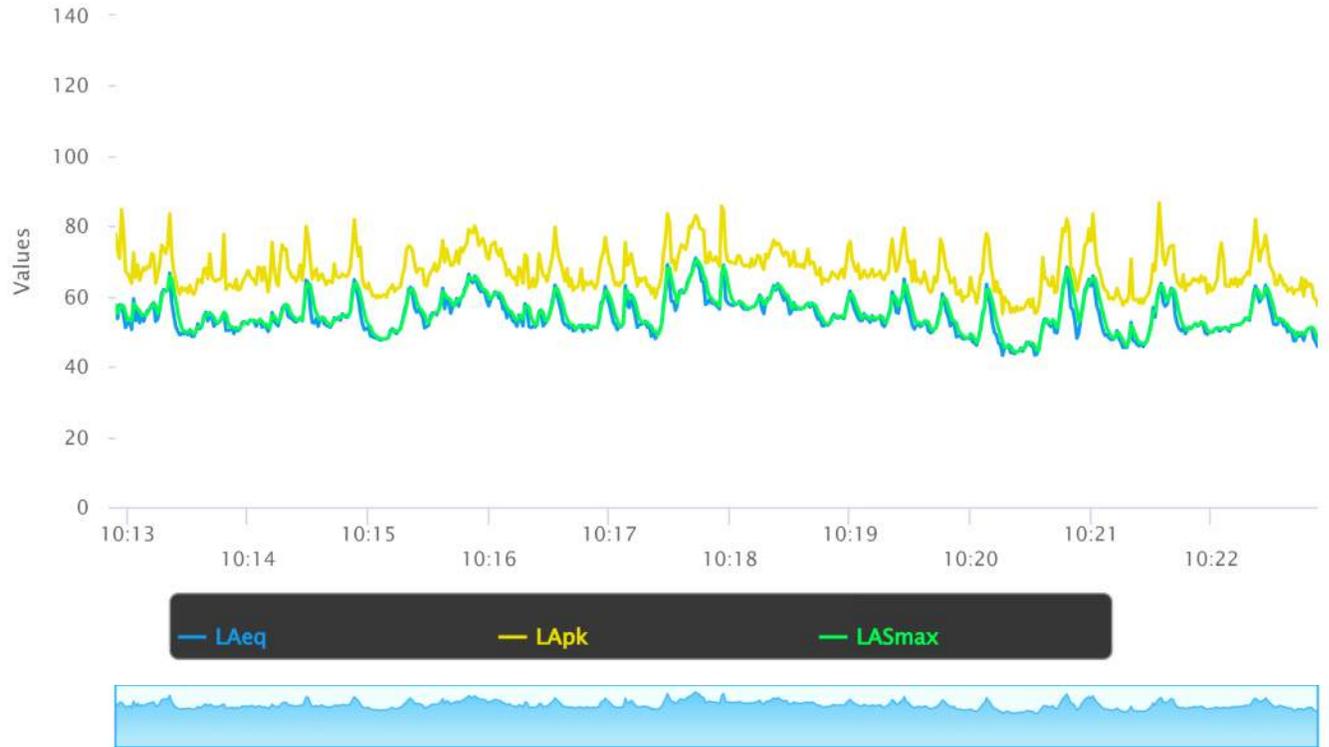
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	63.1 dB
LAS 10.0	61.4 dB
LAS 33.3	56.7 dB
LAS 50.0	53.8 dB
LAS 66.6	52.1 dB
LAS 90.0	48.8 dB

Time History



Noise Measurement Field Data

Project:	Cane's Costa Mesa	Job Number:	094797132
Site No.:	ST-4	Date:	9/14/2023
Analyst:	Daisy Pineda and Damian Arnaiz	Time:	10:41 AM
Location:	Central portion of the project site in existing driveway/parking area adjacent to Newport Boulevard		
Noise Sources:	nearby traffic, people talking, trucks being loaded		
Comments:			

Results (dBA):				
	Leq:	Lmin:	Lmax:	Peak:
	59.5	44.6	70.9	88.0

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	73°
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.96"
Humidity:	79%

Photo:



Measurement Report

Report Summary

Meter's File Name	ST-1.013.s	Computer's File Name	LxTse_0007061-20230914 104112-ST-1.013.ldbin		
Meter	LxT SE 0007061	Firmware	2.404		
User		Location			
Job Description					
Note					
Start Time	2023-09-14 10:41:12	Duration	0:10:00.0	Pause Time	0:00:00.0
End Time	2023-09-14 10:51:12	Run Time	0:10:00.0	Calibration Deviation	---
Pre-Calibration	2023-09-14 09:22:27	Post-Calibration	None		

Results

Overall Metrics

LA _{eq}	59.5 dB		
LAE	87.3 dB	SEA	--- dB
EA	59.4 μPa²h		
LA _{peak}	88.0 dB	2023-09-14 10:44:19	
LAS _{max}	70.9 dB	2023-09-14 10:44:30	
LAS _{min}	44.6 dB	2023-09-14 10:45:25	
LA _{eq}	59.5 dB		
LC _{eq}	70.9 dB	LC _{eq} - LA _{eq}	11.4 dB
LA _l _{eq}	60.6 dB	LA _l _{eq} - LA _{eq}	1.1 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	0	0:00:00.0
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
59.5 dB	59.5 dB	0.0 dB	
LDEN	LDay	LEve	LNight
59.5 dB	59.5 dB	--- dB	--- dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	59.5 dB		70.9 dB		--- dB	
L _{q(max)}	70.9 dB	2023-09-14 10:44:30	--- dB	None	--- dB	None
L _{q(min)}	44.6 dB	2023-09-14 10:45:25	--- dB	None	--- dB	None
L _{Peak(max)}	88.0 dB	2023-09-14 10:44:19	--- dB	None	--- dB	None

Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	64.5 dB
LAS 10.0	62.0 dB
LAS 33.3	59.7 dB
LAS 50.0	57.9 dB
LAS 66.6	54.2 dB
LAS 90.0	48.9 dB

Time History



Noise Measurement Field Data

Project:	Cane's Costa Mesa	Job Number:	094797132
Site No.:	LT-1	Date:	9/14/23-9/15/23
Analyst:	Daisy Pineda and Damian Arnaiz	Time:	11:18 AM-11:20
Location:	At the northern corner of the project site		

Noise Sources: nearby traffic

Comments:

Results (dBA):

Leq:	Lmin:	Lmax:	Peak:
63.2	37.0	99.1	114.3

Equipment	
Sound Level Meter:	LD SoundExpert LxT
Calibrator:	CAL200
Response Time:	Slow
Weighting:	A
Microphone Height:	5 feet

Weather	
Temp. (degrees F):	73°
Wind (mph):	< 5
Sky:	Clear
Bar. Pressure:	29.96"
Humidity:	79%

Photo:



Measurement Report

Report Summary

Meter's File Name	LT_1.006.s	Computer's File Name	LxTse_0007061-20230914 111813-LT_1.006.ldbin		
Meter	LxT SE 0007061	Firmware	2.404		
User		Location			
Job Description					
Note					
Start Time	2023-09-14 11:18:13	Duration	24:02:32.3	Pause Time	0:00:00.0
End Time	2023-09-15 11:20:45	Run Time	24:02:32.3	Calibration Deviation	---
Pre-Calibration	2023-09-14 11:07:03	Post-Calibration	None		

Results

Overall Metrics

LA _{eq}	63.2 dB		
LAE	112.6 dB	SEA	--- dB
EA	20.1 mPa²h		
LA _{peak}	114.3 dB		2023-09-14 13:12:25
LAS _{max}	99.1 dB		2023-09-14 13:12:25
LAS _{min}	37.0 dB		2023-09-15 02:46:56
LA _{eq}	63.2 dB		
LC _{eq}	72.4 dB	LC _{eq} - LA _{eq}	9.2 dB
LA _l _{eq}	66.2 dB	LA _l _{eq} - LA _{eq}	3.0 dB

Exceedances

	Count	Duration
LAS > 85.0 dB	15	0:01:01.7
LAS > 115.0 dB	0	0:00:00.0
LApk > 135.0 dB	0	0:00:00.0
LApk > 137.0 dB	0	0:00:00.0
LApk > 140.0 dB	0	0:00:00.0

Community Noise

LDN	LDay	LNight	
66.6 dB	64.6 dB	0.0 dB	
LDEN	LDay	LEve	LNight
67.0 dB	64.9 dB	62.9 dB	58.6 dB

Any Data

	A		C		Z	
	Level	Time Stamp	Level	Time Stamp	Level	Time Stamp
L _{eq}	63.2 dB		72.4 dB		--- dB	
L _{q(max)}	99.1 dB	2023-09-14 13:12:25	--- dB	None	--- dB	None
L _{q(min)}	37.0 dB	2023-09-15 02:46:56	--- dB	None	--- dB	None
L _{Peak(max)}	114.3 dB	2023-09-14 13:12:25	--- dB	None	--- dB	None

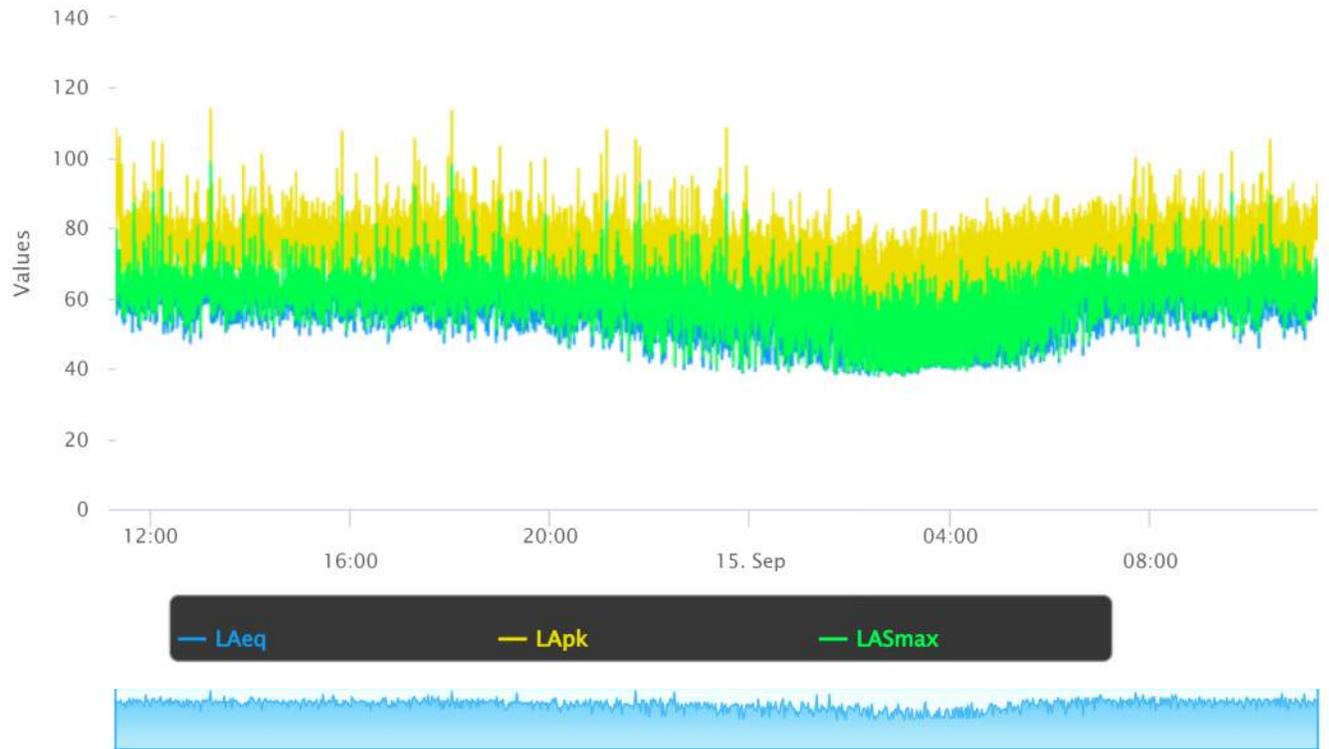
Overloads

Count	Duration	OBA Count	OBA Duration
0	0:00:00.0	0	0:00:00.0

Statistics

LAS 5.0	65.9 dB
LAS 10.0	64.2 dB
LAS 33.3	60.4 dB
LAS 50.0	57.7 dB
LAS 66.6	54.3 dB
LAS 90.0	44.9 dB

Time History





RAISING CANE'S TRAFFIC STUDY
Costa Mesa, California

October 30, 2023

Prepared for:
City of Costa Mesa

Prepared by:
Stantec Consulting Services Inc.

Project Number:
2042657200

The conclusions in the Report titled Raising Cane's Traffic Study are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

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1 Introduction

Stantec Consulting Services Inc. (Stantec) has prepared a traffic analysis for a proposed Raising Cane's restaurant (Project) in the City of Costa Mesa, California. The Project consists of a fast-food restaurant with a drive-through on a site previously occupied by commercial retail uses. The purpose of this report is to document the data and findings of the traffic analysis, which includes traffic operational analysis, parking analysis and drive-through queue analysis.

1.1 Project Description

The Project site is located at 1595 Newport Boulevard, just south of East 16th Street. The proposed Raising Cane's building gross square footage is approximately 3,000 square feet. Primary access to the Project site is via the Old Newport Boulevard frontage road, on the west side of Newport Boulevard. See Figure 1 for the Project Location Map. The proposed Project would replace an existing 25,159 square-foot commercial retail building (currently unoccupied furniture store) with a stand-alone fast-food restaurant with a drive-through. See Figure 2 for the Project Site Plan.

1.2 Approach

This traffic study includes a trip generation analysis, a parking analysis, and a drive-through queue analysis based on a scope of work determined by the City of Costa Mesa. The trip generation and queuing analyses utilize data collected at three similar Raising Cane's case study sites in the surrounding areas. The case study trip rates have been compared to trip rates from standardized Institute of transportation Engineers (ITE) trip generation estimates for a similar type of fast-food drive-through use. The trip generation estimates derived from the case studies were approved by the City as the basis for this traffic study.

The Raising Cane's sites used as case study locations are in the cities of Costa Mesa, Laguna Hills, and Orange. A professional traffic data collection firm was used to count the number of vehicles entering and exiting each site, count parking utilization, and tabulate drive-through queue lengths at each case study location for use in this study. Data was collected at each case study site during the mid-day (11 AM - 1 PM) and evening (5 - 7 PM) peak periods for a typical weekday and typical Saturday. Intersection traffic count data for seven key intersections near the Project site were also collected for the same mid-day and evening weekday, and mid-day Saturday time periods.

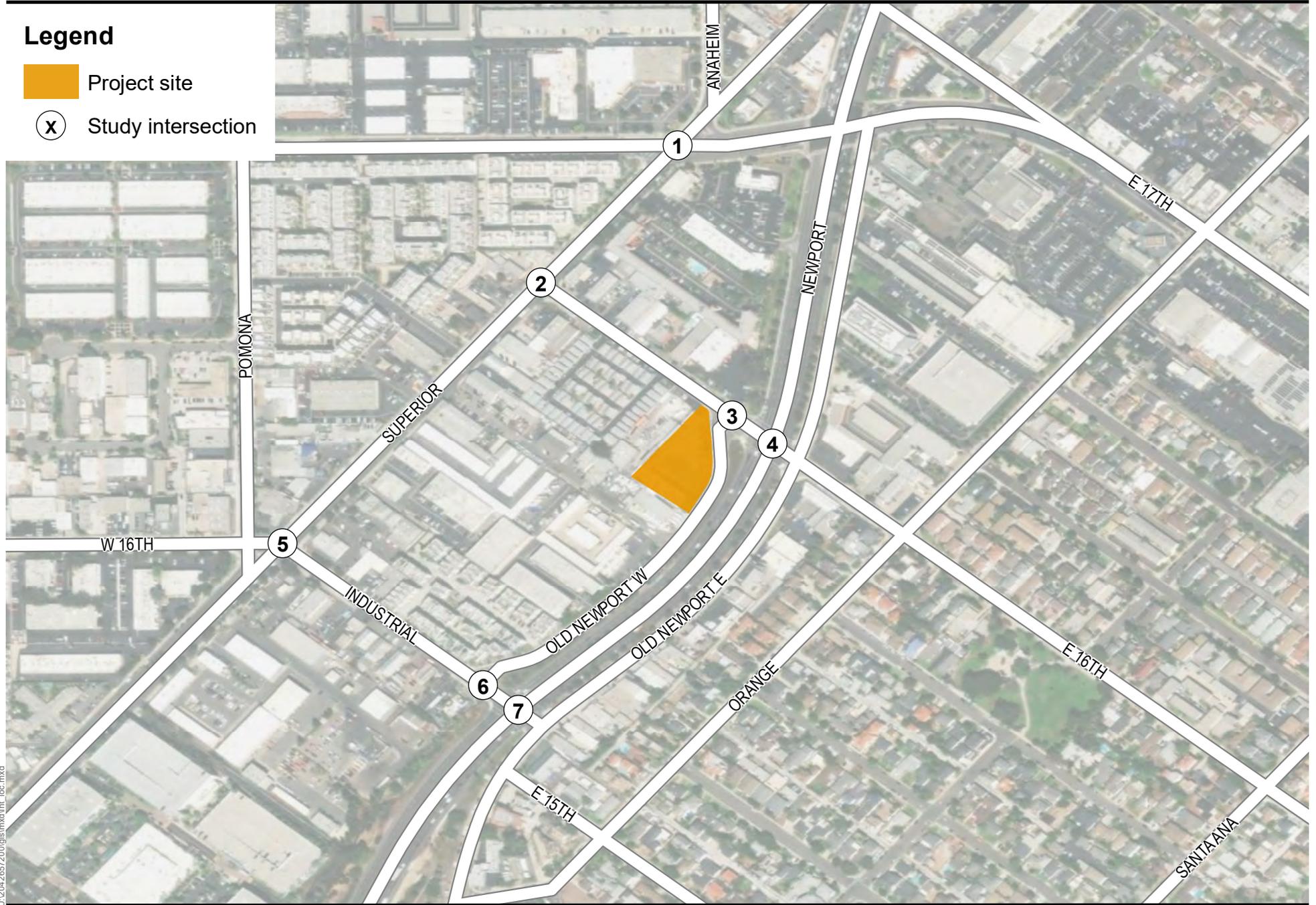
In accordance with City traffic study guidelines and in consultation with City staff, seven intersections in the immediate vicinity of the Project were selected for intersection operational analysis, as shown in the previously referenced Figure 1. The analysis includes evaluation of the proposed Project during the weekday and Saturday mid-day peak hours and the weekday PM peak hour under the following scenarios:

- Existing Conditions
- Opening Year (2024) Cumulative Conditions without Project
- Opening Year (2024) Cumulative Conditions with Project



Legend

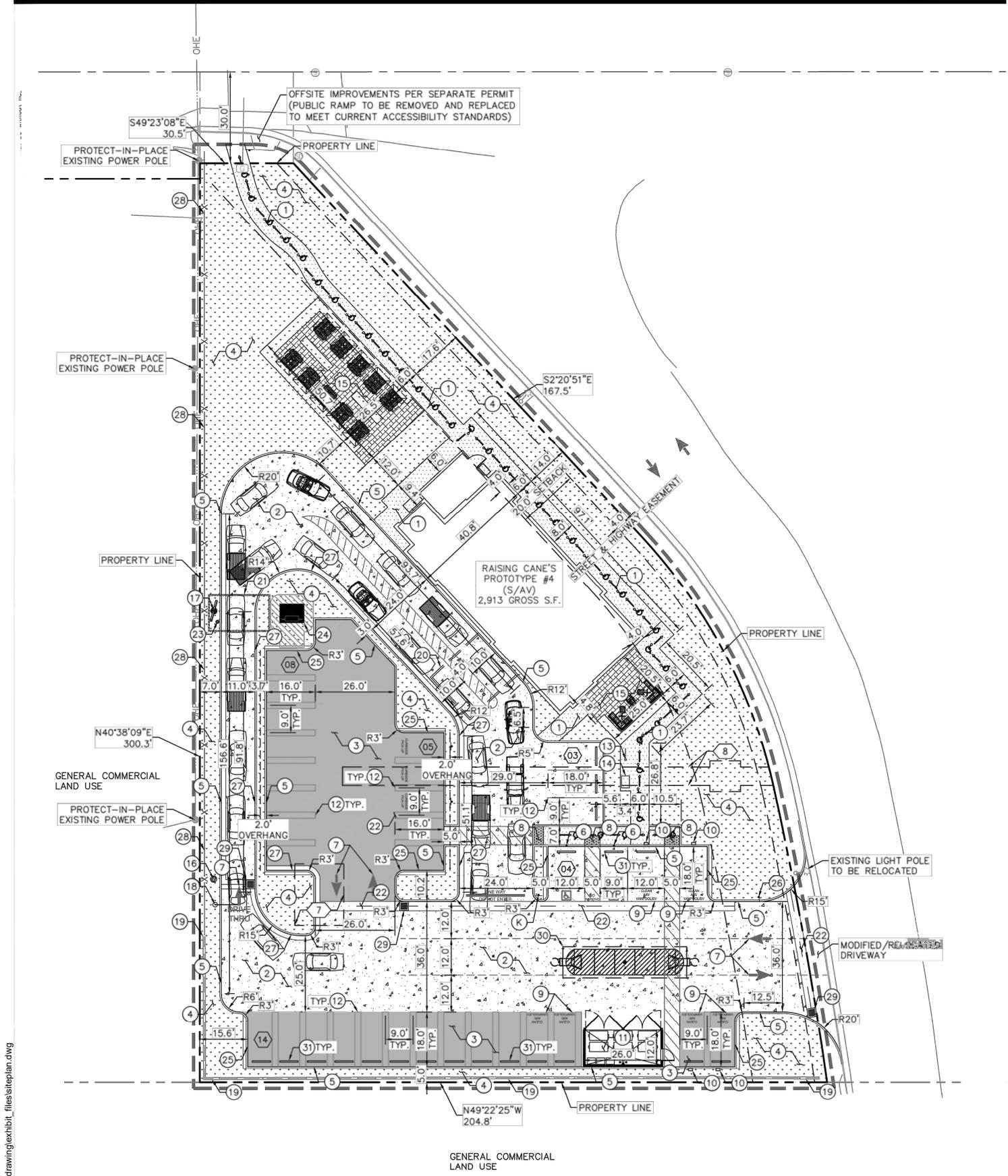
-  Project site
-  Study intersection



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Figure 1
Project Location Map and Study Area Intersector **185**



Source: Kimley Horn

Figure 2
Project Site Plan
186

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Existing traffic count data was collected in early February 2023 for the study area intersections to represent existing traffic conditions. Opening Year (2024) cumulative conditions represent traffic for the Project’s anticipated opening year of 2024. The year-2024 background traffic is estimated by applying an ambient growth rate of one percent per year, added to the existing traffic volumes. In consultation and approved by City staff, a growth rate of one percent per year was calculated based on traffic forecasts obtained from the Orange County Transportation Analysis Model (OCTAM), which includes traffic growth projections generated by cumulative development projects. Project generated traffic is then incrementally added to the 2024 baseline volumes to represent Opening Year (2024) Cumulative Conditions with Project.

1.3 Project Analysis Methodology

To evaluate the potential effect of Project traffic on the surrounding circulation system, a level of service (LOS) analysis utilizing a defined performance criterion determines if a project would cause an undesirable condition at any of the study area intersections during the mid-day or PM peak hours.

For this analysis, the methodology outlined in the Highway Capacity Manual (HCM) Sixth Edition is used, which produces estimates of average vehicle delay as a function of intersection capacity and the volume of traffic passing through the intersection. From this, a corresponding LOS is defined. Traffic LOS is designated “A” through “F” with LOS A representing free flow conditions and LOS F representing severe traffic congestion. The vehicle delay ranges that correspond to LOS A through F, as specified in the HCM, are summarized in Table 1.

Table 1 Intersection Level of Service Ranges (HCM Delay)

LOS	Signal Control Delay	Stop Control Delay
A	0.00 – 10.0 seconds	0.00 – 10.0 seconds
B	10.1 – 20.0 seconds	10.1 – 15.0 seconds
C	20.1 – 35.0 seconds	15.1 – 25.0 seconds
D	35.1 – 55.0 seconds	25.1 – 35.0 seconds
E	55.1 – 80.0 seconds	35.1 – 50.0 seconds
F	Above 80.0 seconds	Above 50.0 seconds

Source: HCM Sixth Edition

Certain LOS values are deemed undesirable by the City. The performance criteria and thresholds used in this analysis are summarized in Table 2 as established by the City of Costa Mesa. Synchro software was used to calculate the intersection delay and LOS.



Table 2 Intersection Performance Criteria

<p>Delay Methodology</p> <p>Calculation Methodology Level of service based on “average vehicle delay” calculated as follows:</p> <ul style="list-style-type: none"> - Synchro/HCM delay-based intersection methodology for traffic signals - HCM Sixth Edition delay-based intersection methodology for stop sign control <p>Performance Standard Level of service D defined as follows:</p> <ul style="list-style-type: none"> - stopped delay to not exceed 55 seconds for signalized intersections - stopped delay to not exceed 35 seconds for stop sign control
<p>Thresholds</p> <p>Would the Project:</p> <ul style="list-style-type: none"> • Worsen an intersection maintained by the City from LOS D or better to LOS E or F
<p>Abbreviations: LOS – Level of Service</p>

2 Traffic Analysis

For comparison purposes, the proposed Project’s anticipated trip generation estimates were prepared using standardized Institute of Transportation Engineers (ITE) 11th Edition trip generation rates for the Fast-Food Restaurant with Drive-Through Window (934) category and compared to the measured case study trip rate.

2.1 Trip Generation Case Study

The number of vehicles entering and exiting the three case study sites during mid-day and evening peak periods on a typical weekday and on a Saturday were collected during the following time periods:

- Thursday from 11:00 AM - 7:00 PM
- Saturday from 11:00 AM - 7:00 PM

Data was collected at the three case study locations listed below. See Appendix A for the driveway entering and exiting traffic volumes data worksheets.

- 1) 3150 Harbor Blvd, Costa Mesa
- 2) 23971 El Toro Road, Laguna Hills
- 3) 2249 N. Tustin Street, Orange



Raising Cane's Traffic Study
2 Traffic Analysis
October 2023

The case study trips collected at the three locations mentioned above were summarized and submitted to the City for their review and approval of the specific trip rates to use in this study. Table 3 summarizes the trip generation based on the ITE trip rates as well as the case study derived trip rates for a weekday. As shown in the table, based on standardized ITE trip rates the proposed Project would generate a total of approximately 152 mid-day peak hour trips and 153 PM peak hour trips on a typical weekday. Based on the case study trip rates, the proposed Project is expected to generate a total of approximately 138 mid-day peak hour trips and 161 PM peak hour trips on a typical weekday.

Table 3 Trip Generation Summary based on ITE & Case Study Trip Rates – Weekday

Trip Rates	Amount	Units	Mid-day Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Fast-Food Restaurant with Drive-Through Window (934) ¹	-	TSF	26.30	24.27	50.57	25.98	24.96	50.94
Fast-Food Restaurant with Drive-Through Window (Case-study trip rates)	-	TSF	24.07	22.16	46.23	27.27	26.33	53.60
Trip Generation								
Project (based on ITE trip rate)	3.0	TSF	79	73	152	78	75	153
Project (based on case study trip rate)	3.0	TSF	72	66	138	82	79	161
Trip Rate Source: ¹ For the peak hour of generator, Institute of Transportation Engineers (ITE), 11th Edition, 2021, with ITE code in parentheses TSF- Thousand Square Feet								

Similarly, Table 4 summarizes the trip generation based on the ITE trip rates as well as the case study derived trip rates for a Saturday. Note that ITE trip rates are available only for the peak hour of the generator on a Saturday. As shown in the table, based on standardized ITE trip rates the proposed Project would generate a total of approximately 166 peak hour trips on a Saturday. Based on the case study trip rates, the proposed Project is expected to generate a total of approximately 167 mid-day peak hour trips and 150 PM peak hour trips on a Saturday.

Table 4 Trip Generation Summary based on ITE & Case Study Trip Rates – Saturday

Trip Rates	Amount	Units	Saturday Mid-day Peak Hour			Saturday PM Peak Hour		
			In	Out	Total	In	Out	Total
Fast-Food Restaurant with Drive-Through Window (934) ¹	-	TSF	28.18	27.07	55.25	n/a	n/a	n/a
Fast-Food Restaurant with Drive-Through Window (case-study trip rates)	-	TSF	28.75	26.96	55.71	27.03	23.10	50.13
Trip Generation								
Project (based on ITE trip rate)	3.0	TSF	85	81	166	n/a	n/a	n/a
Project (based on case study trip rate)	3.0	TSF	86	81	167	81	69	150
Trip Rate Source: ¹ For the peak hour of generator, Institute of Transportation Engineers (ITE), 11th Edition, 2021, with ITE code in parentheses TSF- Thousand Square Feet n/a – not available								



Raising Cane's Traffic Study
2 Traffic Analysis
October 2023

City engineers reviewed the case study trip generation data and concurred that the trip rates derived from the case study are the most appropriate for use in this study. For ADT purposes, ITE trip rate was used. Table 5 summarizes the proposed Project trip generation based on the case study trip rates for a weekday. As shown in the table, the proposed Project is expected to generate a total of approximately 138 mid-day peak hour trips and 161 PM peak hour trips. A pass-by trip reduction of 50 percent for the peak hour is applied based on the data for fast-food restaurants with drive-through window provided in the ITE Trip Generation Handbook, Third Edition. Applying the pass-by trip reduction, the net new trips generated by the Project are approximately 69 trips during the mid-day peak hour and 81 trips during the PM peak hour on a typical weekday. The proposed Project is expected to generate 1,402 daily trips. For ADT, a 25 percent pass-by trip reduction was applied based on the direction from the City. Therefore, the net new daily Project trips generated by the Project would be 1,051 trips.

When compared to the prior commercial retail (furniture store) use on-site, the additional trips generated by the Project are approximately 58 during the mid-day peak hour and 68 during the PM peak hour, and 892 daily trips on a typical weekday. Based on the ITE trip rates for the furniture store, the Project generates 13 PM peak hour trips and 159 daily trips. Mid-day peak hour trips are estimated to be 11 trips based on an assumption that the mid-day peak hour trips are 80% of the PM peak hour trips. This information is provided for comparison purposes only since the existing retail use (furniture store) is currently unoccupied.

Table 5 Trip Generation Summary based on Case Studies of Local Raising Cane's – Weekday

Trip Rates	Amount	Units	Mid-day Peak Hour			PM Peak Hour			ADT
			In	Out	Total	In	Out	Total	
Furniture Store (890) ¹	--	TSF	0.20 ³	0.22 ³	0.42 ³	0.24	0.28	0.52	6.30
Fast-Food Restaurant with Drive-Through Window (Case study trip rates except ADT)	--	TSF	24.07	22.16	46.23	27.27	26.33	53.60	467.48
Trip Generation									
Raising Cane's (proposed)	3.0	TSF	72	66	138	82	79	161	1,402
Pass-by/diverted trips ² (50%/25%) ³	--	--	-36	-33	-69	-41	-39	-80	-351
Net New Project Trips	--	--	36	33	69	41	40	81	1,051
Furniture Store (existing)	25.2	TSF	-5 ⁴	-6 ⁴	-11 ⁴	-6	-7	-13	-159
Additional trips compared to existing use (for comparison purposes only)	--	--	31	27	58	35	33	68	892
Trip Rate Source: ¹ Institute of Transportation Engineers (ITE), 11 th Edition, 2021, with ITE code in parentheses ² Pass-by/diverted trip reduction rate for peak hours from ITE Trip Generation Handbook, 3rd Edition ³ Pass-by/diverted trip reduction rate of 50% for peak hour and 25% for ADT based on City's direction ⁴ Mid-day furniture store ITE trip rate not available, assumed equal to 80% of the PM peak hour trip rate. Furniture store trips are shown for comparison purposes only. TSF - Thousand Square Feet n/a - not available									

Similarly, Table 6 shows summary of the proposed Project trip generation based on the case study trip rates for a Saturday. As shown in the table, the proposed Project is expected to generate a total of



Raising Cane's Traffic Study
2 Traffic Analysis
October 2023

approximately 167 peak hour trips. A pass-by trip reduction of 50 percent is applied based on the data for fast-food restaurants with drive-through window provided in the ITE Trip Generation Handbook, Third Edition. Applying the pass-by trip reduction, the net new trips generated by the Project are approximately 83 trips during the mid-day peak hour.

When compared to the prior commercial retail (furniture store) use on-site, the additional trips generated by the Project are approximately 55 during the peak hour on a Saturday. This information is provided for comparison purposes only since the existing retail use (furniture store) is currently unoccupied.

Table 6 Trip Generation Summary based on Case Studies of Local Raising Cane's – Saturday

Trip Rates	Amount	Units	Mid-day Peak Hour		
			In	Out	Total
Furniture Store (890) ¹	--	TSF	0.59	0.51	1.10
Fast-Food Restaurant with Drive-Through Window (Case study trip rates)	--	TSF	28.75	26.96	55.71
Trip Generation					
Raising Cane's (proposed)	3.0	TSF	86	81	167
Pass-by/diverted trips ² (50%)	--	--	-43	-41	-84
Net New Project Trips	--	--	43	40	83
Furniture Store (existing)	25.2	TSF	-15	-13	-28
Additional trips compared to existing use (for comparison purposes only)	--	--	28	27	55
Trip Rate Source: ¹ For the peak hour of generator, Institute of Transportation Engineers (ITE), 11th Edition, 2021, with ITE code in parentheses ² ITE Trip Generation Handbook, 3rd Edition TSF- Thousand Square Feet					

2.2 Study Area

In accordance with City traffic study guidelines and in consultation with City staff, the following seven study intersections in the vicinity of the Project site were selected for analysis:

1. Superior Avenue and 17th Street (Signal)
2. Superior Avenue and E. 16th Street (Side-street Stop)
3. Old Newport Boulevard Frontage Road and E. 16th Street (Side-street Stop)
4. Newport Boulevard and E. 16th Street (Signal)
5. Superior Avenue and W. 16th Street/ Industrial Way (Signal)
6. Old Newport Boulevard Frontage Road and Industrial Way (Side-street Stop)
7. Newport Boulevard and Industrial Way (Signal)



Existing traffic count data was collected in early February 2023 for seven study area intersections during the mid-day (11 AM - 1 PM) and evening (5 - 7 PM) peak periods for a typical weekday and during the mid-day (11 AM - 1 PM) on a typical Saturday. Traffic count data sheets are provided in Appendix B. See Figure 3 for the Project study area intersections and the existing intersection lane geometry, Figure 4 for existing mid-day peak hour volumes, Figure 5 for the existing PM peak hour volumes, and Figure 6 for Saturday mid-day peak hour volumes.

The results of the existing conditions intersection LOS analysis are shown in Table 7. The study area intersections were analyzed using the HCM delay methodology for signalized and unsignalized intersections. Current signal timing data was provided by the City for the analysis. Detailed LOS calculation worksheets are provided in Appendix C. The table shows that each study intersection currently operates at LOS C or better based on the average vehicle delay during both the mid-day and the PM peak hour conditions on a typical weekday, as well as during the Saturday peak hour.

Table 7 Intersection LOS Summary – Existing Conditions

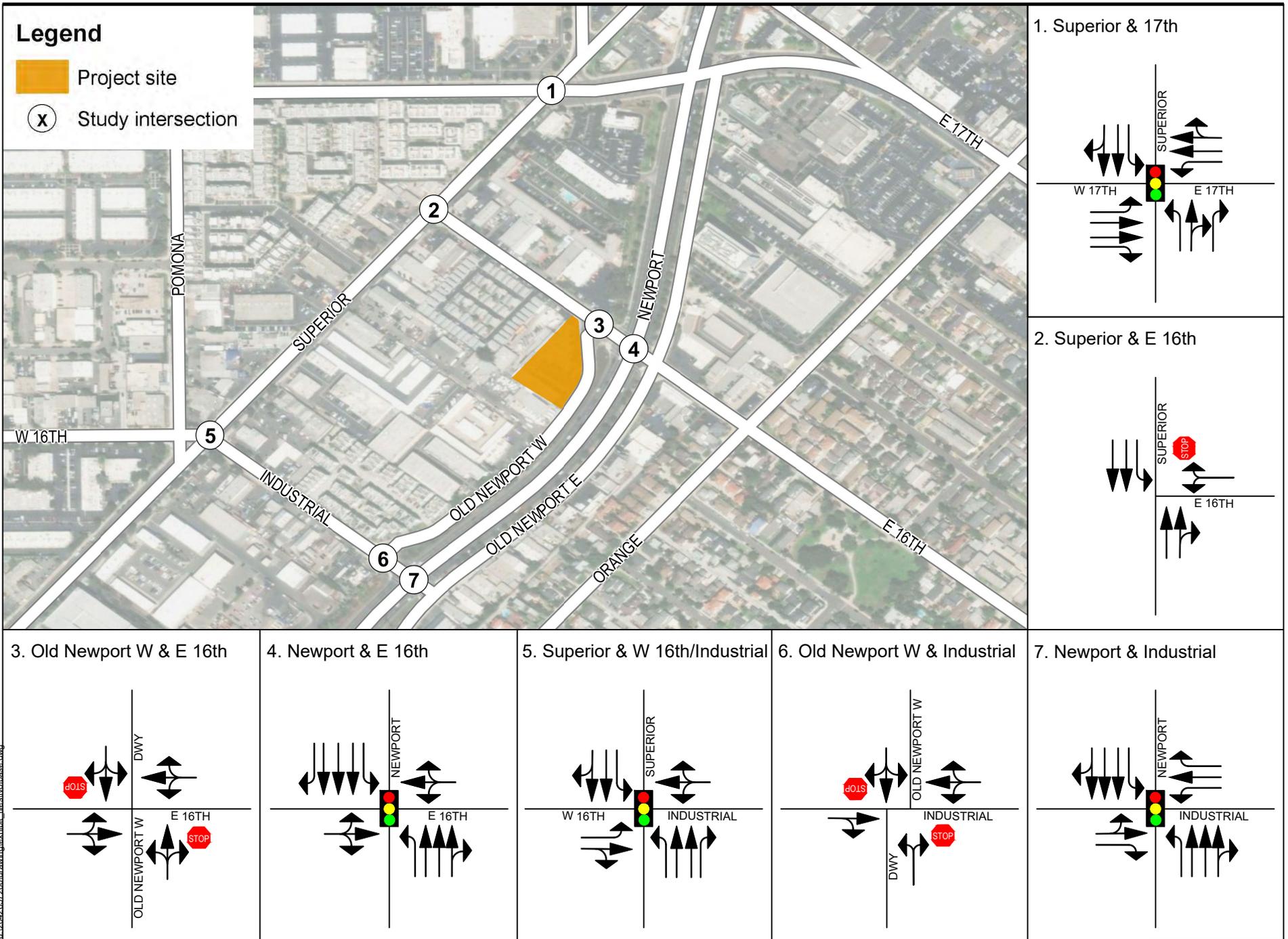
Int #	Intersection Name	Control Type	Weekday				Saturday	
			Mid-Day		PM Peak Hour		Mid-Day	
			Delay	LOS	Delay	LOS	Delay	LOS
1	Superior & 17th	Signal	22.8	C	23.5	C	19.5	B
2	Superior & E 16th	TWSC	15.5	C	16.1	C	13.8	B
3	Old Newport W & E 16th	TWSC	10.1	B	9.4	A	9.6	A
4	Newport & E 16th	Signal	17.6	B	18.0	B	18.9	B
5	Superior & W 16th/Industrial	Signal	26.0	C	28.9	C	25.8	C
6	Old Newport W & Industrial	TWSC	11.3	B	10.4	B	9.9	A
7	Newport & Industrial	Signal	16.0	B	15.0	B	11.1	B

Note:
Based on traffic counts collected in February 2023
LOS - Level of Service
Delay - Average vehicle delay (seconds/vehicle) for movements subject to stopping

2.3 Project Trip Distribution

The Project's anticipated trip distribution percentages were derived based on the Project site's location in relation to the surrounding uses while taking into account the proposed driveway locations, roadway lane geometry, existing traffic flow patterns, and engineering judgement. Overall, approximately 50 percent of the Project trips are expected to be oriented towards the north on Old Newport Boulevard and 50 percent of the Project trips oriented towards the south, with 25 percent continuing on Newport Boulevard and the remaining 25 percent distributed almost equally towards the east and the west. See Figure 7 for the Project trip distribution and Figure 8, Figure 9, and Figure 10 for the weekday mid-day peak hour, weekday PM peak hour, and Saturday mid-day peak hour net Project trips, respectively. The corresponding pass-by Project trip estimates are shown in Figure 11, Figure 12, and Figure 13, respectively.

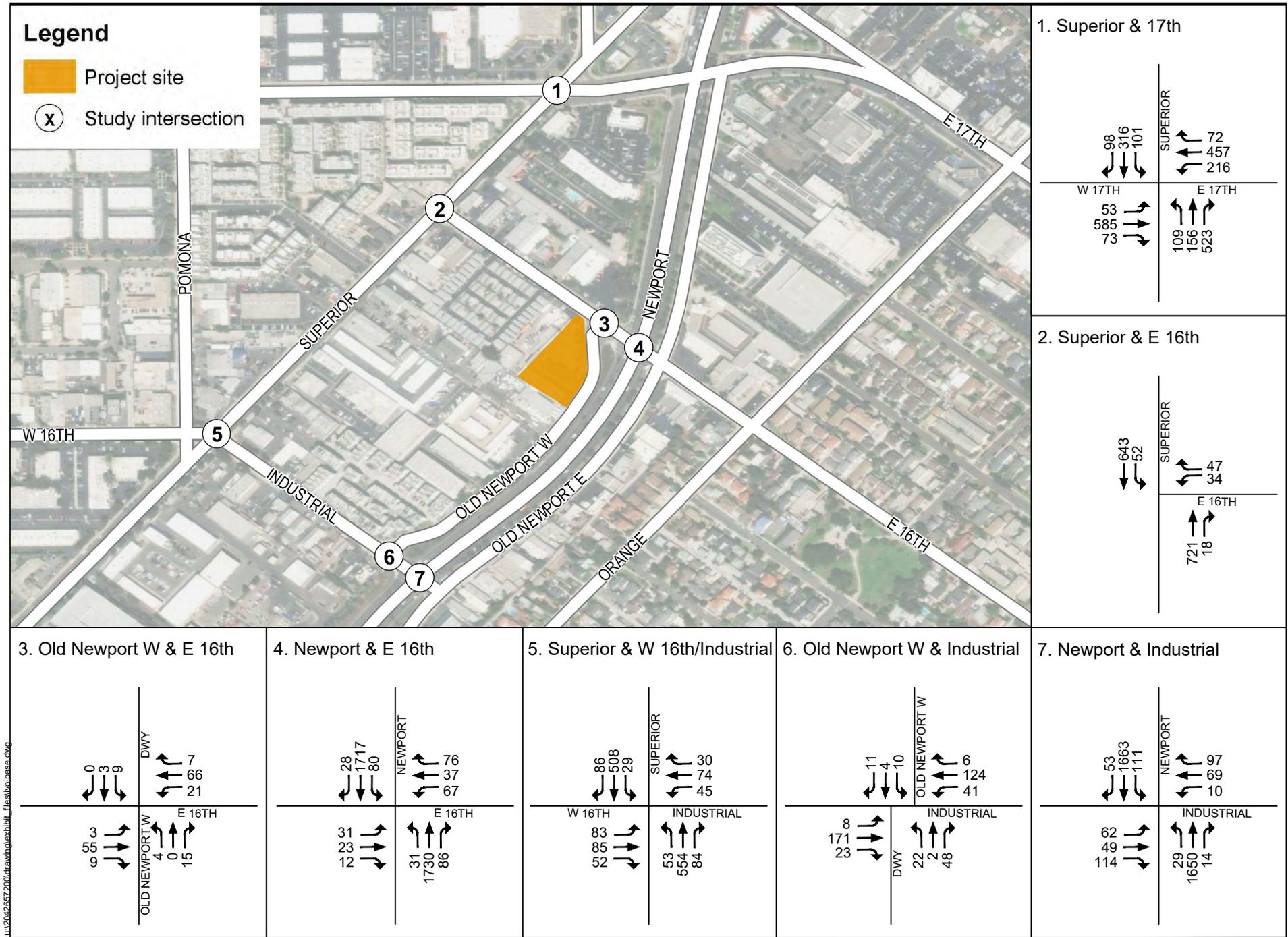




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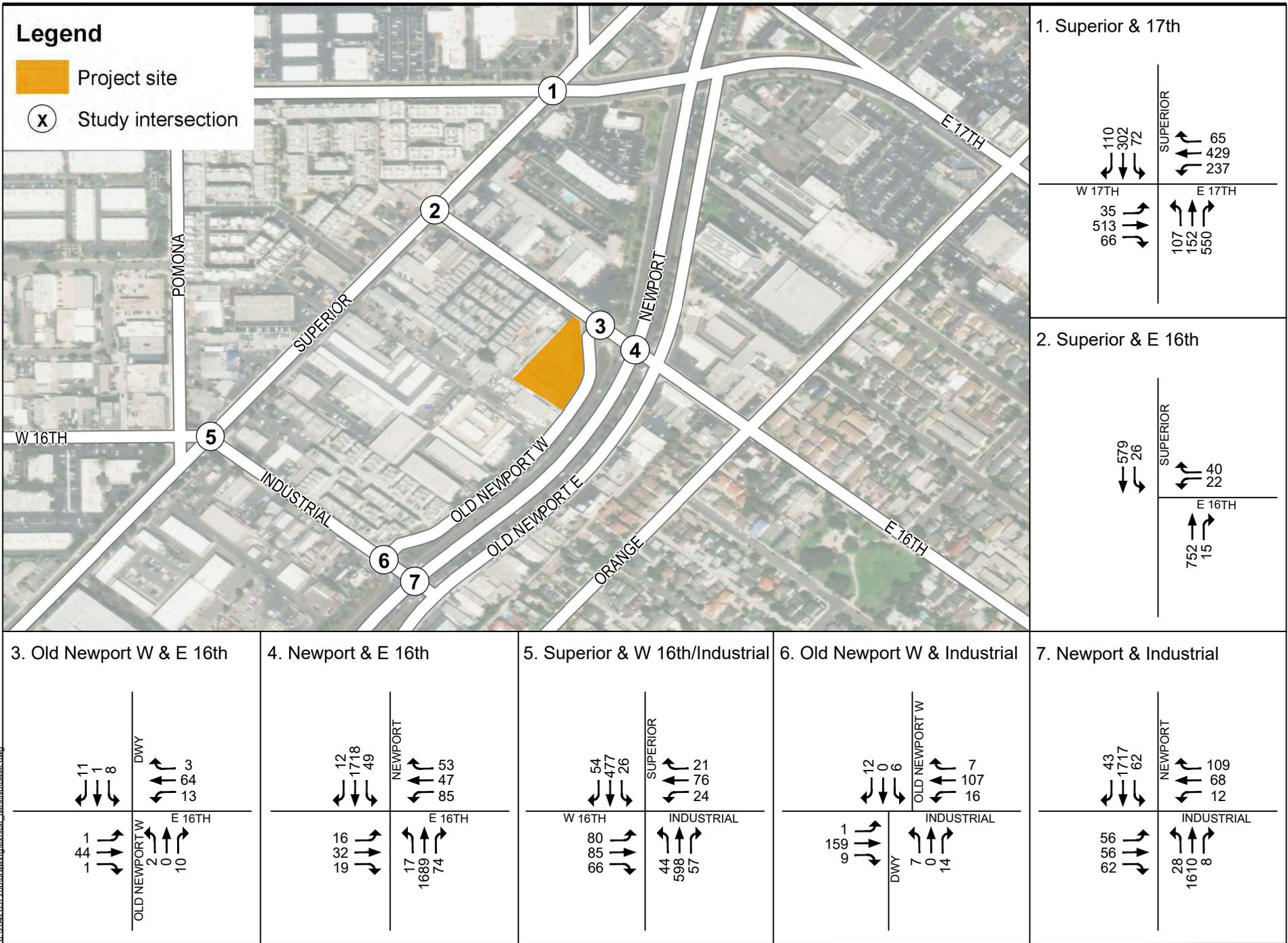
Figure 3
Existing Intersection Lane Configurations



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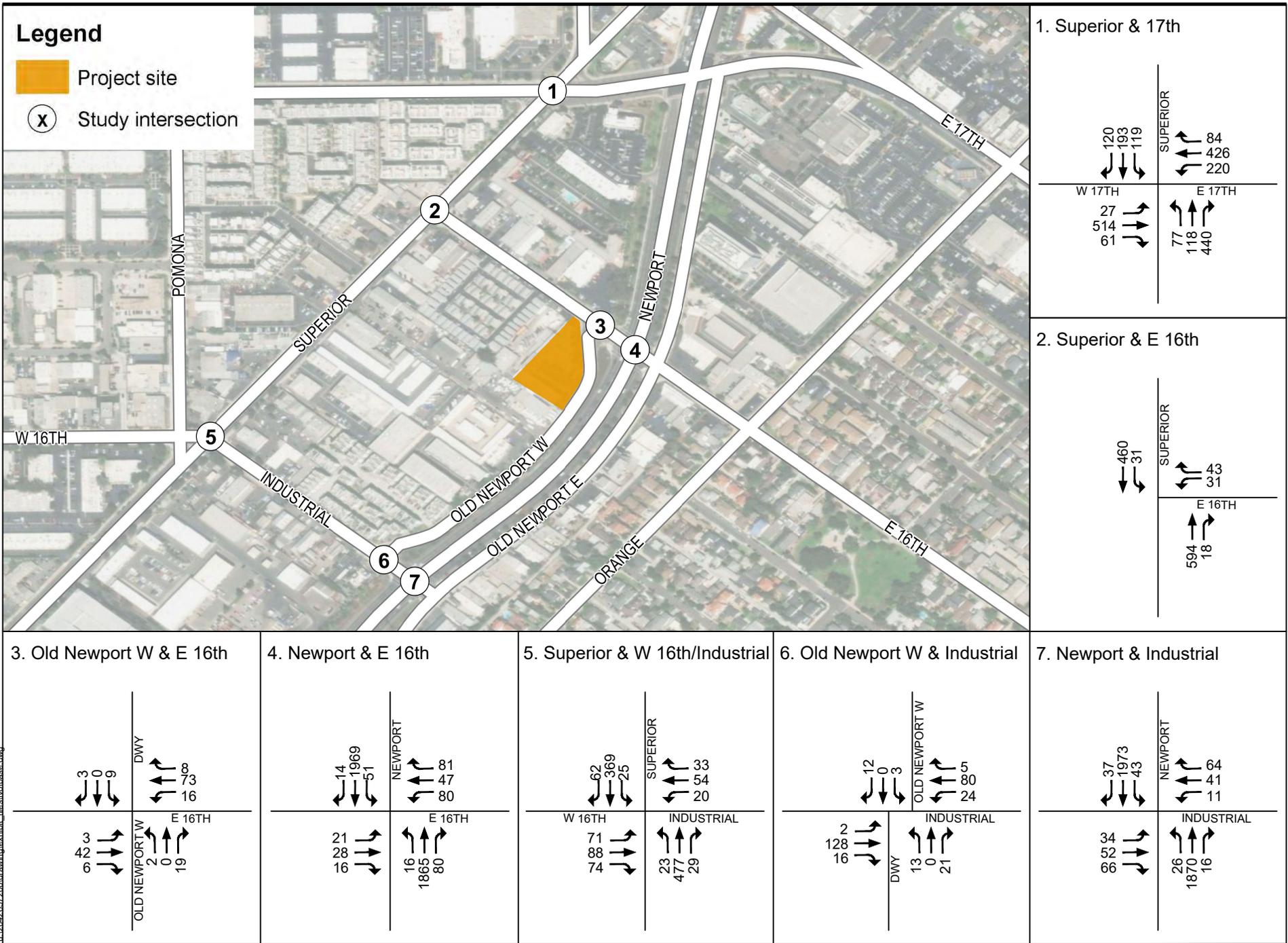
Figure 4
Existing Mid-Day Peak Hour Volumes - Weekday



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Figure 5
Existing PM Peak Hour Volumes - Weekday



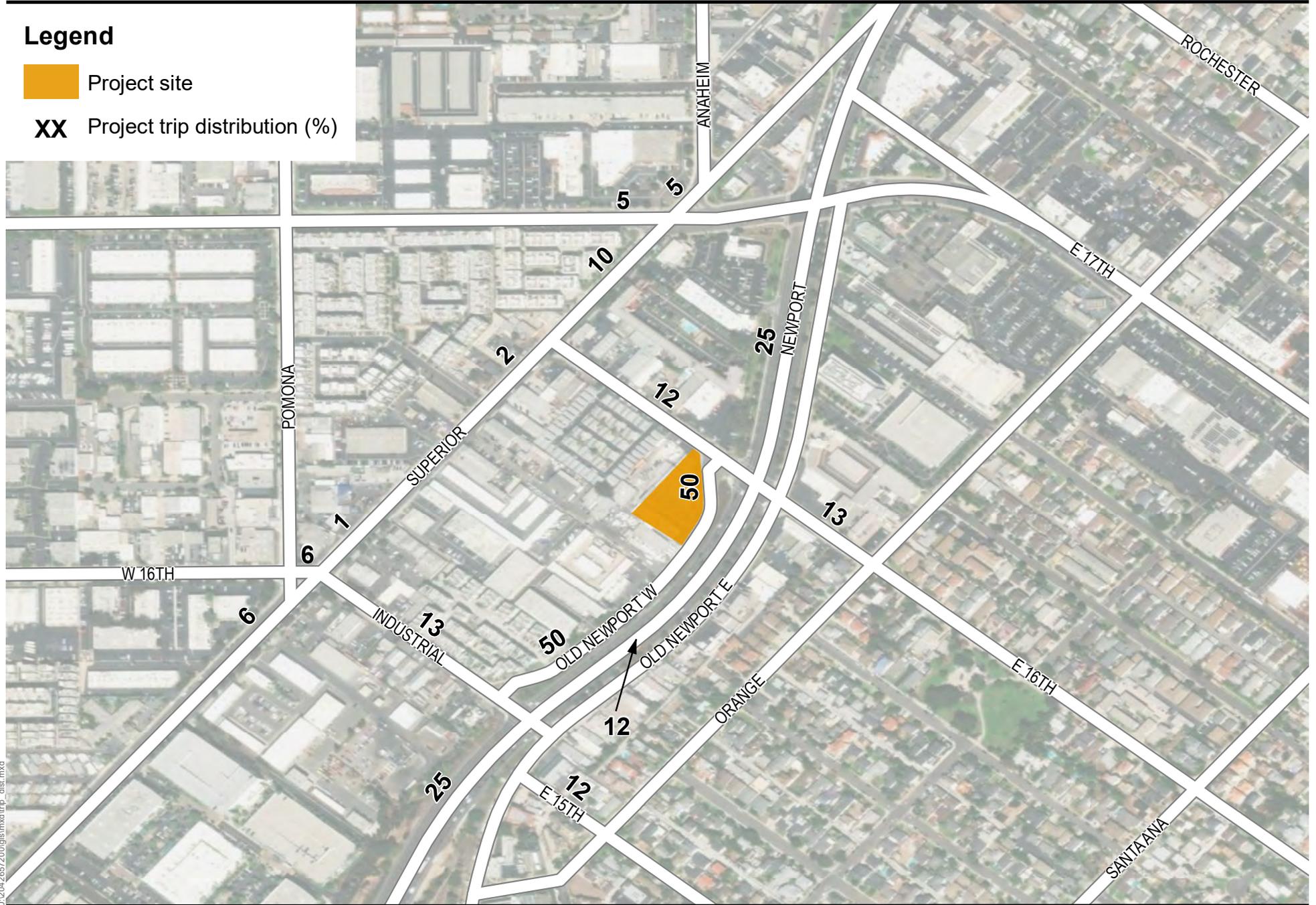
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Figure 6
Existing Mid-Day Peak Hour Volumes - Saturday

Legend

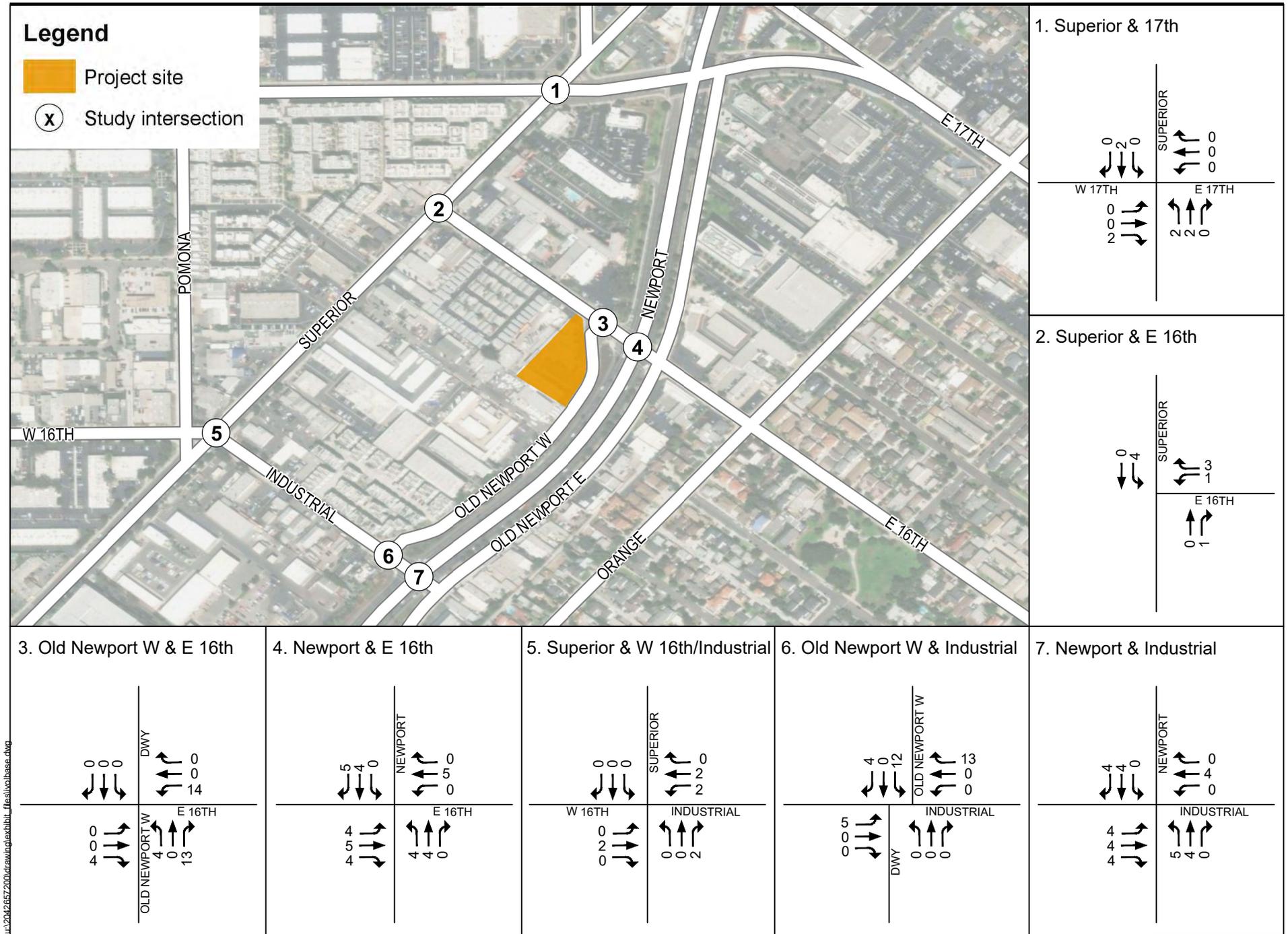
-  Project site
- XX** Project trip distribution (%)



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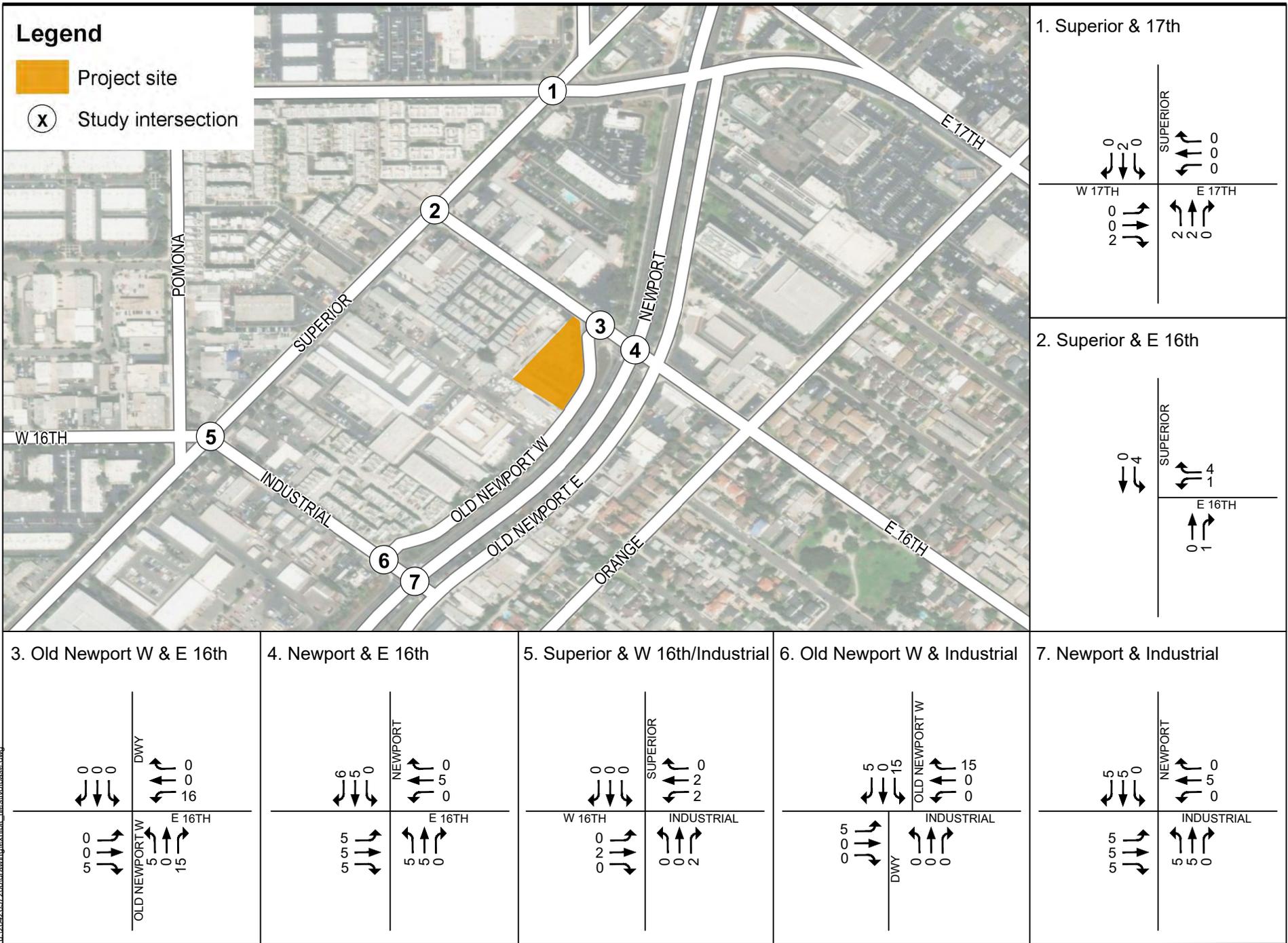
Figure 7
Project Trip Distribution
197
14



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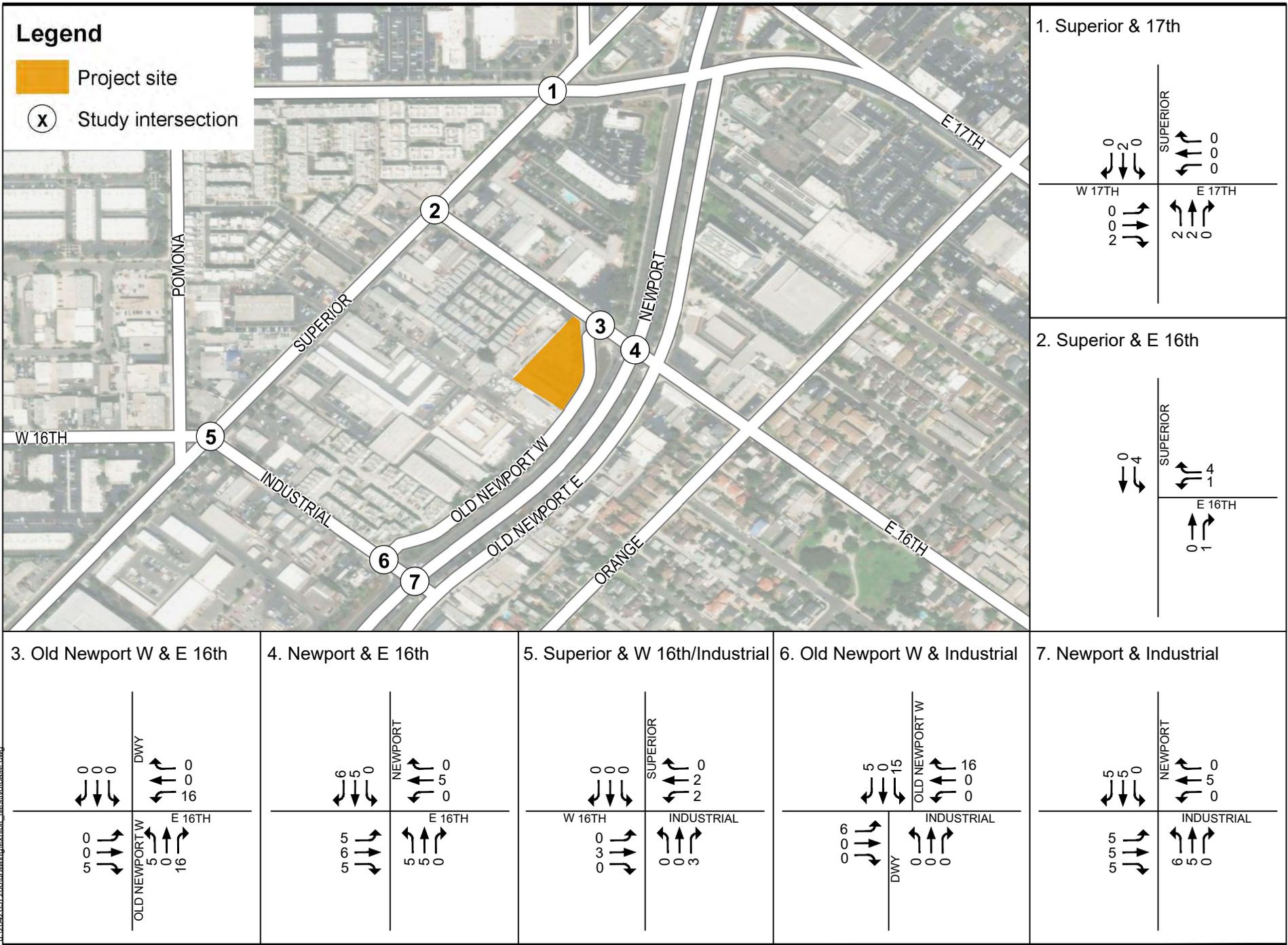
Figure 8
Net Project Trips - Mid-Day Peak Hour - Weekday



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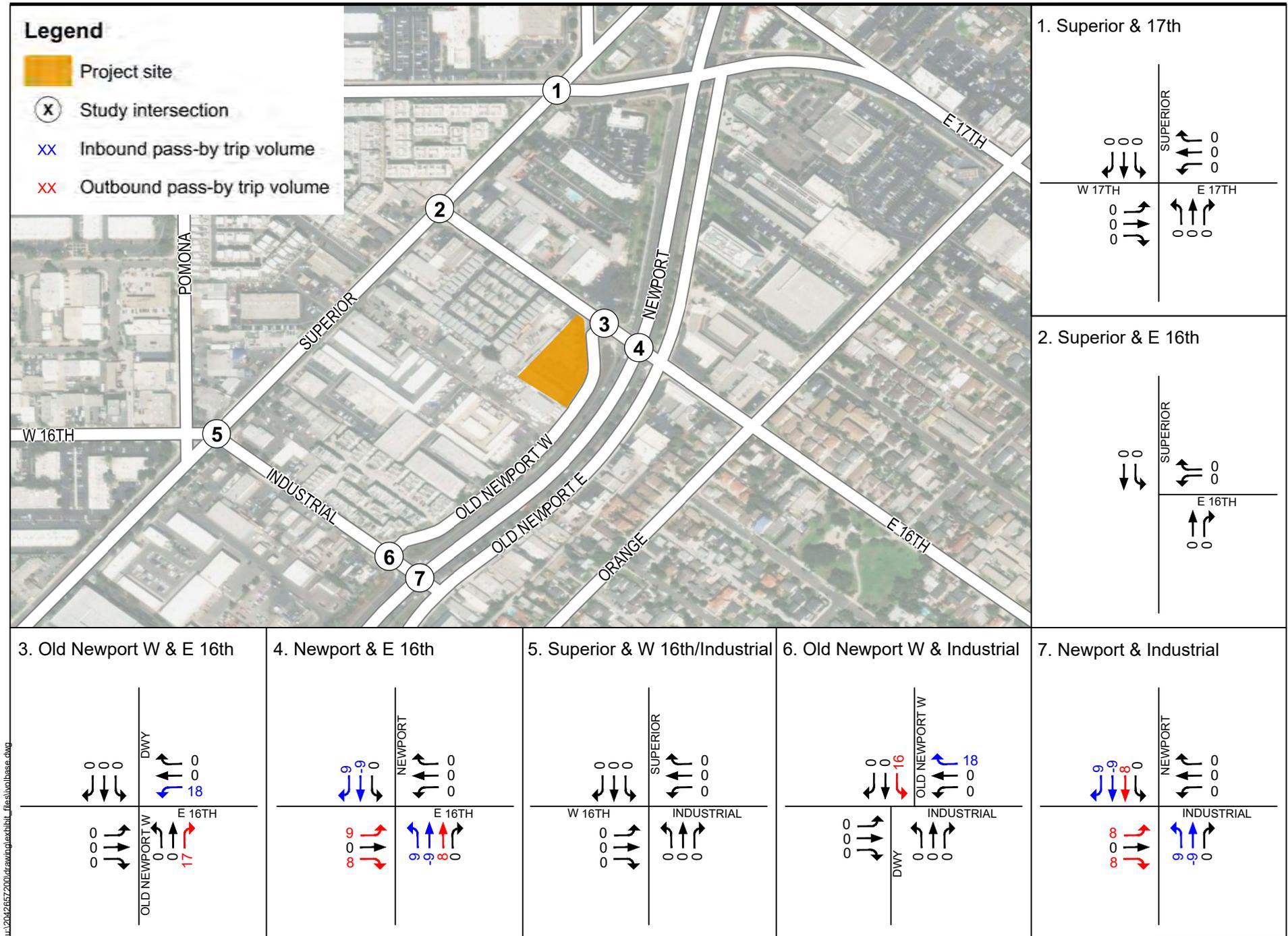
Figure 9
Net Project Trips - PM Peak Hour - Weekday



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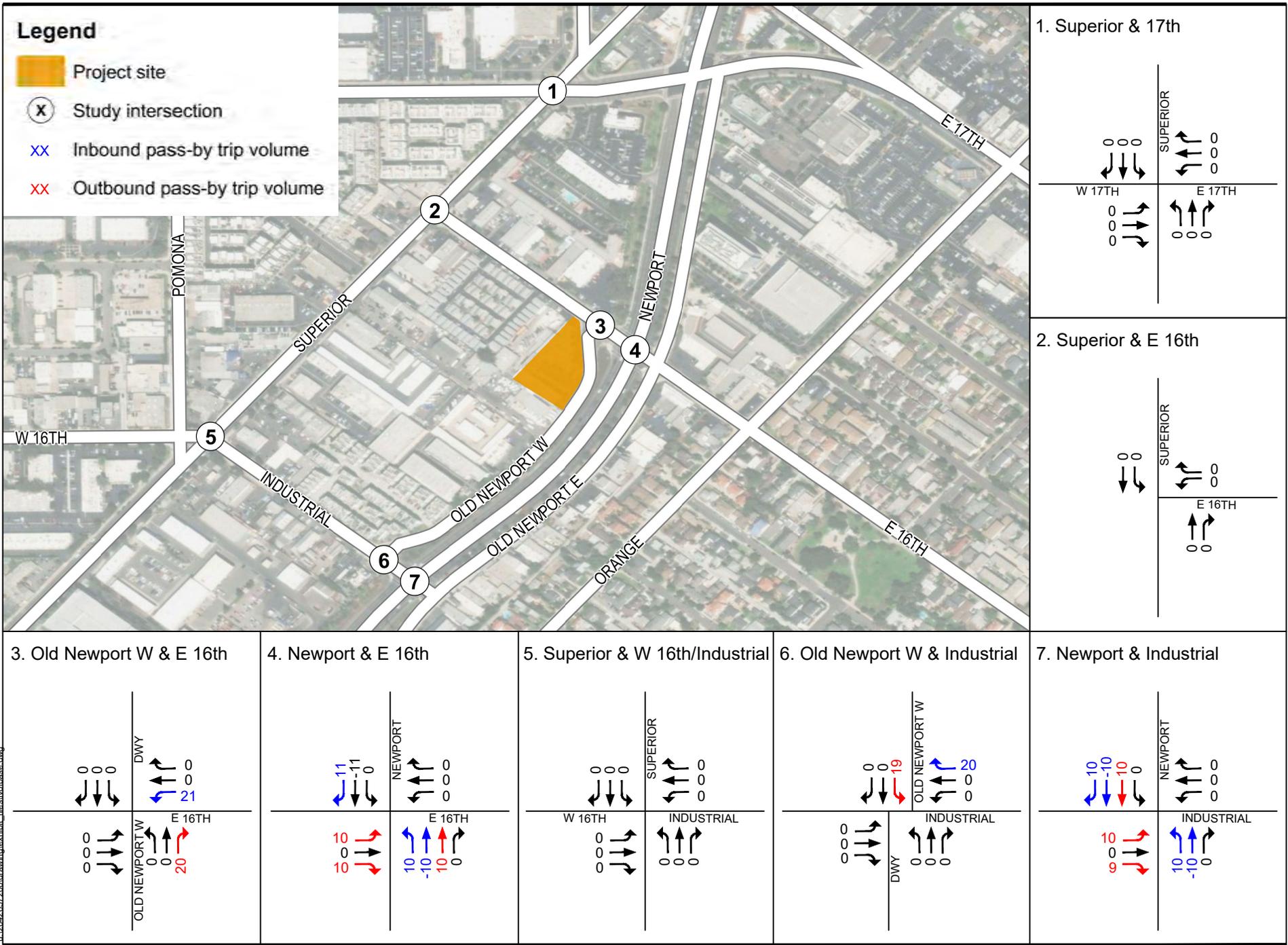
Figure 10
Net Project Trips - Mid-Day Peak Hour - Saturday



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Figure 11

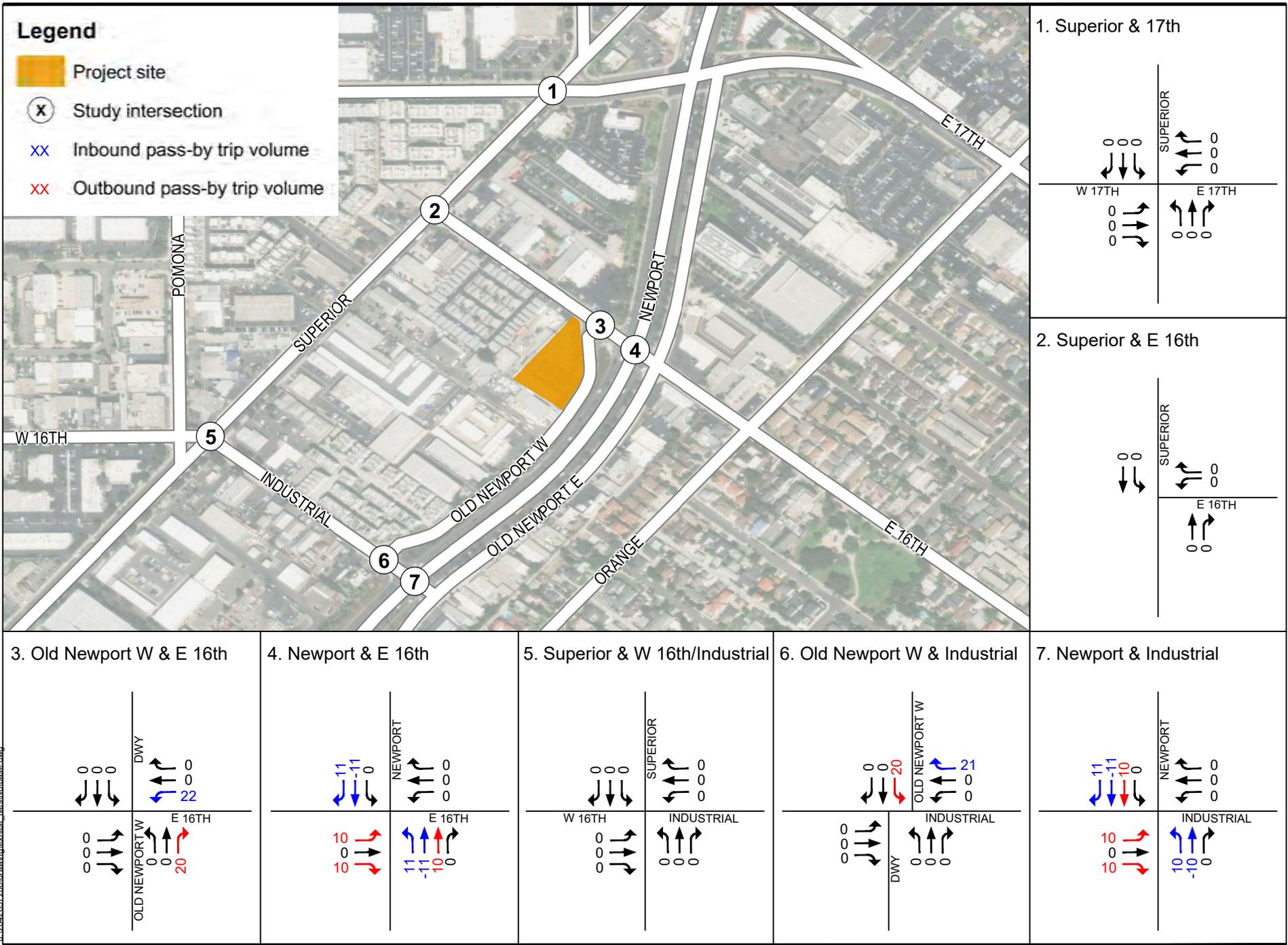
Pass-By Project Trips- Mid-Day Peak Hour- Weekday



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Figure 12



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Figure 13

2.4 Opening Year (2024) Cumulative Conditions Analysis

The Project is expected to be built out within a year in 2024. A growth rate of one percent per year was calculated based on traffic forecasts obtained from OCTAM, which includes traffic growth projections generated by cumulative development projects. In consultation and approval from the City staff, a growth rate of one percent per year was used to factor the existing traffic counts to obtain baseline opening day volumes without the Project. The total volume of trips generated by the proposed Project (net new trips plus pass-by adjustments) were added to the Opening Year (2024) cumulative conditions without Project to obtain Opening Year (2024) cumulative conditions with-Project volumes.

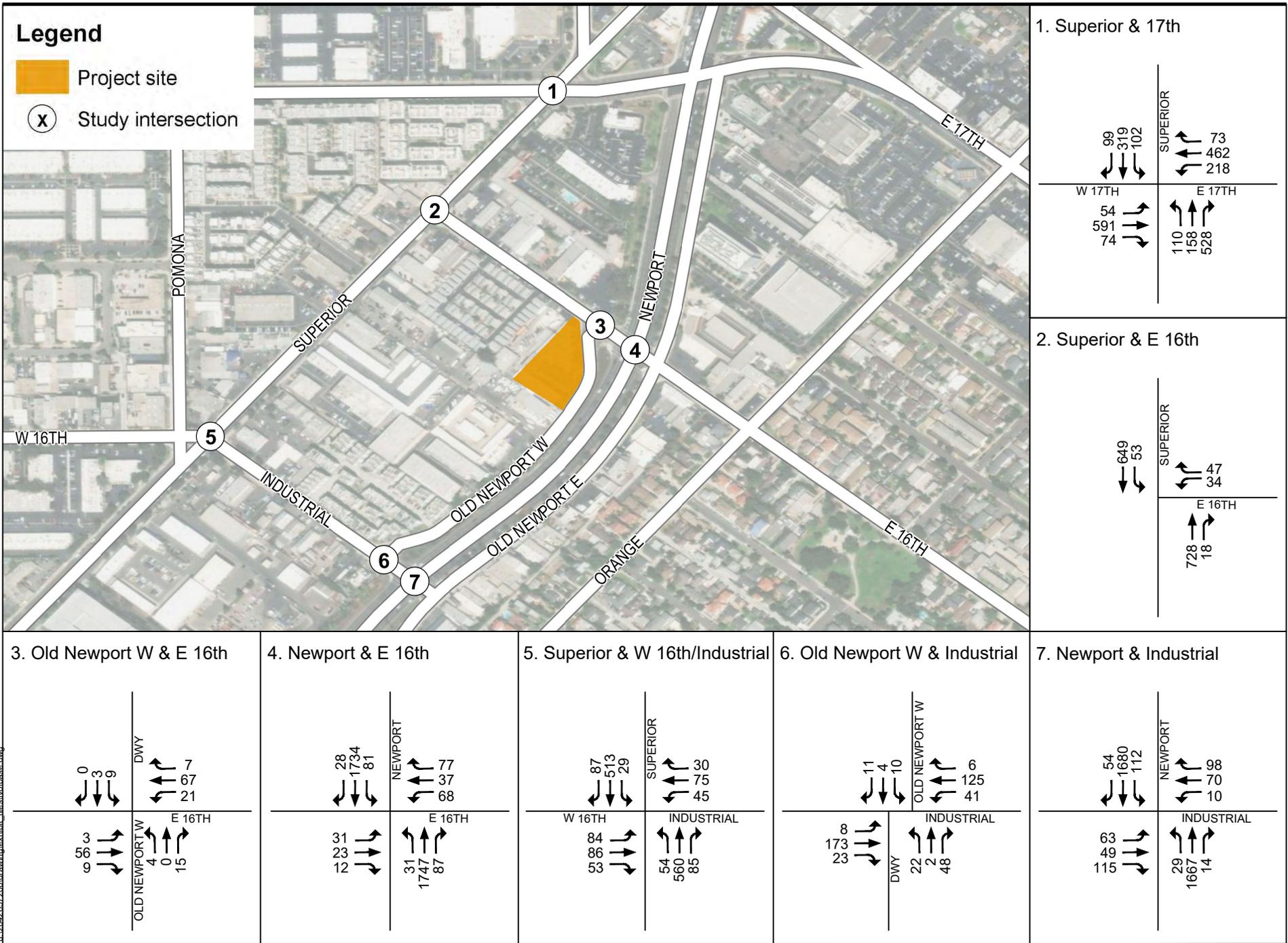
Figure 14 and Figure 15 show the Opening Year (2024) cumulative conditions without-Project mid-day peak hour volumes and PM peak hour volumes, respectively for a weekday. Figure 16 shows the Opening Year (2024) cumulative conditions without-Project mid-day peak hour volumes on a Saturday. Figure 17 and Figure 18 show the Opening Year (2024) cumulative conditions with-Project mid-day peak hour volumes and PM peak hour volumes, respectively on a weekday. Figure 19 shows the Opening Year (2024) cumulative conditions with-Project mid-day peak hour volumes on a Saturday.

Peak hour delay values and LOS that correspond with the Opening Year (2024) cumulative conditions without and with Project traffic volumes can be found in Table 8, which provides a comparison between the two scenarios. The signalized and unsignalized study intersections were analyzed based on HCM delay methodology using Synchro software. Current signal timing data was provided by the City for the analysis. Detailed LOS calculation worksheets are provided in Appendix C. The table shows that the study intersections would continue to operate at LOS C or better during the mid-day peak hour and PM peak hour on a typical weekday as well as during the mid-day peak hour on a Saturday.

Table 8 Intersection LOS Summary – Opening Year (2024) Cumulative Conditions

Int #	Intersection Name	Opening Year (2024) Cumulative Conditions without Project						Opening Year (2024) Cumulative Conditions with Project					
		Weekday				Saturday		Weekday				Saturday	
		Mid-Day		PM		Mid-Day		Mid-Day		PM		Mid-day	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Superior & 17th	23.0	C	23.5	C	19.5	B	23.0	C	23.7	C	19.5	B
2	Superior & E 16th	15.6	C	16.2	C	13.9	B	15.8	C	16.4	C	14.0	B
3	Old Newport W & E 16th	10.1	B	9.4	A	9.6	A	11.1	B	10.1	B	10.5	B
4	Newport & E 16th	17.9	B	18.0	B	18.9	B	19.5	B	20.4	C	22.0	C
5	Superior & W 16th/Industrial	26.1	C	28.9	C	25.8	C	26.2	C	29.2	C	26.1	C
6	Old Newport W & Industrial	11.3	B	10.4	B	10.0	B	12.9	B	12.3	B	11.1	B
7	Newport & Industrial	16.2	B	15.0	B	11.1	B	17.9	B	17.8	B	13.3	B
Note: Cumulative background conditions based on traffic counts collected in February 2023 and OCTAM growth projections LOS - Level of Service Delay - Average vehicle delay (seconds/vehicle) for movements subject to stopping													

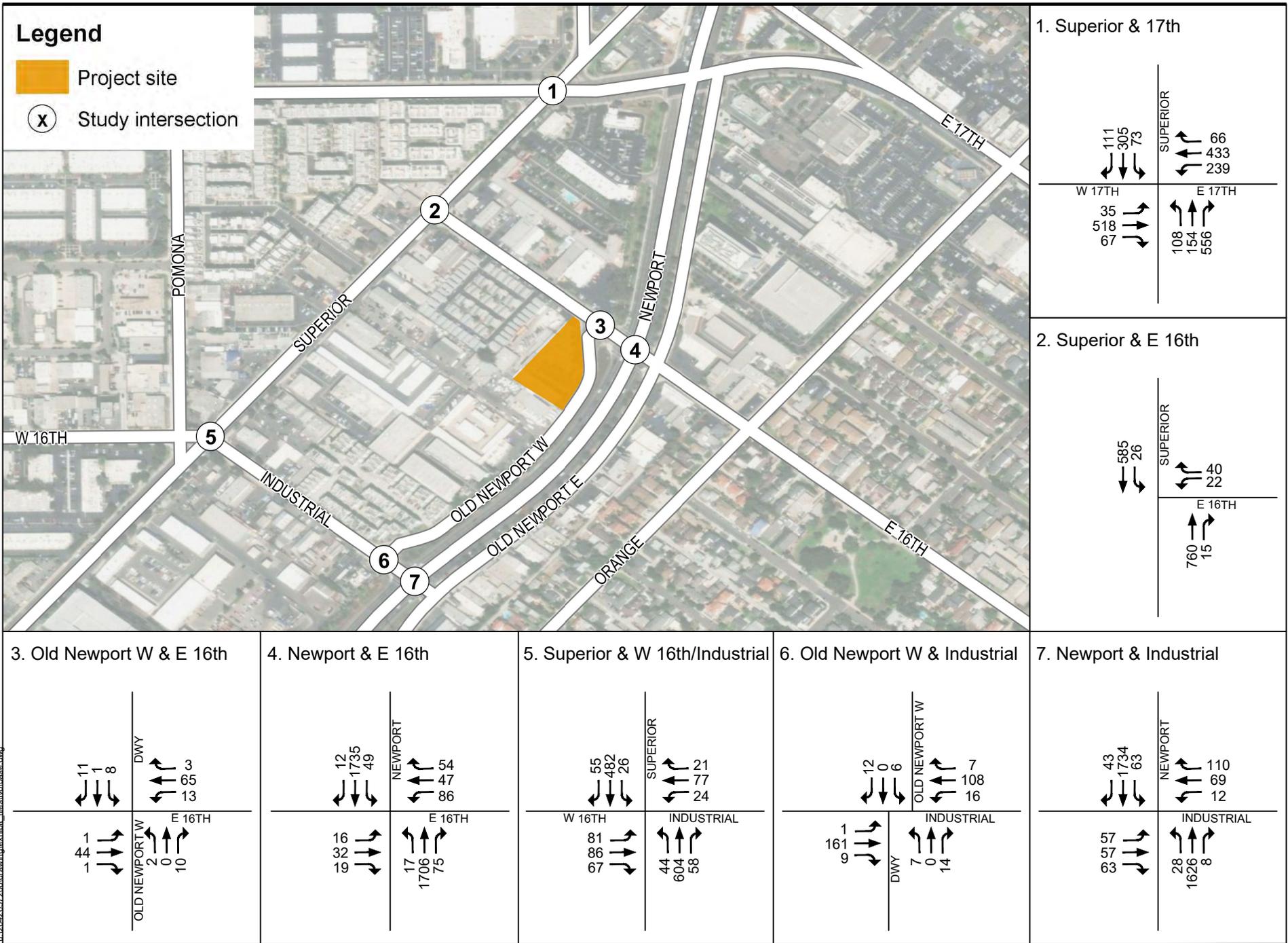




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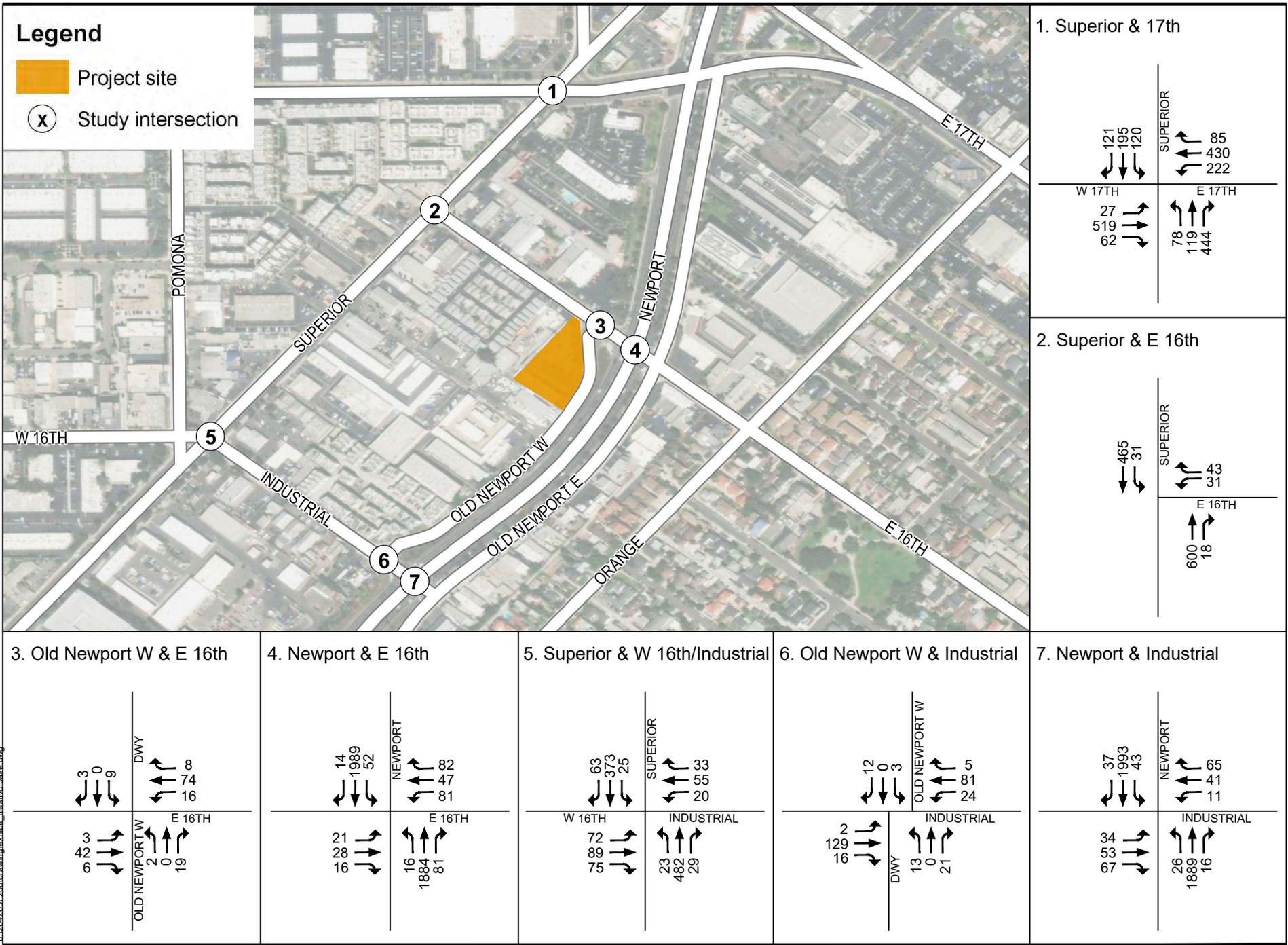
Figure 14
Opening Year (2024) Cumulative Conditions No Project - Mid-Day Peak Hour Volumes - Weekday



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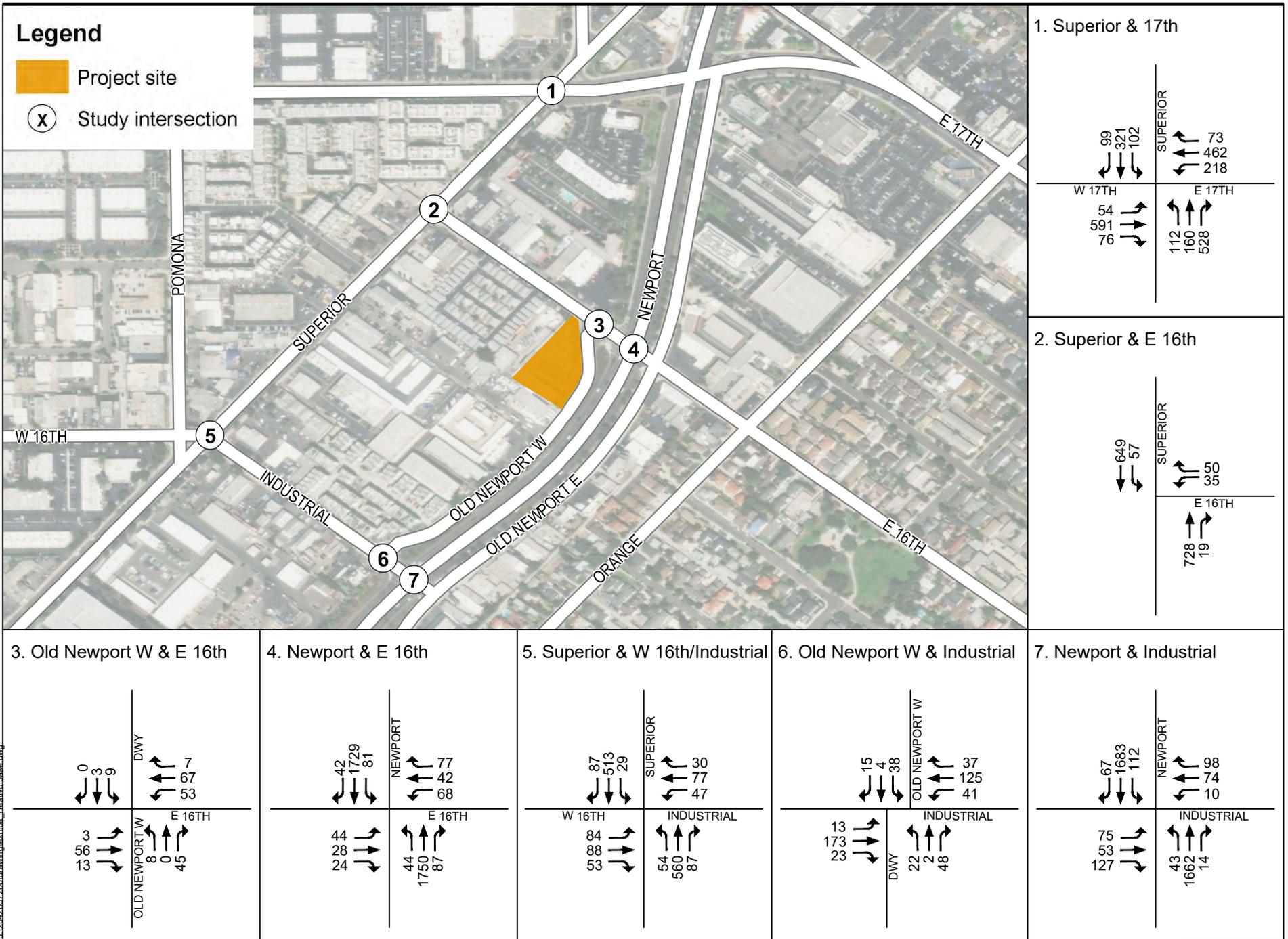
Figure 15
Opening Year (2024) Cumulative Conditions No Project - PM Peak Hour Volumes - Weekday



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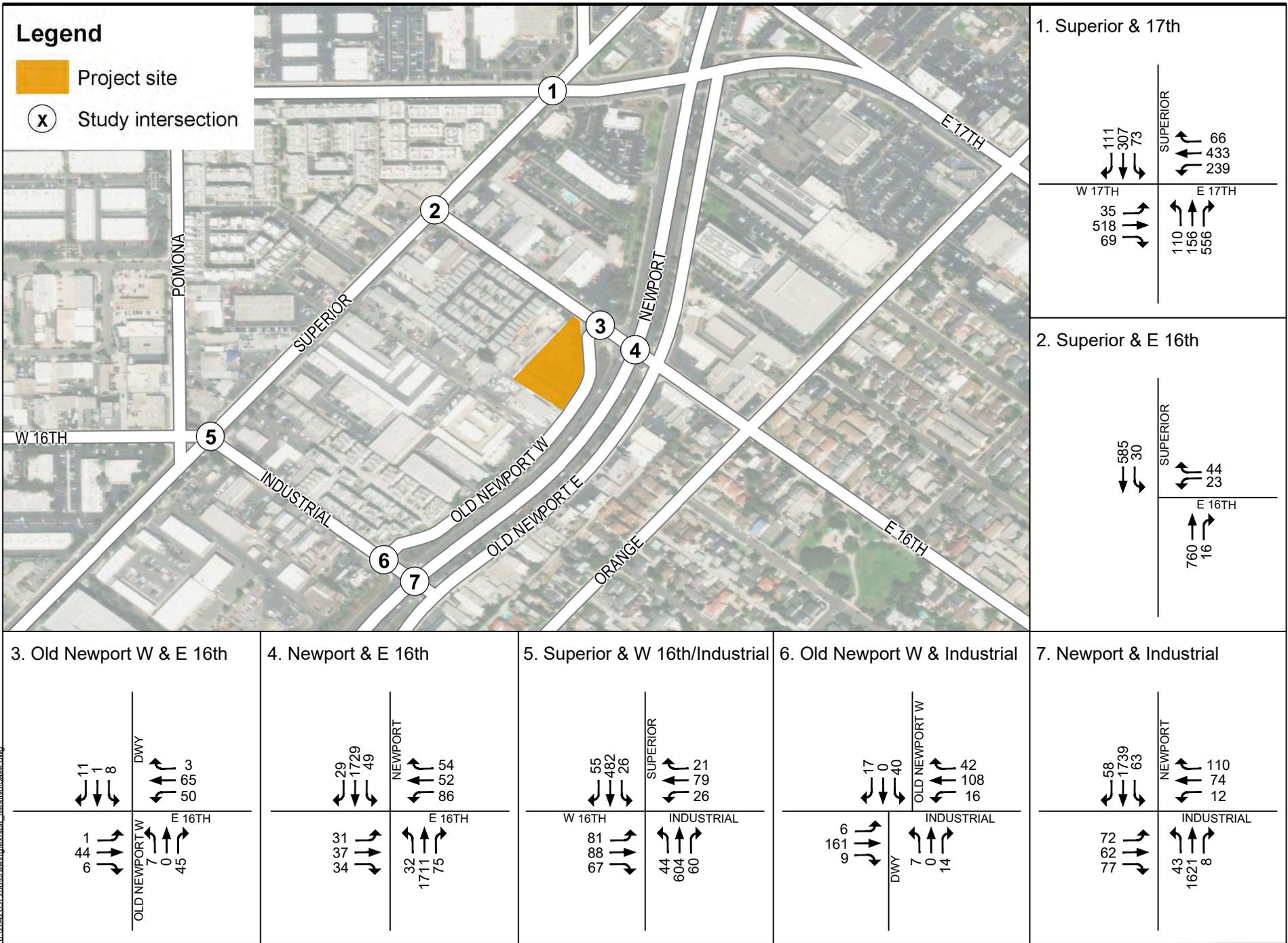
Figure 16
Opening Year (2024) Cumulative Conditions No Project - Mid-Day Peak Hour Volumes - Saturday



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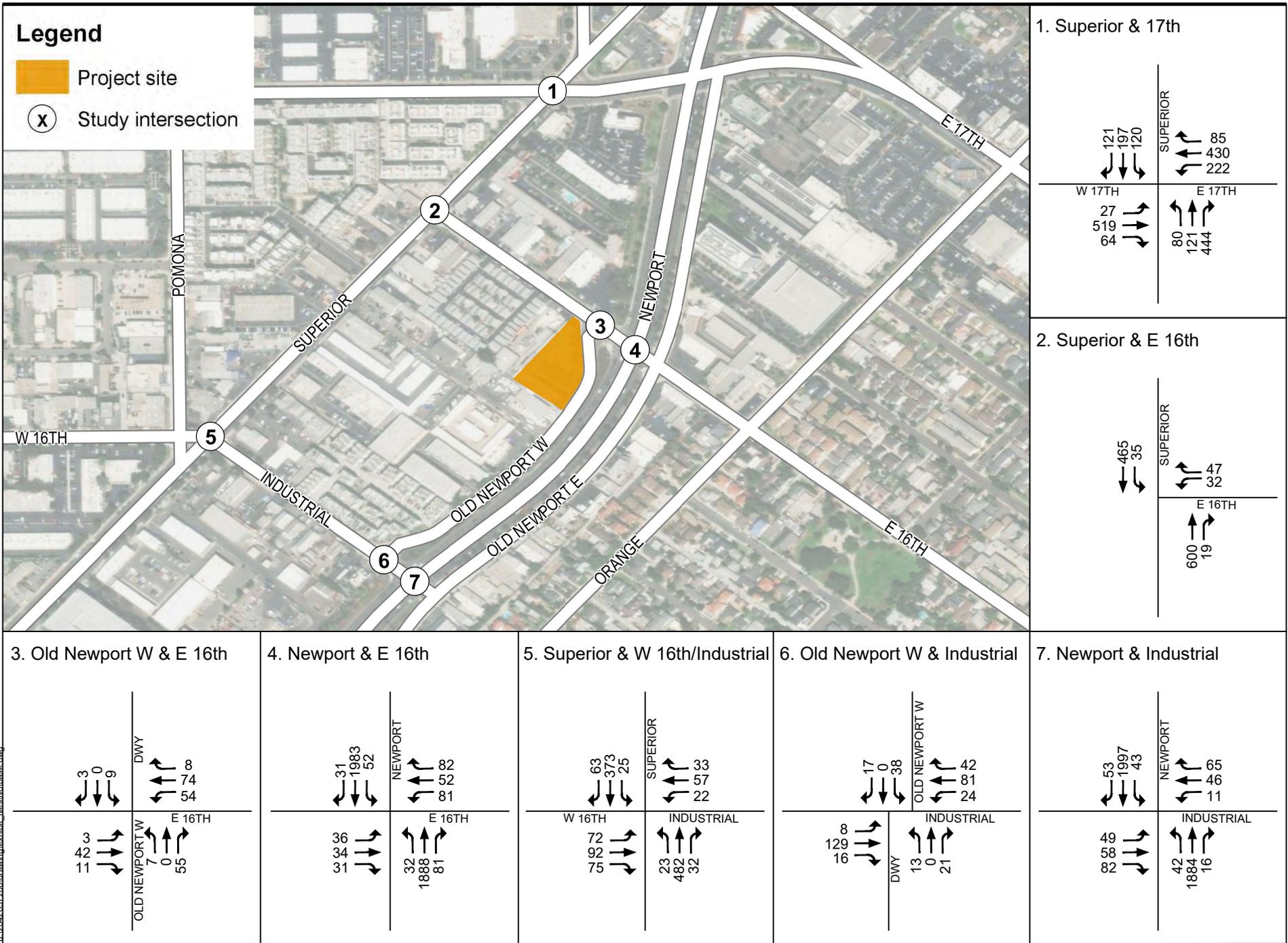
Figure 17
Opening Year (2024) Cumulative Conditions with-Project - Mid-Day Peak Hour Volumes - Weekday



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Figure 18
Opening Year (2024) Cumulative Conditions with-Project - PM Peak Hour Volumes - Weekday



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Figure 19
Opening Year (2024) Cumulative Conditions with-Project - Mid-Day Peak Hour Volumes - Saturday

2.5 Site Access and Circulation Analysis

Primary access to the Project site would be via one full access driveway on the Old Newport Boulevard frontage road approximately 275 feet south of East 16th Street. A 36' wide driveway is proposed with one inbound lane and one outbound lane. No additional turn-lanes or acceleration/deceleration lanes are proposed or warranted due to the low-speed nature of Old Newport Boulevard. See Figure 20 for the Project driveway peak hour volumes and the proposed lane configuration. LOS analysis for the site access intersection under Opening Year (2024) cumulative conditions is summarized in Table 9. As shown in the table, the site access intersection would operate at LOS A during the weekday mid-day and PM peak hour, as well as during mid-day peak hour on a Saturday.

Table 9 Site Access Driveway LOS Summary – Opening Year (2024) Cumulative Conditions with Project

Location	Weekday				Saturday	
	Mid-Day		PM Peak Hour		Mid-Day	
	Delay	LOS	Delay	LOS	Delay	LOS
Old Newport Blvd & Project Driveway	9.4	A	9.3	A	9.5	A
Note: Cumulative background conditions based on traffic counts collected in February 2023 and OCTAM growth projections. LOS - Level of Service Delay - Delay to driveway exiting vehicles (seconds/vehicle)						

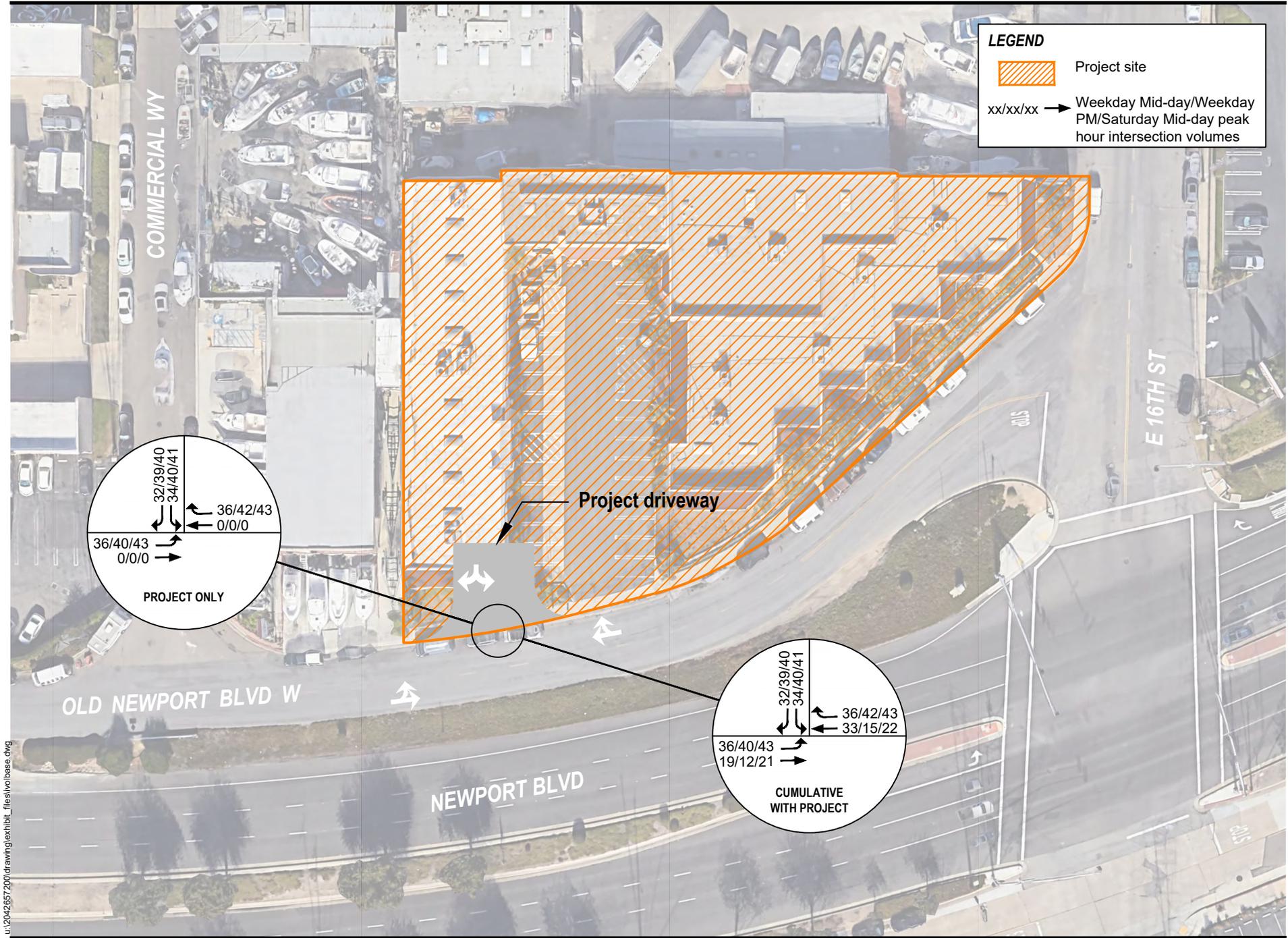
A sidewalk is present on the west side of the Old Newport Boulevard frontage road. There is no sidewalk on the east side of Old Newport Boulevard. There are no designated bicycle facilities in the vicinity of the Project site. The existing accessible curb ramp at the southwest corner of the Old Newport Boulevard/East 16th Street intersection is recommended to be reconstructed to meet current standards for pedestrians crossing Old Newport Boulevard or East 16th Street.

The Orange County Transportation Authority (OCTA) provides local bus service and paratransit services to the area. The Project site is serviced by Route 71 and Route 55 and the nearest bus stop is on Newport Boulevard at the E. 17th Street intersection approximately one-quarter mile north of the Project site.

Pedestrian access to the site would be provided by way of a pathway constructed on-site from the public sidewalk near the Old Newport Boulevard/East 16th Street intersection and extending along the north patio and along the easterly edge of the building to the southerly parking lot. A location for secure bicycle parking on-site is recommended.

On-street parking is allowed on Old Newport Boulevard along the project frontage. On-street parking is not allowed on the northbound side of Old Newport Boulevard opposite of the Project frontage. Sight distance requirements for urban driveways are not based on specific criteria unless signalized per the Caltrans Highway Design Manual (Section 405.1(2)(d)). For the proposed unsignalized driveway, a red curb marking is recommended north and south of the driveway to provide for efficient ingress and egress. Because of the curvature of the roadway, the red curb is recommended for a distance of 100 feet north of the driveway to provide an unobstructed line of sight between the driveway and the start of the road curvature. South of the driveway, red curb is recommended





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Figure 20

-33- Project Driveway Peak Hour Volumes and Lane Configurations

between the driveway and the closest existing driveway at the adjacent parcel (approximately 8 feet). See Section 3 for discussion of on-site parking conditions and Section 4 for analysis of the proposed drive-through lane.

3 Parking Analysis

A parking survey was conducted at the three case study sites to identify the peak parking usage. A professional traffic data collection firm, Transportation Studies Inc. (TSI), was engaged to conduct the parking survey. Parking counts were collected at approximately five-minute intervals over an eight-hour period from 11 AM to 7 PM on a typical weekday (Thursday) and a weekend-day (Saturday) in February 2023. See Appendix D for the parking survey data worksheets. There are a total of 31, 33, and 23 parking spaces at the Costa Mesa, Laguna Hills, and Orange case study sites, respectively.

Based on the data obtained from the three case study site parking surveys and subsequent field reviews, the parking data from the Orange site was determined to be not reflective of actual parking demand since customers appeared to be using parking in the adjacent retail center, and hence is excluded from this study. The parking survey data is summarized in Table 10. During the mid-day peak hour, the average number of vehicles parked on a typical weekday is 19, and on a typical Saturday is 17 vehicles. During the PM peak hour, the average number of vehicles parked on typical weekday is 15, and on a typical Saturday is 17 vehicles. Similarly, the maximum number of vehicles parked on a typical weekday is 29, and on a typical Saturday is 30 vehicles during the mid-day peak hour, whereas during the PM peak hour, the maximum number of vehicles parked on a typical weekday is 27, and on a typical Saturday is 31 vehicles.

Table 10 Case Studies Parking Summary

Location	Mid-Day Peak (11 AM - 3 PM)			PM Peak (3 PM - 7 PM)		
	Average	Max	95th%	Average	Max	95th%
Parked Vehicles - Total Sites						
Thursday	19	29	27	15	27	26
Saturday	17	30	27	17	31	31
Parking Rate per TSF - Total Sites						
Thursday	6.09	10.36	9.80	4.97	9.64	9.39
Saturday	5.46	10.71	9.73	5.46	11.07	11.01

The average and maximum parking rates (per thousand square feet) were derived based on the average and maximum parking demand during a typical weekday and a typical Saturday and the square footage of the case study sites. Based on the consultation with the City staff, this maximum parking rate was utilized to estimate the parking demand for the proposed Project. Table 11 summarizes the required parking during the mid-day and PM peak hour based on the parking rate derived from the case studies. As shown in the table, the proposed Project requires a maximum of 33 parking spaces to meet the expected demand.



Table 11 Required Parking Summary using Case Studies Parking Rate

Proposed Project	Amount	Parking Required	
		Mid-Day Peak	PM Peak
Weekday	3.0 TSF	31	29
Saturday		32	33

Based on the City's parking code, the Project requires 41 parking spaces that includes a 1-space credit for bike racks. However, the Project proposes to provide a total of 34 parking spaces, one additional space than the estimated demand of 33 parking spaces derived from the parking survey data discussed above.

4 Drive-Through Queue Analysis

A queuing analysis of the proposed drive-through has been prepared to establish the typical maximum queue length based on the proposed use. The queuing analysis utilizes data obtained from the three case studies of similar Raising Cane's sites as discussed in the previous sections. Drive-through queue lengths for a typical weekday (Thursday) and a Saturday were collected during the same time periods as the parking counts—five-minute intervals over an eight-hour period from 11 AM to 7 PM in February 2023. See Appendix D for the queuing survey data worksheets.

Table 12 shows the average, maximum and 95th percentile queue summary observed at the three Raising Cane's case study locations. See Figure 22, Figure 23 and Figure 24 for a graphical representation of the queues observed at the three case study locations that show an absolute maximum queue at each of the three case study locations.

Table 12 Case Studies Drive-Through Queue Summary

Location	Mid-Day Peak (11 AM - 3 PM)			PM Peak (3 PM - 7 PM)		
	Average	Max	95th%	Average	Max	95th%
Drive-Through Queues - Total Sites						
Thursday	4	14	9	7	16	13
Saturday	8	17	15	7	15	17
Note: Max represents the average of the three case study sites maximum queue						

As shown in Table 12, on a typical weekday the average drive-through queue length for the case study sites was 4 and 7 vehicles during the mid-day peak and PM peak hour respectively, and the average maximum queue length was 14 and 16 vehicles during the mid-day peak and PM peak hour, respectively. On a Saturday, the average queue length was 8 and 7 vehicles during the mid-day peak and PM peak hour, respectively, and the average maximum queue length was 17 and 15 vehicles during the mid-day peak and PM peak hour, respectively.

Similarly, Table 13 shows the average, maximum and 95th percentile drive-through queue summary observed at the Raising Cane's Costa Mesa case study location. As shown, on a typical weekday the average queue length at the Costa Mesa case study site was 5 and 7 vehicles during the mid-day peak and PM peak hour respectively, and the average maximum queue length was 17 and 18 vehicles during the mid-day peak and PM peak hour, respectively. On a Saturday, the average queue



**Raising Cane's Traffic Study
4 Drive-Through Queue Analysis
October 2023**

length was 10 and 12 vehicles during the mid-day peak and PM peak hour, respectively, and the average maximum queue length was 20 and 21 vehicles during the mid-day peak and PM peak hour, respectively. As shown, the Costa Mesa case study location exhibits slightly longer queue lengths than the average of the three studied locations.

Table 13 Case Study Drive-Through Queue Summary – Costa Mesa Location

Location	Mid-Day Peak (11 AM - 3 PM)			PM Peak (3 PM - 7 PM)		
	Average	Max	95th%	Average	Max	95th%
Thursday	5	17	11	7	18	14
Saturday	10	20	19	12	21	22
Note: Max represents the average of the three case study sites maximum queue						

To be conservative, the Project has been evaluated based on the drive-through queue length data observed at the Costa Mesa case study site. Therefore, the maximum Project drive-through queue during weekday mid-day conditions is assumed to be 17 vehicles, and 18 vehicles during the PM peak hour. Similarly, the maximum queue during Saturday mid-day is assumed to be 20 vehicles and during the PM peak hour is assumed to be 21 vehicles.

Access to the Project site would be via one full access driveway on the Old Newport Boulevard frontage road. The proposed site plan shows a queuing storage capacity of up to 18 vehicles within the two drive-through lanes. The lane that is adjacent to the pickup window is long enough for 14 cars to queue from the start of the drive-through lane to the pickup window and there is additional space for 4 cars in the second lane, for a total queue capacity of 18 cars. Raising Canes would be responsible for managing the drive-through lane to achieve the maximum capacity of 18 cars. Based on the Costa Mesa case study queuing data, which shows maximum queues in the range of 17 to 21 vehicles during weekday and Saturday peak hours, the proposed Project's vehicle maximum queue would exceed the capacity of two proposed drive-through lanes. If the vehicle queue extends longer than the 18-vehicle capacity of the drive-through lane, the queue would block some of the on-site parking spaces. The proposed site plan indicates that approximately 5 additional vehicles could queue on-site before spilling over onto the sidewalk, for a total of 23 vehicles accommodated on-site.



Figure 21 Weekday Mid-Day Queue Data at the Raising Cane's Case Study Locations

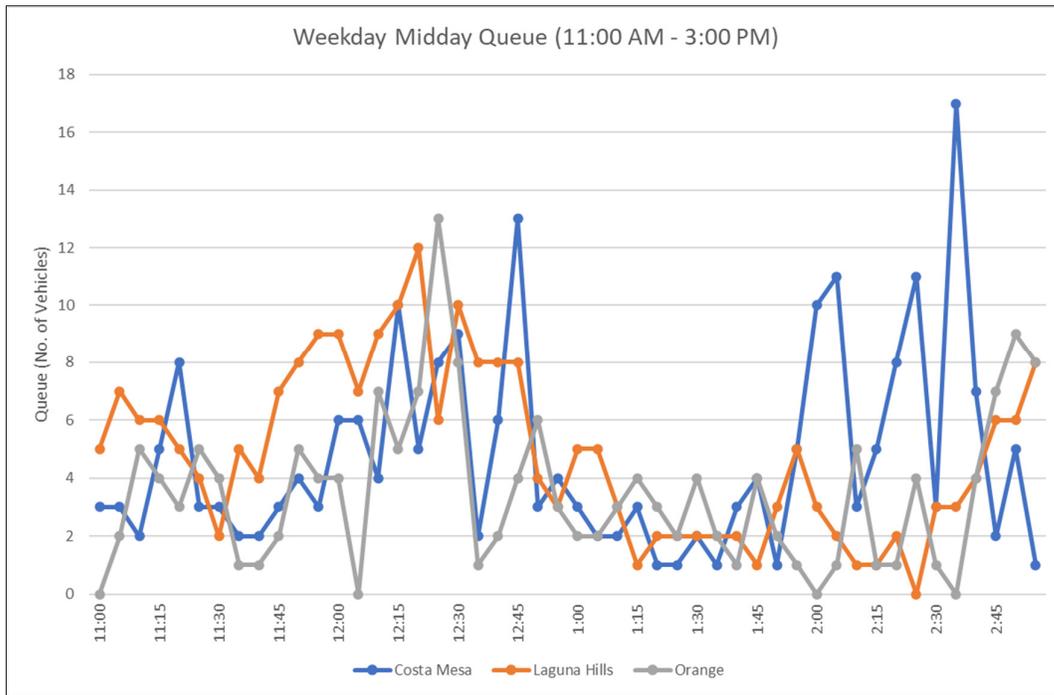


Figure 22 Weekday PM Queue Data at the Raising Cane's Case Study Locations

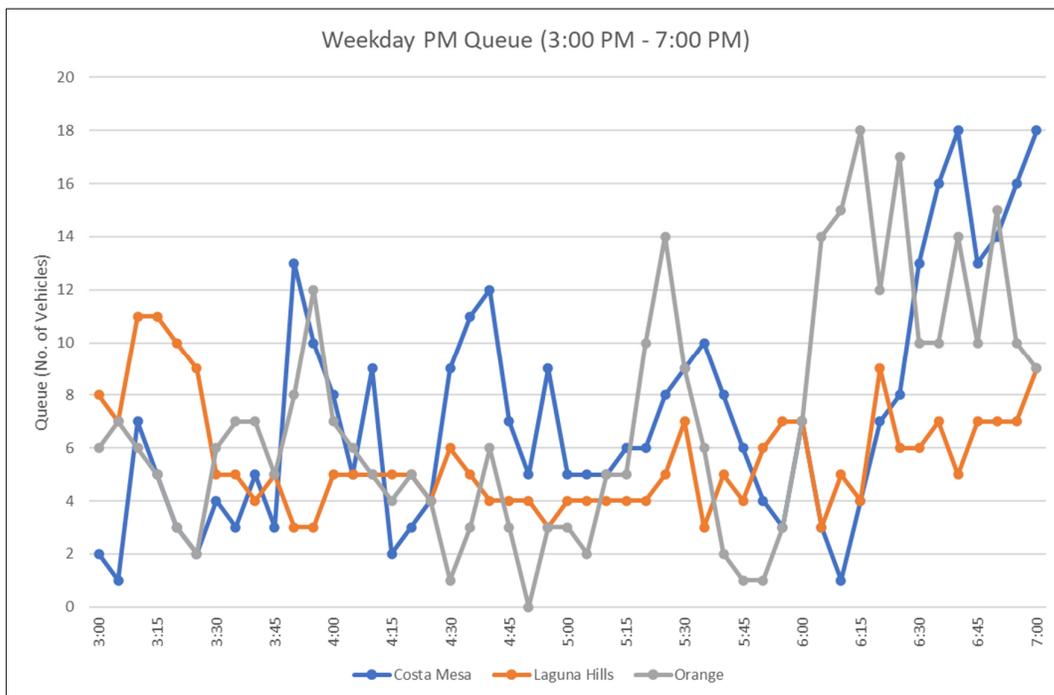


Figure 23 Weekend Mid-Day Queue Data at the Raising Cane's Case Study Locations

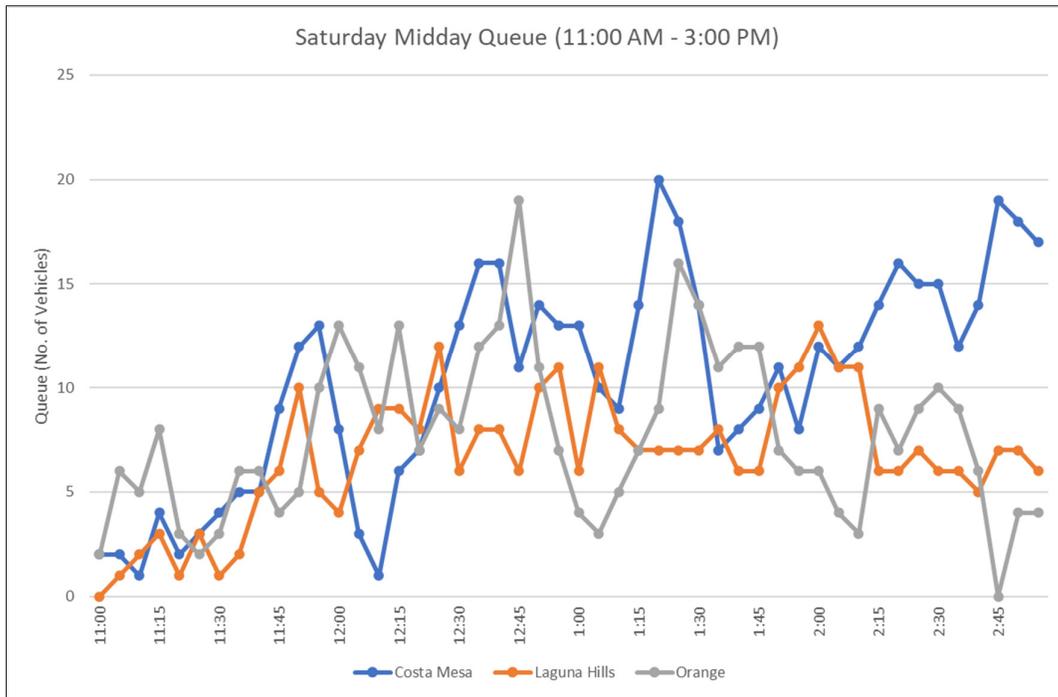
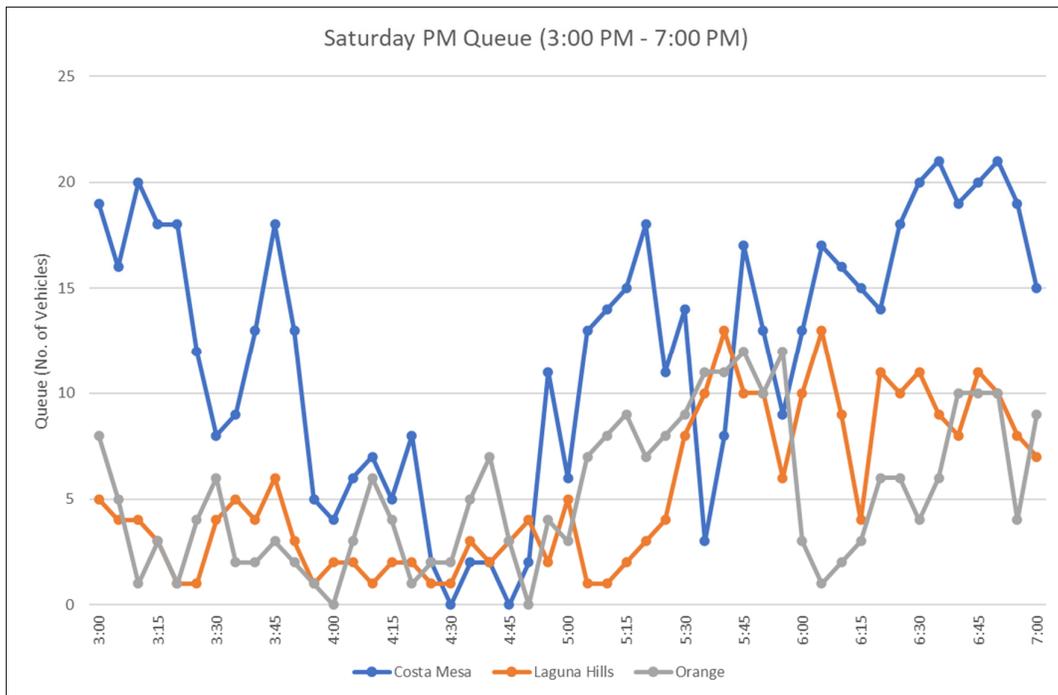


Figure 24 Weekend PM Queue Data at the Raising Cane's Case Study Locations



5 Conclusion

This traffic analysis was prepared to evaluate the Project's effect on traffic conditions in accordance with the City's traffic analysis procedures. The Project was evaluated under opening day conditions with the proposed Project. Based on the results of the LOS analyses and the criteria set forth by the City, the study intersections would not exceed the City's acceptable threshold of LOS D during the weekday mid-day, weekday PM, or Saturday mid-day peak hours. The project's driveway onto the Old Newport Boulevard frontage road would operate at LOS A during each peak hour.

Two ADA compliant ramps at the southwest corner of the Old Newport Boulevard/East 16th Street intersection are recommended and a potential crosswalk may be required to meet current standards for pedestrians crossing Old Newport Boulevard or East 16th Street. For the proposed unsignalized driveway, a red curb marking is recommended north and south of the driveway to provide for efficient ingress and egress. Because of the curvature of the roadway, the red curb is recommended for a distance of 100 feet north of the driveway to provide an unobstructed line of sight between the driveway and the start of the road curvature. South of the driveway, red curb is recommended between the driveway and the closest existing driveway at the adjacent parcel (approximately 8 feet).

A parking analysis was also conducted to determine the maximum parking demand and if the parking provided by the proposed site plan is adequate. The study determined that the proposed parking lot is providing one additional space more than the maximum parking demand determined from the case studies.

A queuing analysis for the proposed drive-through was also conducted to establish the typical maximum queue length based on case study data. The study determined that the proposed drive-through lanes would not accommodate the maximum anticipated queue length determined from the Raising Cane's case study location in Costa Mesa. If the vehicle queue extends longer than the 18-vehicle capacity of the drive-through lane, the queue would block some of the on-site parking spaces. The proposed site plan indicates that approximately 5 additional vehicles could queue on-site before spilling over onto the sidewalk, for a total of 23 vehicles accommodated on-site.



Appendix A DRIVEWAY ENTER AND EXIT TRAFFIC VOLUME DATA SHEETS



TRANSPORTATION STUDIES, INC.

File D2302032
 Location Costa Mesa Raising Cane's Driveway
 Date 02-09-2023
 City: Costa Mesa

	In	Out	Hour Total			
	In	Out	In	Out	Total	
11:00 AM	18	12	70	66	136	
11:15 AM	15	18	79	72	151	
11:30 AM	18	14	89	77	166	
11:45 AM	19	22	100	91	191	Mid-Day Max
12:00 PM	27	18	91	86	177	
12:15 PM	25	23	84	87	171	
12:30 PM	29	28	71	83	154	
12:45 PM	10	17	52	70	122	
1:00 PM	20	19	67	64	131	
1:15 PM	12	19	69	70	139	
1:30 PM	10	15	75	67	142	
1:45 PM	25	11	87	78	165	
2:00 PM	22	25	80	86	166	
2:15 PM	18	16	76	75	151	
2:30 PM	22	26	71	82	153	
2:45 PM	18	19	68	74	142	
3:00 PM	18	14	68	69	137	
3:15 PM	13	23	69	75	144	
3:30 PM	19	18	80	71	151	
3:45 PM	18	14	78	72	150	
4:00 PM	19	20	71	74	145	
4:15 PM	24	19	71	74	145	
4:30 PM	17	19	65	69	134	
4:45 PM	11	16	66	64	130	
5:00 PM	19	20	76	72	148	
5:15 PM	18	14	76	71	147	
5:30 PM	18	14	86	76	162	
5:45 PM	21	24	100	89	189	PM Max
6:00 PM	19	19	101	84	185	
6:15 PM	28	19				
6:30 PM	32	27				
6:45 PM	22	19				
TOTAL	624	601				

TRANSPORTATION STUDIES, INC.

File D2302033
 Location Costa Mesa Raising Cane's Driveway
 Date 02-11-2023
 City: Costa Mesa

	In	Out	Hour Total			
			In	Out	Total	
11:00 AM	18	14	71	57	128	
11:15 AM	16	6	71	60	131	
11:30 AM	18	15	84	73	157	
11:45 AM	19	22	95	86	181	
12:00 PM	18	17	108	96	204	
12:15 PM	29	19	115	102	217	
12:30 PM	29	28	111	108	219	Mid-Day Max
12:45 PM	32	32	102	106	208	
1:00 PM	25	23	91	92	183	
1:15 PM	25	25	91	94	185	
1:30 PM	20	26	83	86	169	
1:45 PM	21	18	97	81	178	
2:00 PM	25	25	95	87	182	
2:15 PM	17	17	88	82	170	
2:30 PM	34	21	83	87	170	
2:45 PM	19	24	70	75	145	
3:00 PM	18	20	70	83	153	
3:15 PM	12	22	81	84	165	
3:30 PM	21	9	86	82	168	
3:45 PM	19	32	76	84	160	
4:00 PM	29	21	82	68	150	
4:15 PM	17	20	73	70	143	
4:30 PM	11	11	78	70	148	
4:45 PM	25	16	90	79	169	
5:00 PM	20	23	99	92	191	
5:15 PM	22	20	112	96	208	
5:30 PM	23	20	124	100	224	
5:45 PM	34	29	126	99	225	PM Max
6:00 PM	33	27	105	92	197	
6:15 PM	34	24				
6:30 PM	25	19				
6:45 PM	13	22				
TOTAL	721	667				

TRANSPORTATION STUDIES, INC.

File D2302034
 Location Laguna Hills Raising Cane's Driveway
 Date 02-09-2023
 City: Laguna Hills

	In	Out	Hour Total			
			In	Out	Total	
11:00 AM	0	7	1	25	26	
11:15 AM	0	7	1	27	28	
11:30 AM	1	4	2	31	33	
11:45 AM	0	7	1	38	39	
12:00 PM	0	9	1	44	45	
12:15 PM	1	11	1	47	48	Mid-Day Max
12:30 PM	0	11	0	45	45	
12:45 PM	0	13	0	39	39	
1:00 PM	0	12	0	33	33	
1:15 PM	0	9	0	29	29	
1:30 PM	0	5	0	21	21	
1:45 PM	0	7	0	19	19	
2:00 PM	0	8	0	19	19	
2:15 PM	0	1	0	21	21	
2:30 PM	0	3	1	28	29	
2:45 PM	0	7	1	35	36	
3:00 PM	0	10	3	33	36	
3:15 PM	1	8	3	38	41	PM Max
3:30 PM	0	10	2	37	39	
3:45 PM	2	5	2	34	36	
4:00 PM	0	15	0	37	37	
4:15 PM	0	7	0	30	30	
4:30 PM	0	7	0	30	30	
4:45 PM	0	8	0	32	32	
5:00 PM	0	8	0	32	32	
5:15 PM	0	7	0	33	33	
5:30 PM	0	9	0	31	31	
5:45 PM	0	8	0	33	33	
6:00 PM	0	9	0	30	30	
6:15 PM	0	5				
6:30 PM	0	11				
6:45 PM	0	5				
TOTAL	5	253				

TRANSPORTATION STUDIES, INC.

File D2302035
 Location Laguna Hills Raising Cane's Driveway
 Date 02-11-2023
 City: Laguna Hills

	In	Out	Hour Total			
	In	Out	In	Out	Total	
11:00 AM	0	3	0	25	25	
11:15 AM	0	8	0	30	30	
11:30 AM	0	3	0	33	33	
11:45 AM	0	11	0	42	42	
12:00 PM	0	8	0	45	45	
12:15 PM	0	11	0	49	49	
12:30 PM	0	12	0	53	53	Mid-Day Max
12:45 PM	0	14	0	47	47	
1:00 PM	0	12	0	41	41	
1:15 PM	0	15	0	36	36	
1:30 PM	0	6	0	32	32	
1:45 PM	0	8	0	30	30	
2:00 PM	0	7	0	29	29	
2:15 PM	0	11	0	27	27	
2:30 PM	0	4	1	24	25	
2:45 PM	0	7	1	26	27	
3:00 PM	0	5	2	20	22	
3:15 PM	1	8	2	20	22	
3:30 PM	0	6	1	17	18	
3:45 PM	1	1	1	18	19	
4:00 PM	0	5	0	22	22	
4:15 PM	0	5	2	22	24	
4:30 PM	0	7	2	20	22	
4:45 PM	0	5	2	21	23	
5:00 PM	2	5	3	27	30	
5:15 PM	0	3	1	34	35	
5:30 PM	0	8	1	41	42	
5:45 PM	1	11	1	46	47	PM Max
6:00 PM	0	12	0	44	44	
6:15 PM	0	10				
6:30 PM	0	13				
6:45 PM	0	9				
TOTAL	5	253				

TRANSPORTATION STUDIES, INC.

File D2302036
 Location Orange Raising Cane's Driveway
 Date 02-09-2023
 City: Orange

	South Dwy		North Dwy		Hour Total			
	In	Out	In	Out	In	Out	Total	
11:00 AM	7	5	0	6	53	57	110	
11:15 AM	13	4	2	12	69	64	133	
11:30 AM	12	7	0	13	73	71	144	
11:45 AM	19	8	0	14	76	71	147	Mid-Day Max
12:00 PM	22	7	1	12	73	70	143	
12:15 PM	19	6	0	18	67	69	136	
12:30 PM	14	12	1	10	64	66	130	
12:45 PM	14	6	2	14	59	63	122	
1:00 PM	17	12	0	9	50	60	110	
1:15 PM	15	6	1	15	40	55	95	
1:30 PM	9	12	1	7	33	47	80	
1:45 PM	7	8	0	10	43	44	87	
2:00 PM	7	9	0	5	54	53	107	
2:15 PM	9	7	0	7	68	61	129	
2:30 PM	19	3	1	8	71	68	139	
2:45 PM	18	7	0	20	62	76	138	
3:00 PM	19	9	2	13	66	75	141	
3:15 PM	12	8	0	13	55	72	127	
3:30 PM	10	5	1	15	55	68	123	
3:45 PM	20	7	2	19	59	66	125	
4:00 PM	10	6	0	12	53	58	111	
4:15 PM	11	7	1	9	60	60	120	
4:30 PM	15	5	0	13	68	62	130	
4:45 PM	15	7	1	11	63	66	129	
5:00 PM	14	12	3	11	71	68	139	
5:15 PM	19	6	1	12	82	70	152	
5:30 PM	9	9	1	15	80	85	165	
5:45 PM	22	11	2	11	99	94	193	
6:00 PM	28	6	0	16	99	103	202	PM Max
6:15 PM	17	18	1	21				
6:30 PM	29	11	0	23				
6:45 PM	24	15	0	18				
TOTAL	495	261	24	412				

TRANSPORTATION STUDIES, INC.

File D2302037
 Location Orange Raising Cane's Driveway
 Date 02-11-2023
 City: Orange

	South Dwy		North Dwy		Hour Total			
	In	Out	In	Out	In	Out	Total	
11:00 AM	7	6	0	6	62	52	114	
11:15 AM	9	3	0	12	74	64	138	
11:30 AM	15	2	0	10	87	72	159	
11:45 AM	31	4	2	16	99	89	188	Mid-Day Max
12:00 PM	19	11	0	16	81	97	178	
12:15 PM	22	7	0	18	76	95	171	
12:30 PM	27	11	0	22	80	87	167	
12:45 PM	13	3	1	25	74	86	160	
1:00 PM	14	8	1	15	77	78	155	
1:15 PM	26	5	2	11	82	80	162	
1:30 PM	21	9	0	22	74	82	156	
1:45 PM	16	9	2	14	63	75	138	
2:00 PM	19	10	0	16	65	77	142	
2:15 PM	18	6	0	13	60	77	137	
2:30 PM	10	11	0	14	58	74	132	
2:45 PM	18	10	0	15	61	66	127	
3:00 PM	14	12	2	15	59	65	124	
3:15 PM	16	5	1	11	57	57	114	
3:30 PM	13	3	2	10	53	60	113	
3:45 PM	16	13	1	12	56	62	118	
4:00 PM	12	9	1	9	57	61	118	
4:15 PM	12	6	0	13	66	67	133	
4:30 PM	16	5	0	11	66	66	132	
4:45 PM	17	9	1	13	68	68	136	
5:00 PM	21	8	0	16	67	75	142	
5:15 PM	12	7	2	11	57	70	127	
5:30 PM	18	9	0	11	63	73	136	
5:45 PM	16	7	1	21	67	75	142	
6:00 PM	11	7	0	12	72	70	142	PM Max
6:15 PM	18	10	1	12				
6:30 PM	22	5	1	15				
6:45 PM	21	9	0	15				
TOTAL	540	239	21	452				

Appendix B TRAFFIC COUNT DATA SHEETS



City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: W. 17TH STREET

File Name : H2302012
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 1

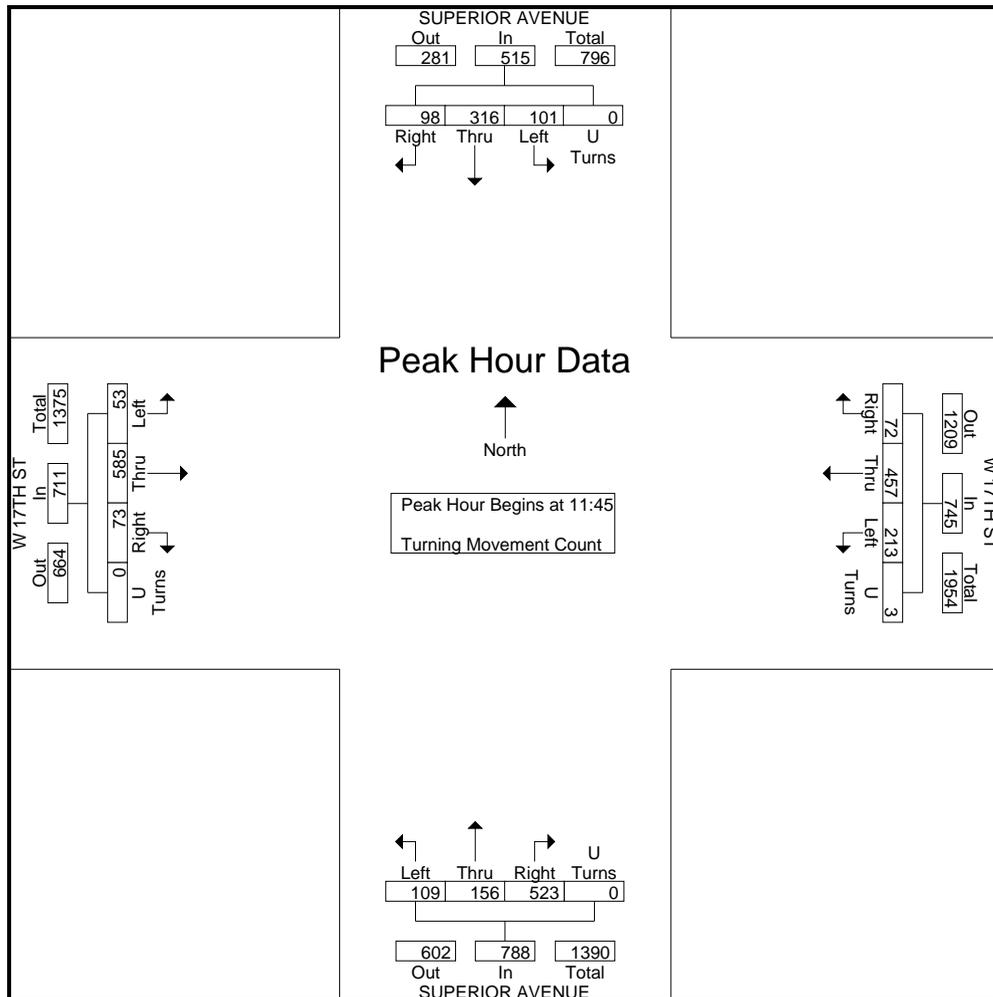
Groups Printed- Turning Movement Count

Start Time	SUPERIOR AVENUE Southbound				W 17TH ST Westbound				SUPERIOR AVENUE Northbound				W 17TH ST Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	30	74	20	0	17	86	58	1	126	40	21	0	14	113	7	0	607
11:15	18	81	23	0	16	105	57	0	141	40	20	0	10	97	13	0	621
11:30	29	96	29	0	9	95	60	0	129	37	16	0	10	121	10	0	641
11:45	24	74	23	0	19	118	43	3	144	34	31	0	16	153	12	0	694
Total	101	325	95	0	61	404	218	4	540	151	88	0	50	484	42	0	2563
12:00	34	68	24	0	20	110	48	0	137	45	27	0	16	147	15	0	691
12:15	23	95	24	0	17	119	65	0	121	39	23	0	18	136	10	0	690
12:30	17	79	30	0	16	110	57	0	121	38	28	0	23	149	16	0	684
12:45	34	110	22	0	11	110	78	2	139	38	16	0	16	107	8	0	691
Total	108	352	100	0	64	449	248	2	518	160	94	0	73	539	49	0	2756
17:00	26	89	20	0	16	112	65	0	168	48	22	0	18	127	8	0	719
17:15	21	86	16	0	18	101	45	0	137	46	33	0	17	109	13	0	642
17:30	34	68	15	0	14	116	52	1	128	28	27	0	22	142	5	0	652
17:45	29	59	21	0	17	100	74	0	117	30	25	0	9	135	9	0	625
Total	110	302	72	0	65	429	236	1	550	152	107	0	66	513	35	0	2638
18:00	27	67	32	0	13	88	64	0	120	33	16	0	13	107	13	0	593
18:15	27	67	20	0	17	83	67	1	113	19	12	0	11	109	4	0	550
18:30	22	47	28	0	13	91	65	1	88	19	17	0	13	115	9	0	528
18:45	24	48	20	0	12	95	52	1	80	20	14	0	13	95	3	0	477
Total	100	229	100	0	55	357	248	3	401	91	59	0	50	426	29	0	2148
Grand Total	419	1208	367	0	245	1639	950	10	2009	554	348	0	239	1962	155	0	10105
Apprch %	21	60.6	18.4	0	8.6	57.6	33.4	0.4	69	19	12	0	10.1	83.3	6.6	0	
Total %	4.1	12	3.6	0	2.4	16.2	9.4	0.1	19.9	5.5	3.4	0	2.4	19.4	1.5	0	

City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: W. 17TH STREET

File Name : H2302012
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 2

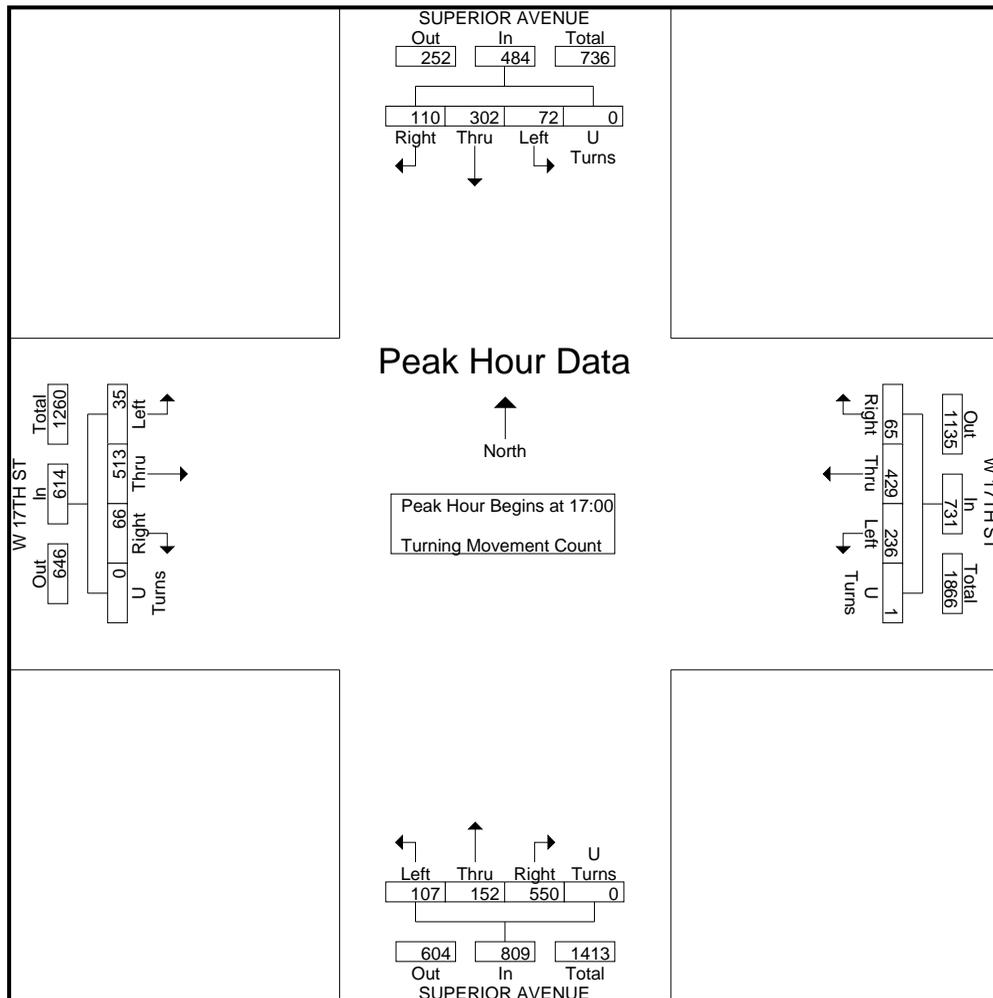
Start Time	SUPERIOR AVENUE Southbound					W 17TH ST Westbound					SUPERIOR AVENUE Northbound					W 17TH ST Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45																					
11:45	24	74	23	0	121	19	118	43	3	183	144	34	31	0	209	16	153	12	0	181	694
12:00	34	68	24	0	126	20	110	48	0	178	137	45	27	0	209	16	147	15	0	178	691
12:15	23	95	24	0	142	17	119	65	0	201	121	39	23	0	183	18	136	10	0	164	690
12:30	17	79	30	0	126	16	110	57	0	183	121	38	28	0	187	23	149	16	0	188	684
Total Volume	98	316	101	0	515	72	457	213	3	745	523	156	109	0	788	73	585	53	0	711	2759
% App. Total	19	61.4	19.6	0		9.7	61.3	28.6	0.4		66.4	19.8	13.8	0		10.3	82.3	7.5	0		
PHF	.721	.832	.842	.000	.907	.900	.960	.819	.250	.927	.908	.867	.879	.000	.943	.793	.956	.828	.000	.945	.994



City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: W. 17TH STREET

File Name : H2302012
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 3

Start Time	SUPERIOR AVENUE Southbound					W 17TH ST Westbound					SUPERIOR AVENUE Northbound					W 17TH ST Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 17:00 to 18:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	26	89	20	0	135	16	112	65	0	193	168	48	22	0	238	18	127	8	0	153	719
17:15	21	86	16	0	123	18	101	45	0	164	137	46	33	0	216	17	109	13	0	139	642
17:30	34	68	15	0	117	14	116	52	1	183	128	28	27	0	183	22	142	5	0	169	652
17:45	29	59	21	0	109	17	100	74	0	191	117	30	25	0	172	9	135	9	0	153	625
Total Volume	110	302	72	0	484	65	429	236	1	731	550	152	107	0	809	66	513	35	0	614	2638
% App. Total	22.7	62.4	14.9	0		8.9	58.7	32.3	0.1		68	18.8	13.2	0		10.7	83.6	5.7	0		
PHF	.809	.848	.857	.000	.896	.903	.925	.797	.250	.947	.818	.792	.811	.000	.850	.750	.903	.673	.000	.908	.917



City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: E. 16TH STREET

File Name : H2302010
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 1

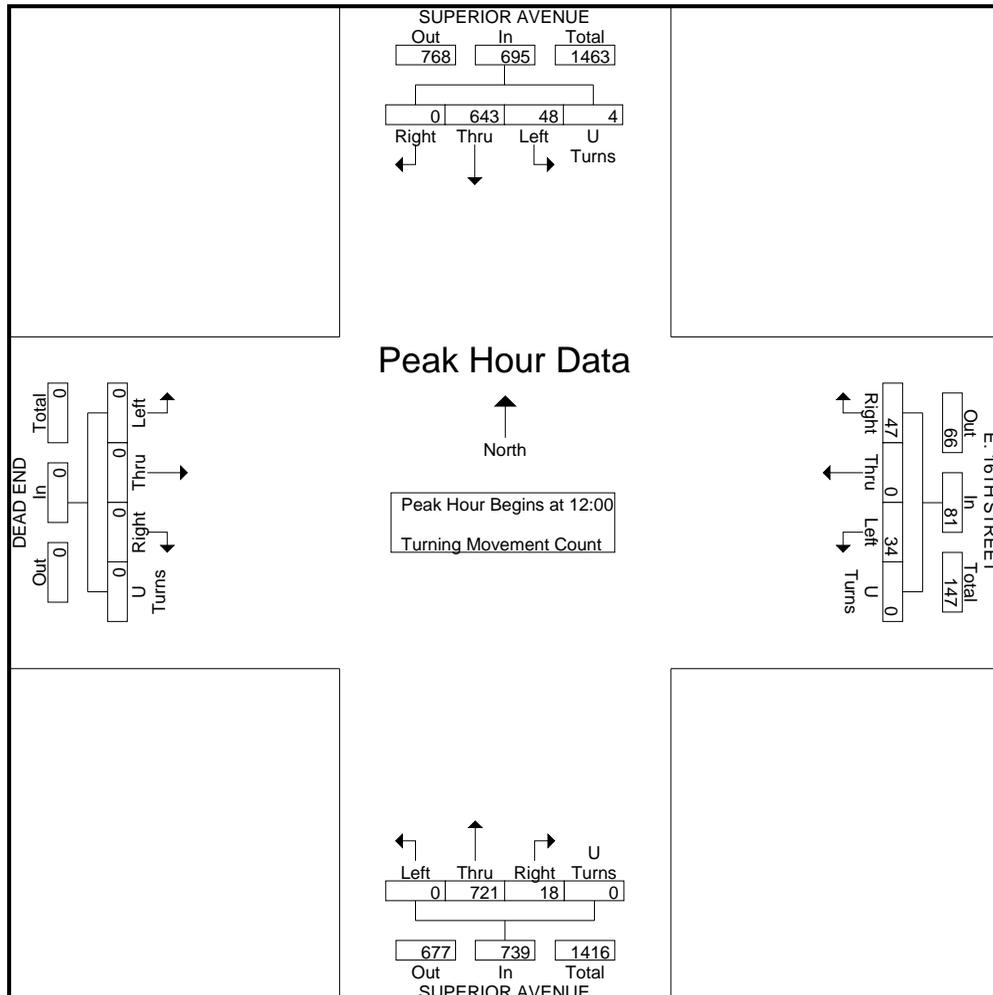
Groups Printed- Turning Movement Count

Start Time	SUPERIOR AVENUE Southbound				E. 16TH STREET Westbound				SUPERIOR AVENUE Northbound				DEAD END Eastbound				Int. Total	
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns		
11:00	0	153	5	1	5	0	5	0	3	176	0	0	0	0	0	0	0	348
11:15	0	142	3	0	11	0	7	0	4	197	0	1	0	0	0	0	0	365
11:30	0	159	5	1	7	0	7	0	7	176	0	0	0	0	0	0	0	362
11:45	0	136	12	0	7	0	6	0	6	170	0	0	0	0	0	0	0	337
Total	0	590	25	2	30	0	25	0	20	719	0	1	0	0	0	0	0	1412
12:00	0	121	13	1	9	0	6	0	5	210	0	0	0	0	0	0	0	365
12:15	0	169	13	1	19	0	11	0	2	169	0	0	0	0	0	0	0	384
12:30	0	172	12	1	10	0	9	0	5	180	0	0	0	0	0	0	0	389
12:45	0	181	10	1	9	0	8	0	6	162	0	0	0	0	0	0	0	377
Total	0	643	48	4	47	0	34	0	18	721	0	0	0	0	0	0	0	1515
17:00	0	163	7	0	9	0	7	0	4	237	0	0	0	0	0	0	0	427
17:15	0	134	9	0	12	0	9	0	3	179	0	0	0	0	0	0	0	346
17:30	0	137	6	2	13	0	2	0	3	194	0	0	0	0	0	0	0	357
17:45	0	145	2	0	6	0	4	0	5	142	0	0	0	0	0	0	0	304
Total	0	579	24	2	40	0	22	0	15	752	0	0	0	0	0	0	0	1434
18:00	0	130	7	0	16	0	12	0	2	160	0	0	0	0	0	0	0	327
18:15	0	142	6	0	8	0	5	0	3	120	0	0	0	0	0	0	0	284
18:30	0	102	8	0	4	0	4	0	4	115	0	0	0	0	0	0	0	237
18:45	0	104	7	0	7	0	7	0	8	87	0	0	0	0	0	0	0	220
Total	0	478	28	0	35	0	28	0	17	482	0	0	0	0	0	0	0	1068
Grand Total	0	2290	125	8	152	0	109	0	70	2674	0	1	0	0	0	0	0	5429
Apprch %	0	94.5	5.2	0.3	58.2	0	41.8	0	2.6	97.4	0	0	0	0	0	0	0	
Total %	0	42.2	2.3	0.1	2.8	0	2	0	1.3	49.3	0	0	0	0	0	0	0	

City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: E. 16TH STREET

File Name : H2302010
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 2

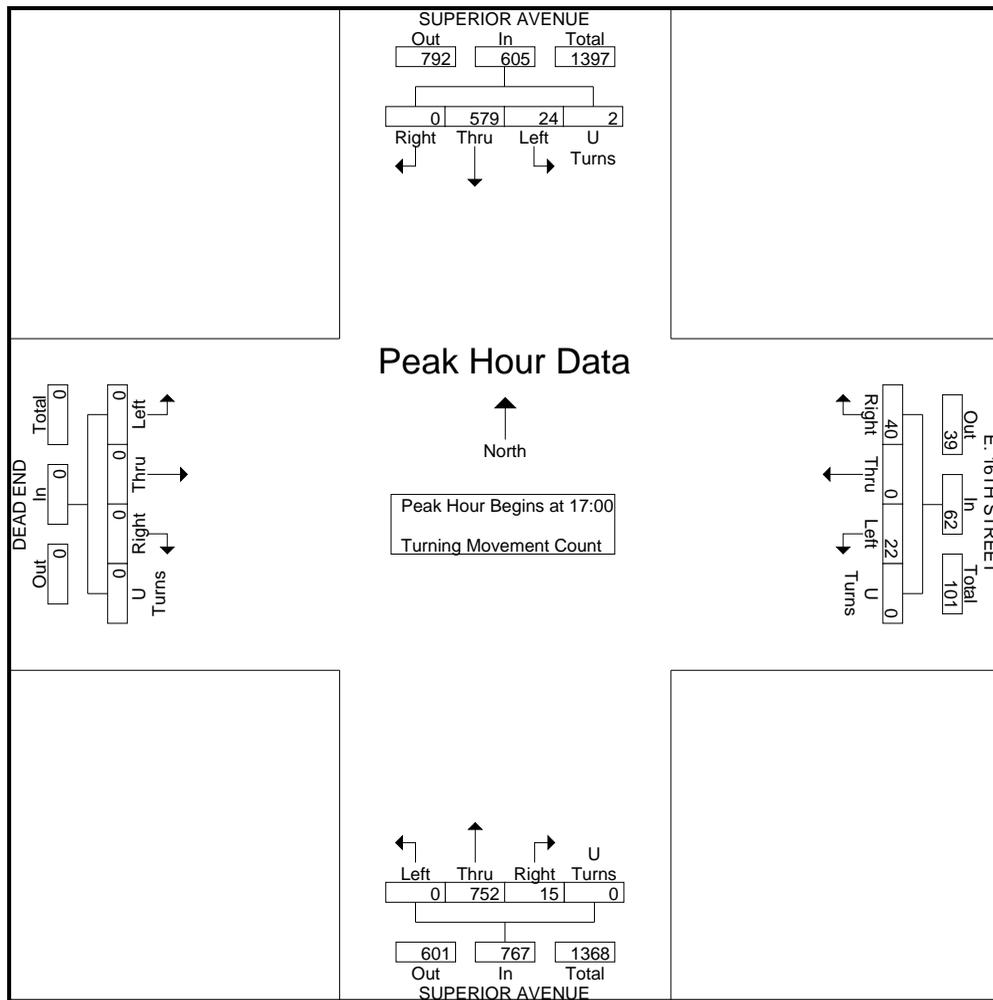
Start Time	SUPERIOR AVENUE Southbound					E. 16TH STREET Westbound					SUPERIOR AVENUE Northbound					DEAD END Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00																					
12:00	0	121	13	1	135	9	0	6	0	15	5	210	0	0	215	0	0	0	0	0	365
12:15	0	169	13	1	183	19	0	11	0	30	2	169	0	0	171	0	0	0	0	0	384
12:30	0	172	12	1	185	10	0	9	0	19	5	180	0	0	185	0	0	0	0	0	389
12:45	0	181	10	1	192	9	0	8	0	17	6	162	0	0	168	0	0	0	0	0	377
Total Volume	0	643	48	4	695	47	0	34	0	81	18	721	0	0	739	0	0	0	0	0	1515
% App. Total	0	92.5	6.9	0.6		58	0	42	0		2.4	97.6	0	0		0	0	0	0		
PHF	.000	.888	.923	1.00	.905	.618	.000	.773	.000	.675	.750	.858	.000	.000	.859	.000	.000	.000	.000	.000	.974



City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: E. 16TH STREET

File Name : H2302010
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 3

Start Time	SUPERIOR AVENUE Southbound					E. 16TH STREET Westbound					SUPERIOR AVENUE Northbound					DEAD END Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 17:00 to 18:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	0	163	7	0	170	9	0	7	0	16	4	237	0	0	241	0	0	0	0	0	427
17:15	0	134	9	0	143	12	0	9	0	21	3	179	0	0	182	0	0	0	0	0	346
17:30	0	137	6	2	145	13	0	2	0	15	3	194	0	0	197	0	0	0	0	0	357
17:45	0	145	2	0	147	6	0	4	0	10	5	142	0	0	147	0	0	0	0	0	304
Total Volume	0	579	24	2	605	40	0	22	0	62	15	752	0	0	767	0	0	0	0	0	1434
% App. Total	0	95.7	4	0.3		64.5	0	35.5	0		2	98	0	0		0	0	0	0	0	
PHF	.000	.888	.667	.250	.890	.769	.000	.611	.000	.738	.750	.793	.000	.000	.796	.000	.000	.000	.000	.000	.840



City: COSTA MESA
 N-S Direction: OLD NEWPORT BOULEVARD (W)
 E-W Direction: 16TH STREET

File Name : h2302002
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 1

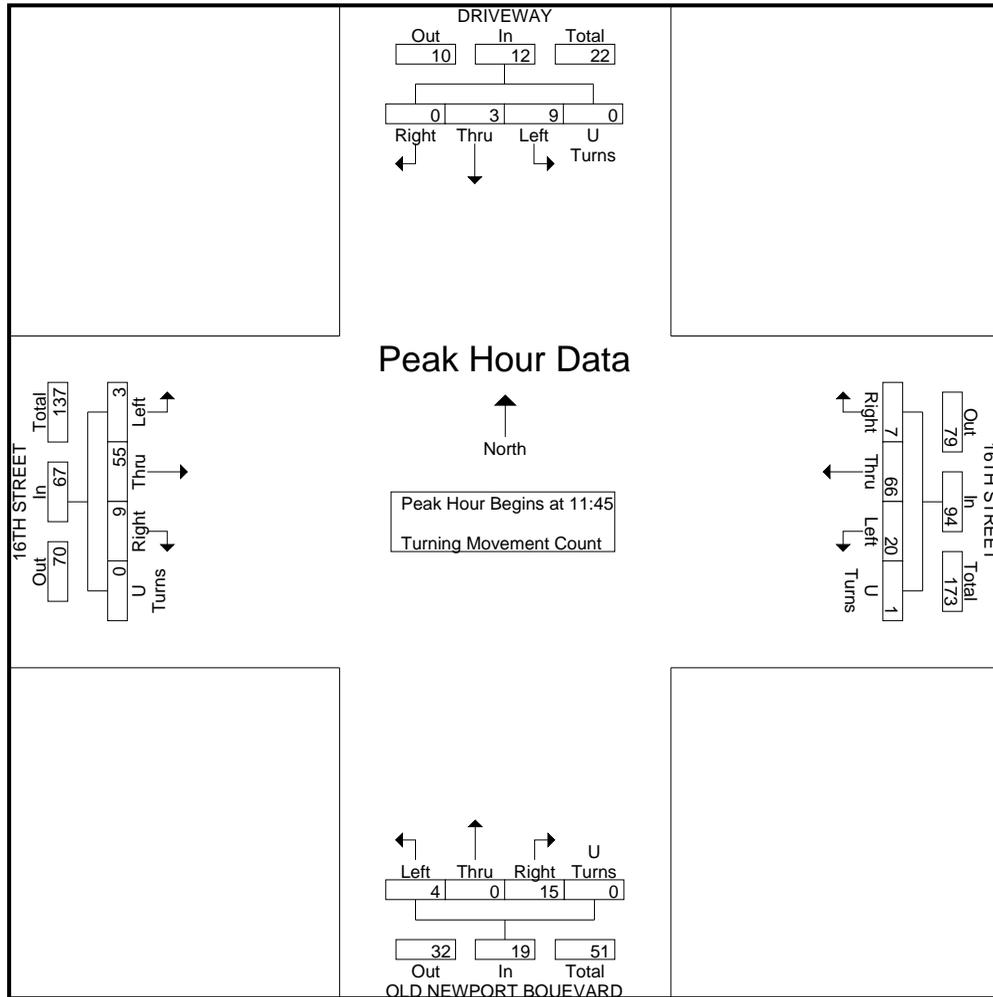
Groups Printed- Turning Movement Count

Start Time	DRIVEWAY Southbound				16TH STREET Westbound				OLD NEWPORT BOUEVARD Northbound				16TH STREET Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	1	0	1	0	1	12	3	0	6	0	0	0	2	7	0	0	33
11:15	2	0	3	0	1	15	6	0	3	0	0	1	0	5	1	0	37
11:30	0	0	3	0	2	15	4	0	1	0	0	0	2	10	1	0	38
11:45	0	0	2	0	2	15	4	0	4	0	0	0	3	17	0	0	47
Total	3	0	9	0	6	57	17	0	14	0	0	1	7	39	2	0	155
12:00	0	2	2	0	2	16	6	1	2	0	1	0	3	15	2	0	52
12:15	0	0	3	0	1	24	6	0	4	0	2	0	1	12	0	0	53
12:30	0	1	2	0	2	11	4	0	5	0	1	0	2	11	1	0	40
12:45	0	1	1	0	4	17	4	0	0	1	0	0	1	12	1	0	42
Total	0	4	8	0	9	68	20	1	11	1	4	0	7	50	4	0	187
17:00	0	0	2	0	1	13	4	1	5	0	0	0	2	14	0	1	43
17:15	1	0	2	0	1	23	6	0	4	0	1	0	0	16	1	0	55
17:30	0	0	2	0	1	13	1	0	2	0	0	0	0	7	0	0	26
17:45	1	0	3	0	0	11	2	1	1	0	1	0	1	8	0	0	29
Total	2	0	9	0	3	60	13	2	12	0	2	0	3	45	1	1	153
18:00	9	1	1	0	1	17	3	0	3	0	0	0	0	13	0	0	48
18:15	1	0	0	0	0	10	1	0	6	0	0	0	1	5	0	0	24
18:30	0	0	0	0	0	13	1	0	2	0	1	0	3	7	0	0	27
18:45	0	0	0	0	0	19	1	0	3	0	1	0	1	6	0	0	31
Total	10	1	1	0	1	59	6	0	14	0	2	0	5	31	0	0	130
Grand Total	15	5	27	0	19	244	56	3	51	1	8	1	22	165	7	1	625
Apprch %	31.9	10.6	57.4	0	5.9	75.8	17.4	0.9	83.6	1.6	13.1	1.6	11.3	84.6	3.6	0.5	
Total %	2.4	0.8	4.3	0	3	39	9	0.5	8.2	0.2	1.3	0.2	3.5	26.4	1.1	0.2	

City: COSTA MESA
 N-S Direction: OLD NEWPORT BOULEVARD (W)
 E-W Direction: 16TH STREET

File Name : h2302002
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 2

Start Time	DRIVEWAY Southbound					16TH STREET Westbound					OLD NEWPORT BOULEVARD Northbound					16TH STREET Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45																					
11:45	0	0	2	0	2	2	15	4	0	21	4	0	0	0	4	3	17	0	0	20	47
12:00	0	2	2	0	4	2	16	6	1	25	2	0	1	0	3	3	15	2	0	20	52
12:15	0	0	3	0	3	1	24	6	0	31	4	0	2	0	6	1	12	0	0	13	53
12:30	0	1	2	0	3	2	11	4	0	17	5	0	1	0	6	2	11	1	0	14	40
Total Volume	0	3	9	0	12	7	66	20	1	94	15	0	4	0	19	9	55	3	0	67	192
% App. Total	0	25	75	0		7.4	70.2	21.3	1.1		78.9	0	21.1	0		13.4	82.1	4.5	0		
PHF	.000	.375	.750	.000	.750	.875	.688	.833	.250	.758	.750	.000	.500	.000	.792	.750	.809	.375	.000	.838	.906

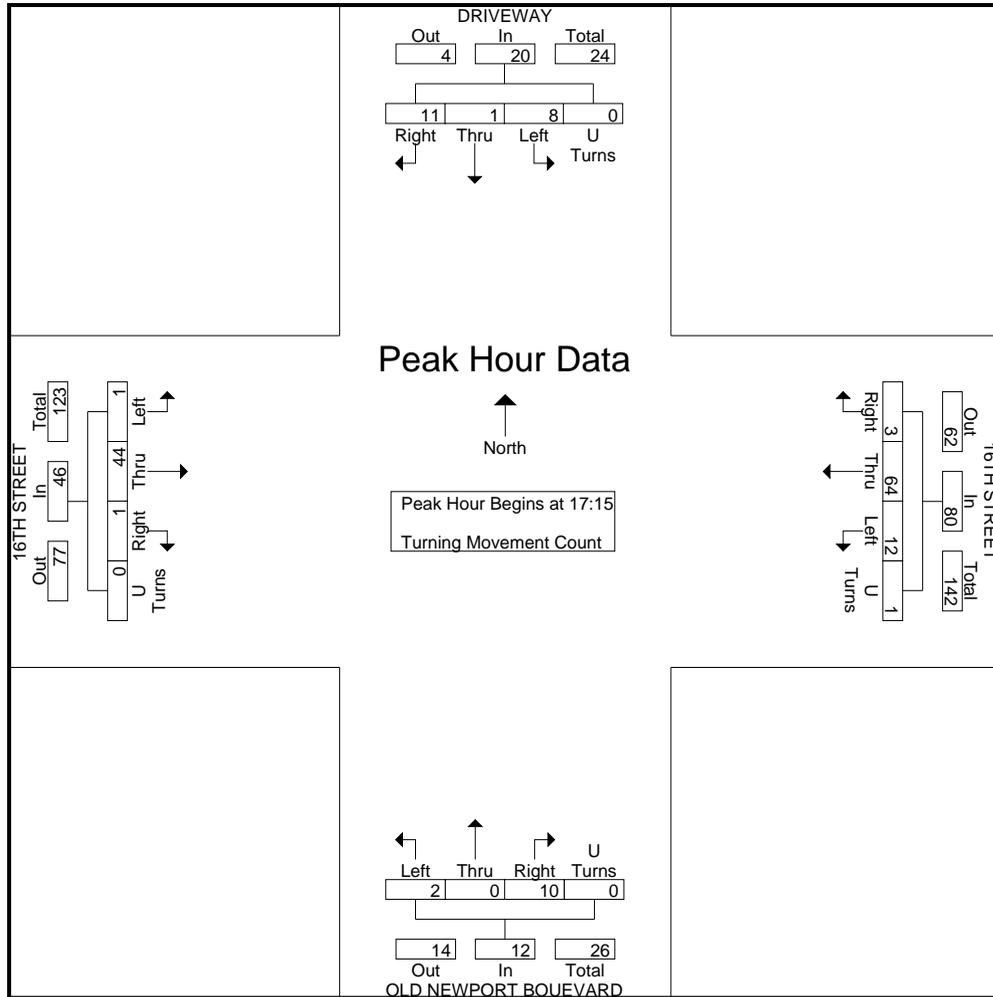


City: COSTA MESA
 N-S Direction: OLD NEWPORT BOULEVARD (W)
 E-W Direction: 16TH STREET

File Name : h2302002
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 3

Start Time	DRIVEWAY Southbound					16TH STREET Westbound					OLD NEWPORT BOUEVARD Northbound					16TH STREET Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
17:15	1	0	2	0	3	1	23	6	0	30	4	0	1	0	5	0	16	1	0	17	55
17:30	0	0	2	0	2	1	13	1	0	15	2	0	0	0	2	0	7	0	0	7	26
17:45	1	0	3	0	4	0	11	2	1	14	1	0	1	0	2	1	8	0	0	9	29
18:00	9	1	1	0	11	1	17	3	0	21	3	0	0	0	3	0	13	0	0	13	48
Total Volume	11	1	8	0	20	3	64	12	1	80	10	0	2	0	12	1	44	1	0	46	158
% App. Total	55	5	40	0		3.8	80	15	1.2		83.3	0	16.7	0		2.2	95.7	2.2	0		
PHF	.306	.250	.667	.000	.455	.750	.696	.500	.250	.667	.625	.000	.500	.000	.600	.250	.688	.250	.000	.676	.718

Peak Hour Analysis From 17:00 to 18:45 - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 17:15



City: COSTA MESA
 N-S Direction: NEWPORT BOULEVARD
 E-W Direction: E. 16TH STREET

File Name : H2302004
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 1

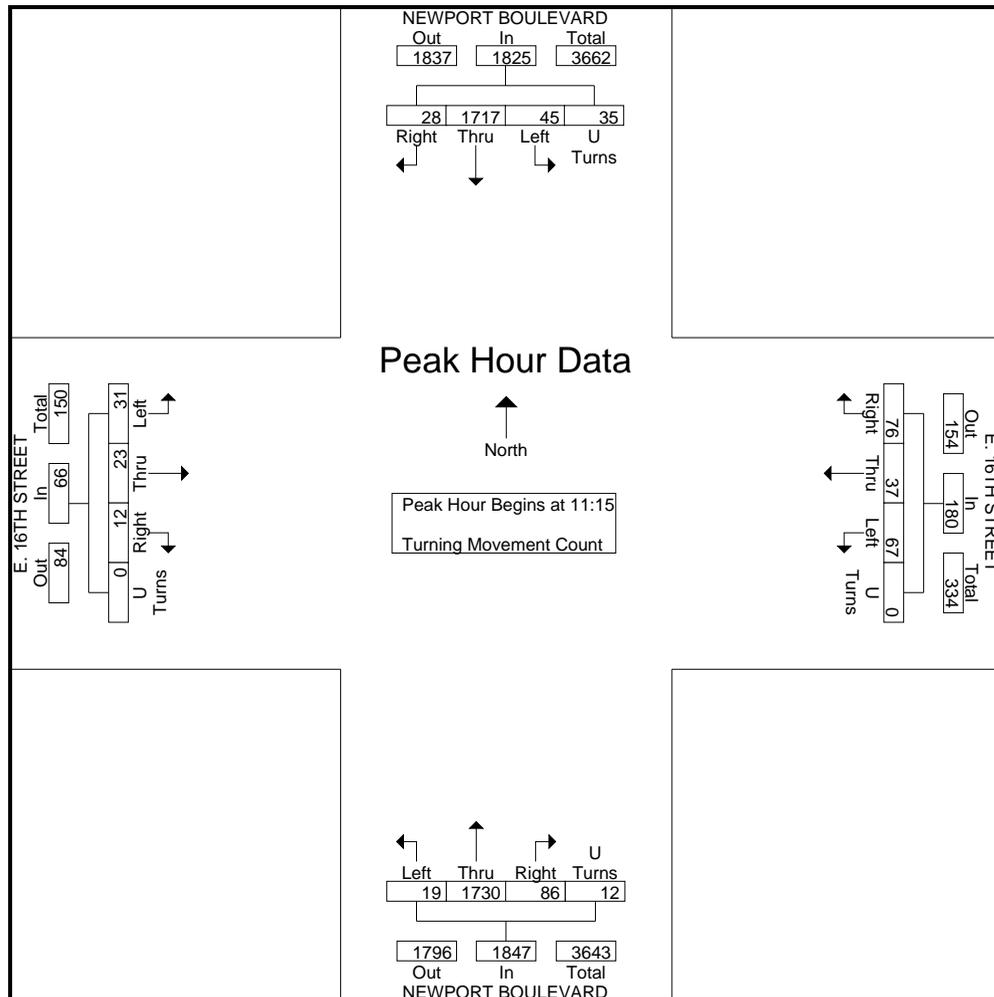
Groups Printed- Turning Movement Count

Start Time	NEWPORT BOULEVARD Southbound				E. 16TH STREET Westbound				NEWPORT BOULEVARD Northbound				E. 16TH STREET Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	8	407	15	6	19	11	15	0	17	417	0	2	2	5	5	0	929
11:15	6	424	10	8	21	5	16	0	23	429	9	1	1	3	4	0	960
11:30	5	441	11	9	19	9	14	0	22	458	7	2	2	6	7	0	1012
11:45	6	430	14	7	17	9	14	0	21	411	3	2	7	8	9	0	958
Total	25	1702	50	30	76	34	59	0	83	1715	19	7	12	22	25	0	3859
12:00	11	422	10	11	19	14	23	0	20	432	0	7	2	6	11	0	988
12:15	10	378	10	13	10	10	17	0	15	414	5	3	6	5	7	0	903
12:30	7	430	7	12	16	9	19	0	18	432	2	0	1	7	10	0	970
12:45	9	431	10	12	20	13	24	0	21	438	7	2	3	9	3	0	1002
Total	37	1661	37	48	65	46	83	0	74	1716	14	12	12	27	31	0	3863
17:00	2	471	13	5	13	13	24	0	16	483	3	2	3	10	10	0	1068
17:15	2	389	5	1	16	15	28	0	26	396	5	1	7	9	4	0	904
17:30	4	471	6	4	14	11	16	0	16	401	2	0	4	5	2	0	956
17:45	4	387	12	3	10	8	17	0	16	409	3	1	5	8	0	0	883
Total	12	1718	36	13	53	47	85	0	74	1689	13	4	19	32	16	0	3811
18:00	6	442	9	1	10	9	11	0	11	370	1	0	3	10	4	0	887
18:15	5	443	15	5	15	11	12	0	9	373	0	0	2	6	2	0	898
18:30	7	393	5	0	10	5	9	0	8	352	3	0	1	6	2	0	801
18:45	8	406	13	0	8	10	7	0	8	306	1	0	0	7	2	0	776
Total	26	1684	42	6	43	35	39	0	36	1401	5	0	6	29	10	0	3362
Grand Total	100	6765	165	97	237	162	266	0	267	6521	51	23	49	110	82	0	14895
Apprch %	1.4	94.9	2.3	1.4	35.6	24.4	40	0	3.9	95	0.7	0.3	20.3	45.6	34	0	
Total %	0.7	45.4	1.1	0.7	1.6	1.1	1.8	0	1.8	43.8	0.3	0.2	0.3	0.7	0.6	0	

City: COSTA MESA
 N-S Direction: NEWPORT BOULEVARD
 E-W Direction: E. 16TH STREET

File Name : H2302004
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 2

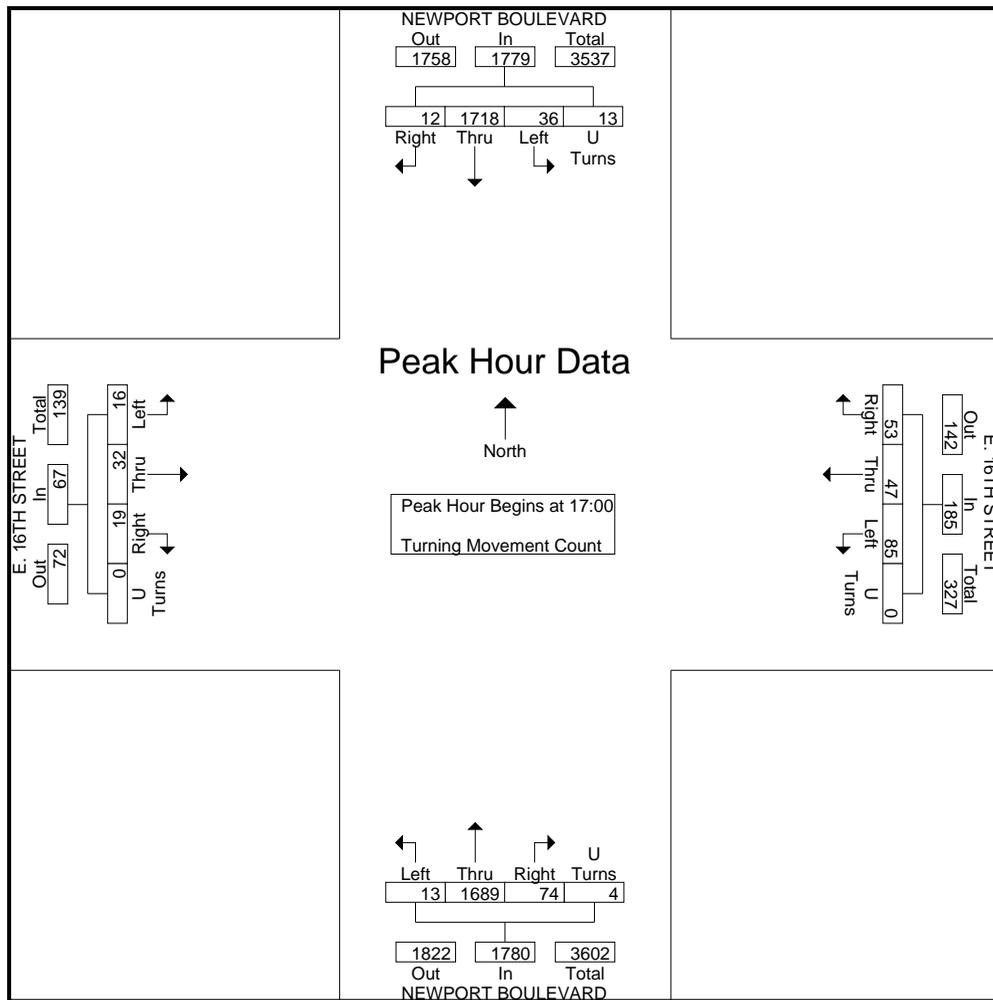
Start Time	NEWPORT BOULEVARD Southbound					E. 16TH STREET Westbound					NEWPORT BOULEVARD Northbound					E. 16TH STREET Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:15																					
11:15	6	424	10	8	448	21	5	16	0	42	23	429	9	1	462	1	3	4	0	8	960
11:30	5	441	11	9	466	19	9	14	0	42	22	458	7	2	489	2	6	7	0	15	1012
11:45	6	430	14	7	457	17	9	14	0	40	21	411	3	2	437	7	8	9	0	24	958
12:00	11	422	10	11	454	19	14	23	0	56	20	432	0	7	459	2	6	11	0	19	988
Total Volume	28	1717	45	35	1825	76	37	67	0	180	86	1730	19	12	1847	12	23	31	0	66	3918
% App. Total	1.5	94.1	2.5	1.9		42.2	20.6	37.2	0		4.7	93.7	1	0.6		18.2	34.8	47	0		
PHF	.636	.973	.804	.795	.979	.905	.661	.728	.000	.804	.935	.944	.528	.429	.944	.429	.719	.705	.000	.688	.968



City: COSTA MESA
 N-S Direction: NEWPORT BOULEVARD
 E-W Direction: E. 16TH STREET

File Name : H2302004
 Site Code : 0000000
 Start Date : 2/2/2023
 Page No : 3

Start Time	NEWPORT BOULEVARD Southbound					E. 16TH STREET Westbound					NEWPORT BOULEVARD Northbound					E. 16TH STREET Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 17:00 to 18:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	2	471	13	5	491	13	13	24	0	50	16	483	3	2	504	3	10	10	0	23	1068
17:15	2	389	5	1	397	16	15	28	0	59	26	396	5	1	428	7	9	4	0	20	904
17:30	4	471	6	4	485	14	11	16	0	41	16	401	2	0	419	4	5	2	0	11	956
17:45	4	387	12	3	406	10	8	17	0	35	16	409	3	1	429	5	8	0	0	13	883
Total Volume	12	1718	36	13	1779	53	47	85	0	185	74	1689	13	4	1780	19	32	16	0	67	3811
% App. Total	0.7	96.6	2	0.7		28.6	25.4	45.9	0		4.2	94.9	0.7	0.2		28.4	47.8	23.9	0		
PHF	.750	.912	.692	.650	.906	.828	.783	.759	.000	.784	.712	.874	.650	.500	.883	.679	.800	.400	.000	.728	.892



City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: INDUSTRIAL WAY

File Name : H2302014
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 1

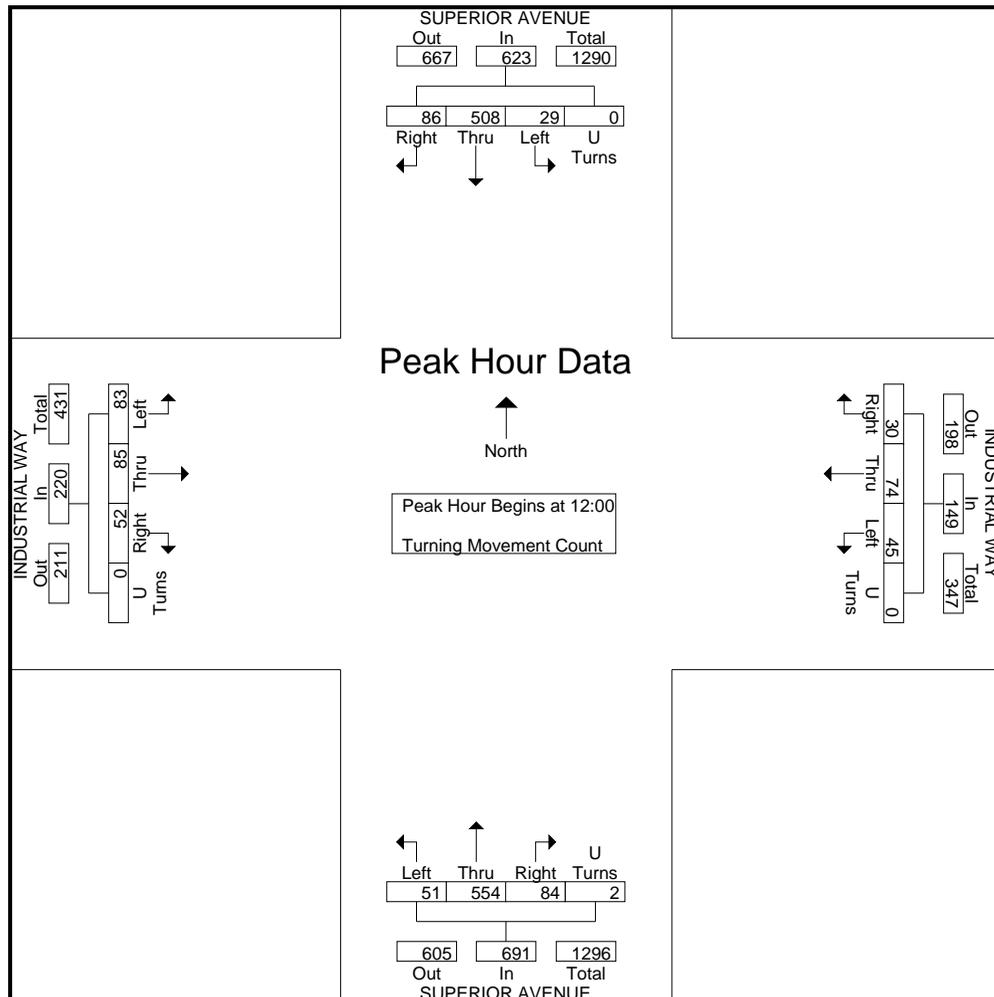
Groups Printed- Turning Movement Count

Start Time	SUPERIOR AVENUE Southbound				INDUSTRIAL WAY Westbound				SUPERIOR AVENUE Northbound				INDUSTRIAL WAY Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	19	112	9	0	7	16	10	0	25	143	9	0	19	18	16	0	403
11:15	18	105	12	0	11	27	17	0	26	147	10	0	14	20	18	0	425
11:30	34	126	13	0	7	11	13	0	24	144	5	0	18	22	19	0	436
11:45	22	107	10	0	9	13	9	0	18	148	7	1	17	18	25	0	404
Total	93	450	44	0	34	67	49	0	93	582	31	1	68	78	78	0	1668
12:00	25	89	3	0	3	19	3	0	25	156	13	0	13	32	20	0	401
12:15	22	147	6	0	10	15	8	0	23	142	9	1	14	17	21	0	435
12:30	22	129	12	0	7	19	18	0	20	132	15	0	15	16	24	0	429
12:45	17	143	8	0	10	21	16	0	16	124	14	1	10	20	18	0	418
Total	86	508	29	0	30	74	45	0	84	554	51	2	52	85	83	0	1683
17:00	17	134	4	0	8	17	9	0	22	191	9	0	25	32	23	0	491
17:15	10	123	5	0	3	30	4	0	17	145	15	0	15	22	21	0	410
17:30	13	106	6	0	6	18	6	0	10	149	13	0	13	17	20	0	377
17:45	14	114	9	2	4	11	5	0	8	113	7	0	13	14	16	0	330
Total	54	477	24	2	21	76	24	0	57	598	44	0	66	85	80	0	1608
18:00	18	119	6	0	8	18	6	0	10	128	6	0	14	10	14	0	357
18:15	17	114	2	0	3	10	10	0	1	99	4	2	11	10	16	0	299
18:30	14	91	2	1	5	9	3	0	4	78	5	1	17	12	19	0	261
18:45	13	88	10	0	4	9	5	0	8	88	2	0	4	11	3	1	246
Total	62	412	20	1	20	46	24	0	23	393	17	3	46	43	52	1	1163
Grand Total	295	1847	117	3	105	263	142	0	257	2127	143	6	232	291	293	1	6122
Apprch %	13	81.7	5.2	0.1	20.6	51.6	27.8	0	10.1	84	5.6	0.2	28.4	35.6	35.9	0.1	
Total %	4.8	30.2	1.9	0	1.7	4.3	2.3	0	4.2	34.7	2.3	0.1	3.8	4.8	4.8	0	

City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: INDUSTRIAL WAY

File Name : H2302014
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 2

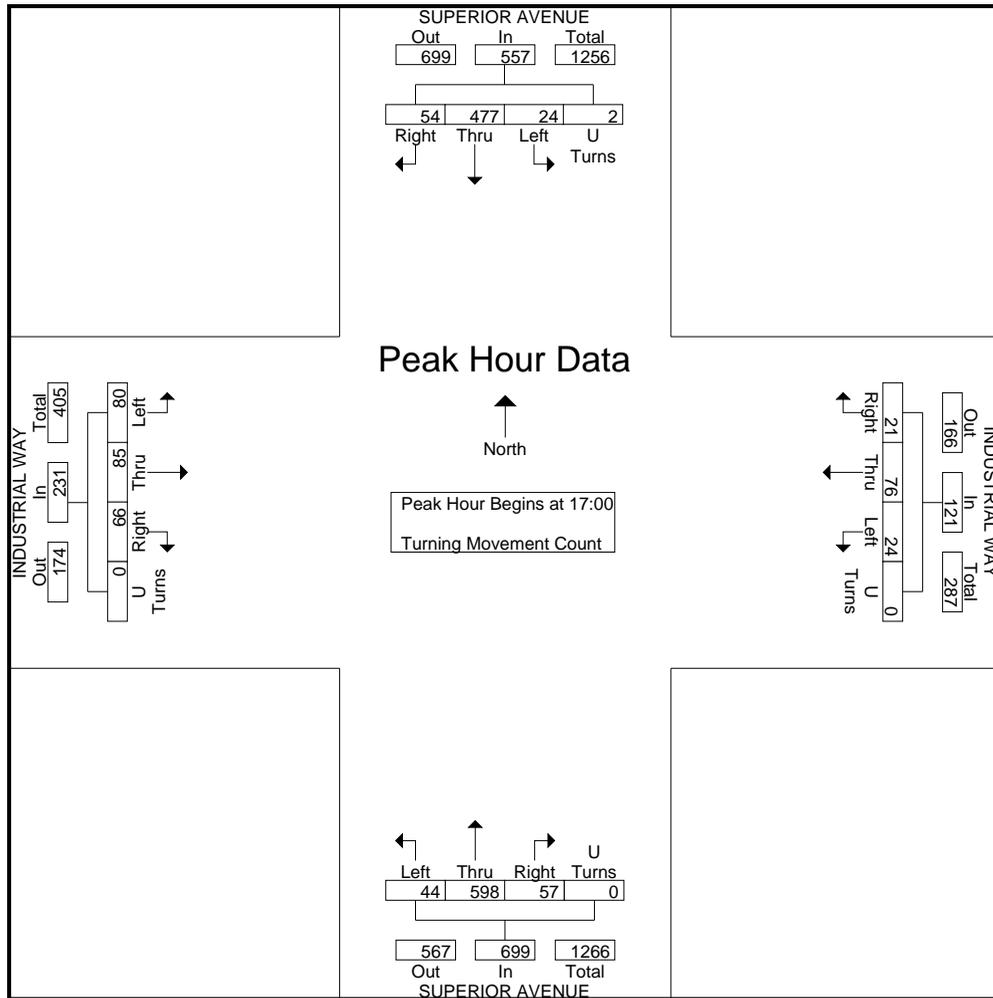
Start Time	SUPERIOR AVENUE Southbound					INDUSTRIAL WAY Westbound					SUPERIOR AVENUE Northbound					INDUSTRIAL WAY Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00																					
12:00	25	89	3	0	117	3	19	3	0	25	25	156	13	0	194	13	32	20	0	65	401
12:15	22	147	6	0	175	10	15	8	0	33	23	142	9	1	175	14	17	21	0	52	435
12:30	22	129	12	0	163	7	19	18	0	44	20	132	15	0	167	15	16	24	0	55	429
12:45	17	143	8	0	168	10	21	16	0	47	16	124	14	1	155	10	20	18	0	48	418
Total Volume	86	508	29	0	623	30	74	45	0	149	84	554	51	2	691	52	85	83	0	220	1683
% App. Total	13.8	81.5	4.7	0		20.1	49.7	30.2	0		12.2	80.2	7.4	0.3		23.6	38.6	37.7	0		
PHF	.860	.864	.604	.000	.890	.750	.881	.625	.000	.793	.840	.888	.850	.500	.890	.867	.664	.865	.000	.846	.967



City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: INDUSTRIAL WAY

File Name : H2302014
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 3

Start Time	SUPERIOR AVENUE Southbound					INDUSTRIAL WAY Westbound					SUPERIOR AVENUE Northbound					INDUSTRIAL WAY Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 17:00 to 18:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	17	134	4	0	155	8	17	9	0	34	22	191	9	0	222	25	32	23	0	80	491
17:15	10	123	5	0	138	3	30	4	0	37	17	145	15	0	177	15	22	21	0	58	410
17:30	13	106	6	0	125	6	18	6	0	30	10	149	13	0	172	13	17	20	0	50	377
17:45	14	114	9	2	139	4	11	5	0	20	8	113	7	0	128	13	14	16	0	43	330
Total Volume	54	477	24	2	557	21	76	24	0	121	57	598	44	0	699	66	85	80	0	231	1608
% App. Total	9.7	85.6	4.3	0.4		17.4	62.8	19.8	0		8.2	85.6	6.3	0		28.6	36.8	34.6	0		
PHF	.794	.890	.667	.250	.898	.656	.633	.667	.000	.818	.648	.783	.733	.000	.787	.660	.664	.870	.000	.722	.819



City: COSTA MESA
 N-S Direction: OLD NEWPORT BOULEVARD (W)
 E-W Direction: INDUSTRIAL WAY

File Name : H2302006
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 1

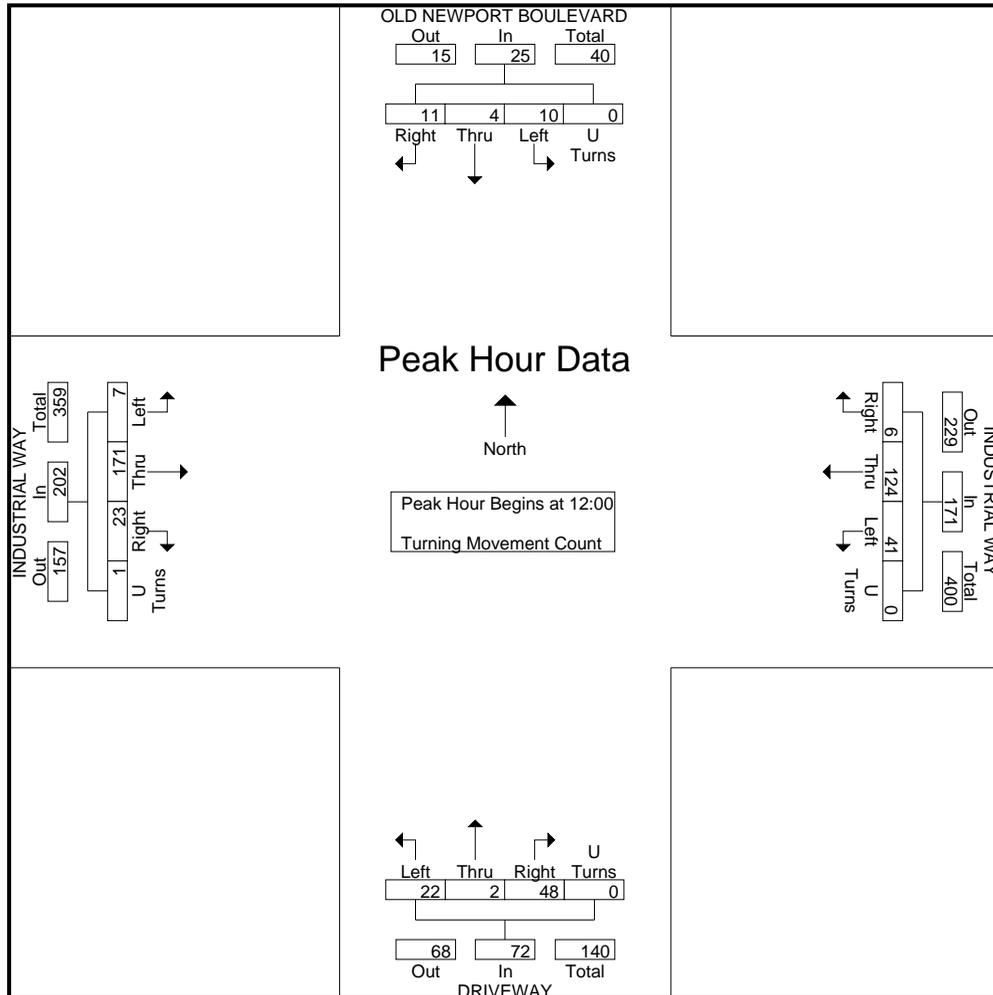
Groups Printed- Turning Movement Count

Start Time	OLD NEWPORT BOULEVARD Southbound				INDUSTRIAL WAY Westbound				DRIVEWAY Northbound				INDUSTRIAL WAY Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	2	0	2	0	5	31	5	0	5	0	6	0	9	43	0	0	108
11:15	2	0	3	0	1	36	2	0	6	0	2	0	3	50	0	0	105
11:30	1	0	2	0	2	37	8	0	5	0	2	0	3	48	0	0	108
11:45	3	0	2	0	1	20	10	0	15	0	2	0	4	43	0	0	100
Total	8	0	9	0	9	124	25	0	31	0	12	0	19	184	0	0	421
12:00	3	2	3	0	1	25	12	0	10	1	5	0	6	48	2	0	118
12:15	0	1	3	0	2	32	8	0	9	1	7	0	7	37	2	1	110
12:30	7	0	2	0	2	36	10	0	16	0	6	0	5	40	0	0	124
12:45	1	1	2	0	1	31	11	0	13	0	4	0	5	46	3	0	118
Total	11	4	10	0	6	124	41	0	48	2	22	0	23	171	7	1	470
17:00	6	0	2	0	5	33	4	0	0	0	1	0	2	58	0	0	111
17:15	4	0	3	0	1	30	7	0	6	0	1	0	2	40	0	0	94
17:30	2	0	1	0	1	27	3	0	6	0	3	0	1	32	1	0	77
17:45	0	0	0	0	0	17	2	0	2	0	2	0	4	29	0	0	56
Total	12	0	6	0	7	107	16	0	14	0	7	0	9	159	1	0	338
18:00	3	0	0	0	1	27	4	0	2	1	5	0	3	20	0	0	66
18:15	2	0	0	0	1	16	1	0	2	0	2	0	2	15	0	0	41
18:30	0	0	2	0	1	21	4	0	2	0	2	0	0	16	0	1	49
18:45	1	0	1	0	2	11	4	0	4	0	3	0	3	26	0	0	55
Total	6	0	3	0	5	75	13	0	10	1	12	0	8	77	0	1	211
Grand Total	37	4	28	0	27	430	95	0	103	3	53	0	59	591	8	2	1440
Apprch %	53.6	5.8	40.6	0	4.9	77.9	17.2	0	64.8	1.9	33.3	0	8.9	89.5	1.2	0.3	
Total %	2.6	0.3	1.9	0	1.9	29.9	6.6	0	7.2	0.2	3.7	0	4.1	41	0.6	0.1	

City: COSTA MESA
 N-S Direction: OLD NEWPORT BOULEVARD (W)
 E-W Direction: INDUSTRIAL WAY

File Name : H2302006
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 2

Start Time	OLD NEWPORT BOULEVARD Southbound					INDUSTRIAL WAY Westbound					DRIVEWAY Northbound					INDUSTRIAL WAY Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00																					
12:00	3	2	3	0	8	1	25	12	0	38	10	1	5	0	16	6	48	2	0	56	118
12:15	0	1	3	0	4	2	32	8	0	42	9	1	7	0	17	7	37	2	1	47	110
12:30	7	0	2	0	9	2	36	10	0	48	16	0	6	0	22	5	40	0	0	45	124
12:45	1	1	2	0	4	1	31	11	0	43	13	0	4	0	17	5	46	3	0	54	118
Total Volume	11	4	10	0	25	6	124	41	0	171	48	2	22	0	72	23	171	7	1	202	470
% App. Total	44	16	40	0		3.5	72.5	24	0		66.7	2.8	30.6	0		11.4	84.7	3.5	0.5		
PHF	.393	.500	.833	.000	.694	.750	.861	.854	.000	.891	.750	.500	.786	.000	.818	.821	.891	.583	.250	.902	.948

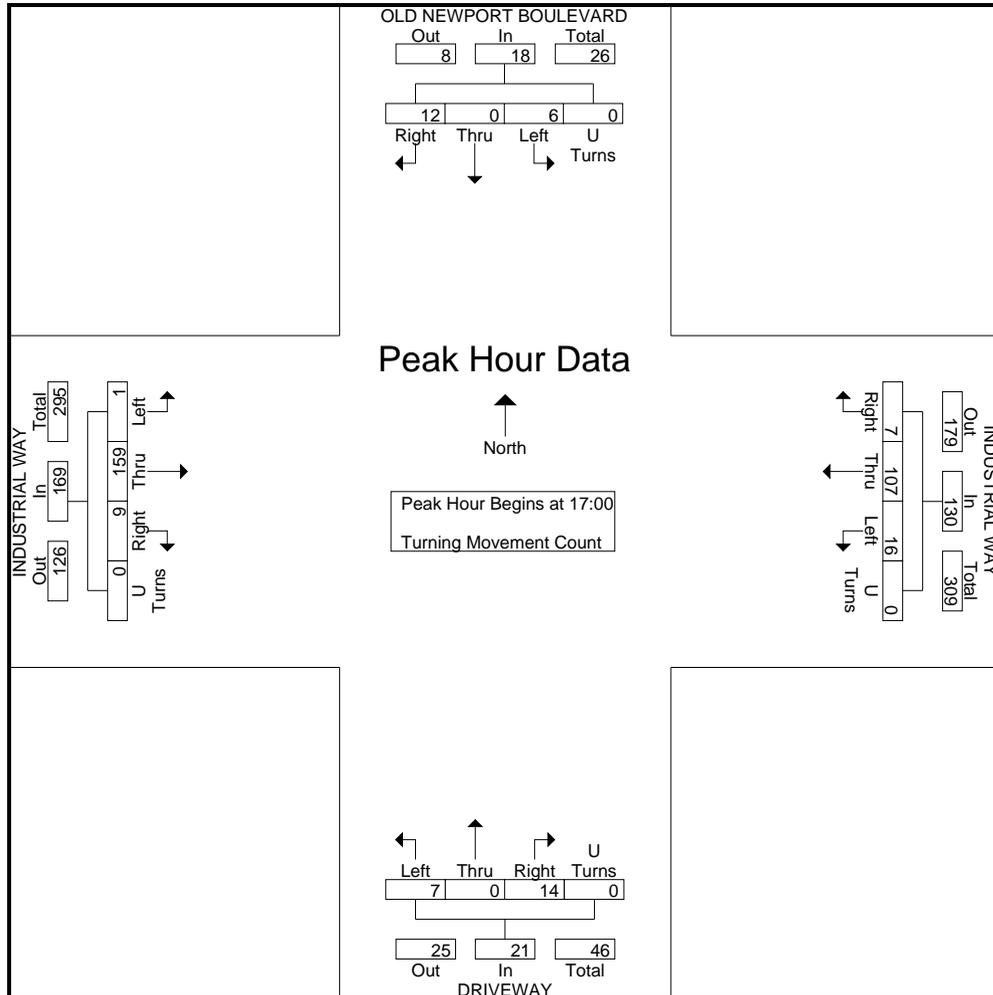


City: COSTA MESA
 N-S Direction: OLD NEWPORT BOULEVARD (W)
 E-W Direction: INDUSTRIAL WAY

File Name : H2302006
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 3

Start Time	OLD NEWPORT BOULEVARD Southbound					INDUSTRIAL WAY Westbound					DRIVEWAY Northbound					INDUSTRIAL WAY Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
17:00	6	0	2	0	8	5	33	4	0	42	0	0	1	0	1	2	58	0	0	60	111
17:15	4	0	3	0	7	1	30	7	0	38	6	0	1	0	7	2	40	0	0	42	94
17:30	2	0	1	0	3	1	27	3	0	31	6	0	3	0	9	1	32	1	0	34	77
17:45	0	0	0	0	0	0	17	2	0	19	2	0	2	0	4	4	29	0	0	33	56
Total Volume	12	0	6	0	18	7	107	16	0	130	14	0	7	0	21	9	159	1	0	169	338
% App. Total	66.7	0	33.3	0		5.4	82.3	12.3	0		66.7	0	33.3	0		5.3	94.1	0.6	0		
PHF	.500	.000	.500	.000	.563	.350	.811	.571	.000	.774	.583	.000	.583	.000	.583	.563	.685	.250	.000	.704	.761

Peak Hour Analysis From 17:00 to 18:45 - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 17:00



City: COSTA MESA
 N-S Direction: NEWPORT BOULEVARD
 E-W Direction: INDUSTRIAL WAY

File Name : H2302008
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 1

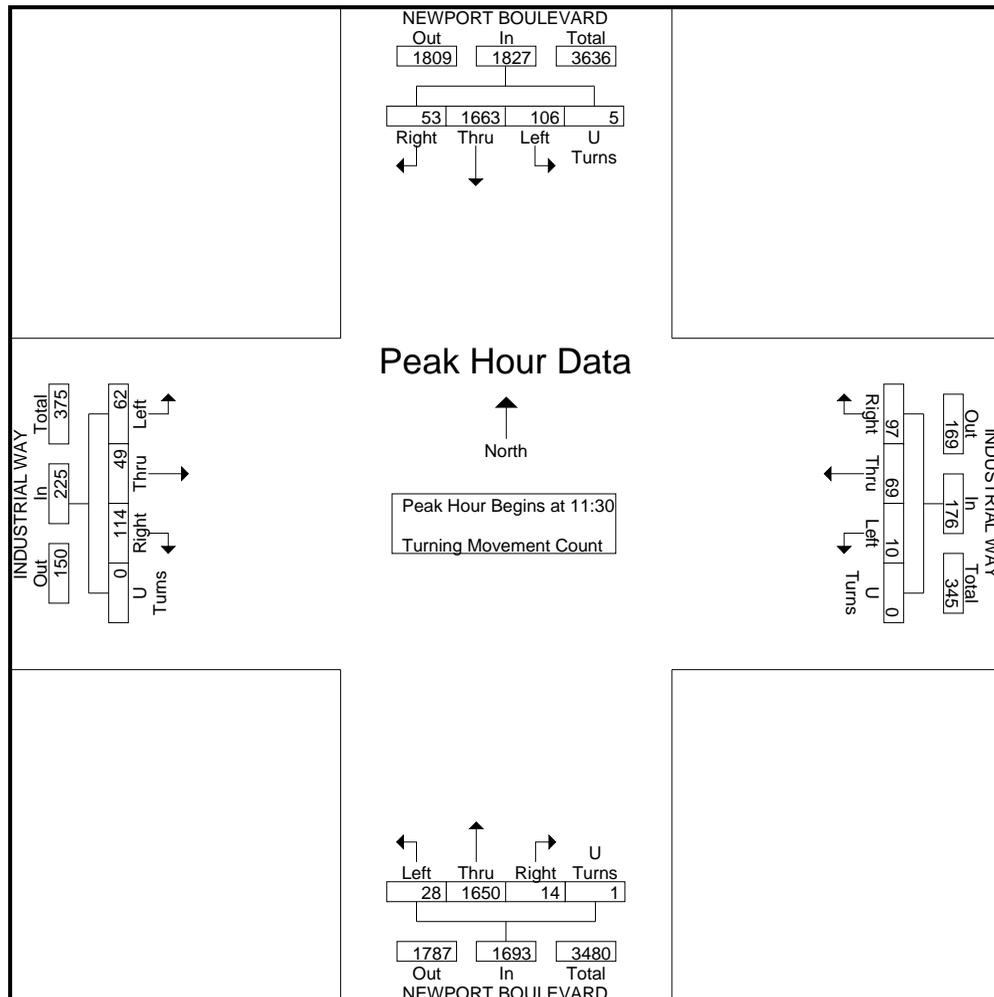
Groups Printed- Turning Movement Count

Start Time	NEWPORT BOULEVARD Southbound				INDUSTRIAL WAY Westbound				NEWPORT BOULEVARD Northbound				INDUSTRIAL WAY Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	15	403	18	0	20	14	2	0	3	397	13	1	20	14	16	0	936
11:15	12	377	23	0	21	15	6	0	3	421	13	1	32	16	12	0	952
11:30	19	421	31	0	29	17	3	0	2	435	12	1	29	14	9	0	1022
11:45	13	422	22	1	24	12	2	0	8	412	5	0	30	12	14	0	977
Total	59	1623	94	1	94	58	13	0	16	1665	43	3	111	56	51	0	3887
12:00	12	405	25	3	24	18	1	0	2	406	9	0	33	11	19	0	968
12:15	9	415	28	1	20	22	4	0	2	397	2	0	22	12	20	0	954
12:30	17	405	12	1	21	21	6	0	4	411	13	2	29	10	17	0	969
12:45	16	403	31	0	18	22	6	0	5	425	12	3	32	7	20	0	1000
Total	54	1628	96	5	83	83	17	0	13	1639	36	5	116	40	76	0	3891
17:00	18	481	17	0	45	20	5	0	0	456	3	1	13	21	22	0	1102
17:15	7	387	16	1	18	12	1	0	3	430	13	0	19	17	17	0	941
17:30	12	436	18	0	27	19	4	0	1	340	7	0	17	11	10	0	902
17:45	6	413	10	0	19	17	2	0	4	384	3	1	13	7	7	0	886
Total	43	1717	61	1	109	68	12	0	8	1610	26	2	62	56	56	0	3831
18:00	7	398	20	0	27	20	2	0	1	363	0	0	10	7	7	0	862
18:15	9	426	18	0	17	11	2	0	1	376	0	0	3	9	7	0	879
18:30	9	419	14	0	11	10	0	0	2	336	4	2	6	5	4	0	822
18:45	10	384	12	0	5	8	2	0	1	274	2	0	15	9	11	0	733
Total	35	1627	64	0	60	49	6	0	5	1349	6	2	34	30	29	0	3296
Grand Total	191	6595	315	7	346	258	48	0	42	6263	111	12	323	182	212	0	14905
Apprch %	2.7	92.8	4.4	0.1	53.1	39.6	7.4	0	0.7	97.4	1.7	0.2	45	25.4	29.6	0	
Total %	1.3	44.2	2.1	0	2.3	1.7	0.3	0	0.3	42	0.7	0.1	2.2	1.2	1.4	0	

City: COSTA MESA
 N-S Direction: NEWPORT BOULEVARD
 E-W Direction: INDUSTRIAL WAY

File Name : H2302008
 Site Code : 00000000
 Start Date : 2/2/2023
 Page No : 2

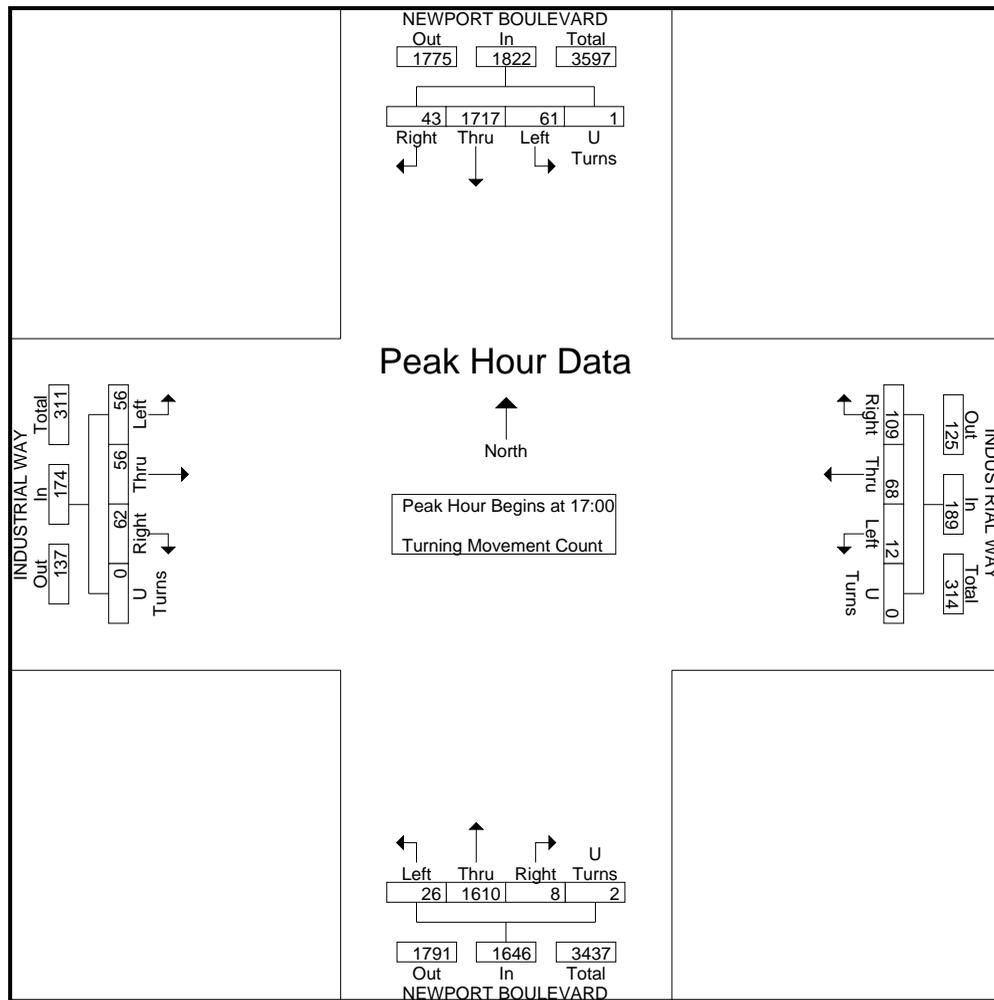
Start Time	NEWPORT BOULEVARD Southbound					INDUSTRIAL WAY Westbound					NEWPORT BOULEVARD Northbound					INDUSTRIAL WAY Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30																					
11:30	19	421	31	0	471	29	17	3	0	49	2	435	12	1	450	29	14	9	0	52	1022
11:45	13	422	22	1	458	24	12	2	0	38	8	412	5	0	425	30	12	14	0	56	977
12:00	12	405	25	3	445	24	18	1	0	43	2	406	9	0	417	33	11	19	0	63	968
12:15	9	415	28	1	453	20	22	4	0	46	2	397	2	0	401	22	12	20	0	54	954
Total Volume	53	1663	106	5	1827	97	69	10	0	176	14	1650	28	1	1693	114	49	62	0	225	3921
% App. Total	2.9	91	5.8	0.3		55.1	39.2	5.7	0		0.8	97.5	1.7	0.1		50.7	21.8	27.6	0		
PHF	.697	.985	.855	.417	.970	.836	.784	.625	.000	.898	.438	.948	.583	.250	.941	.864	.875	.775	.000	.893	.959



City: COSTA MESA
 N-S Direction: NEWPORT BOULEVARD
 E-W Direction: INDUSTRIAL WAY

File Name : H2302008
 Site Code : 0000000
 Start Date : 2/2/2023
 Page No : 3

Start Time	NEWPORT BOULEVARD Southbound					INDUSTRIAL WAY Westbound					NEWPORT BOULEVARD Northbound					INDUSTRIAL WAY Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 17:00 to 18:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 17:00																					
17:00	18	481	17	0	516	45	20	5	0	70	0	456	3	1	460	13	21	22	0	56	1102
17:15	7	387	16	1	411	18	12	1	0	31	3	430	13	0	446	19	17	17	0	53	941
17:30	12	436	18	0	466	27	19	4	0	50	1	340	7	0	348	17	11	10	0	38	902
17:45	6	413	10	0	429	19	17	2	0	38	4	384	3	1	392	13	7	7	0	27	886
Total Volume	43	1717	61	1	1822	109	68	12	0	189	8	1610	26	2	1646	62	56	56	0	174	3831
% App. Total	2.4	94.2	3.3	0.1		57.7	36	6.3	0		0.5	97.8	1.6	0.1		35.6	32.2	32.2	0		
PHF	.597	.892	.847	.250	.883	.606	.850	.600	.000	.675	.500	.883	.500	.500	.895	.816	.667	.636	.000	.777	.869



City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: W 17TH STREET

File Name : H2302013
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 1

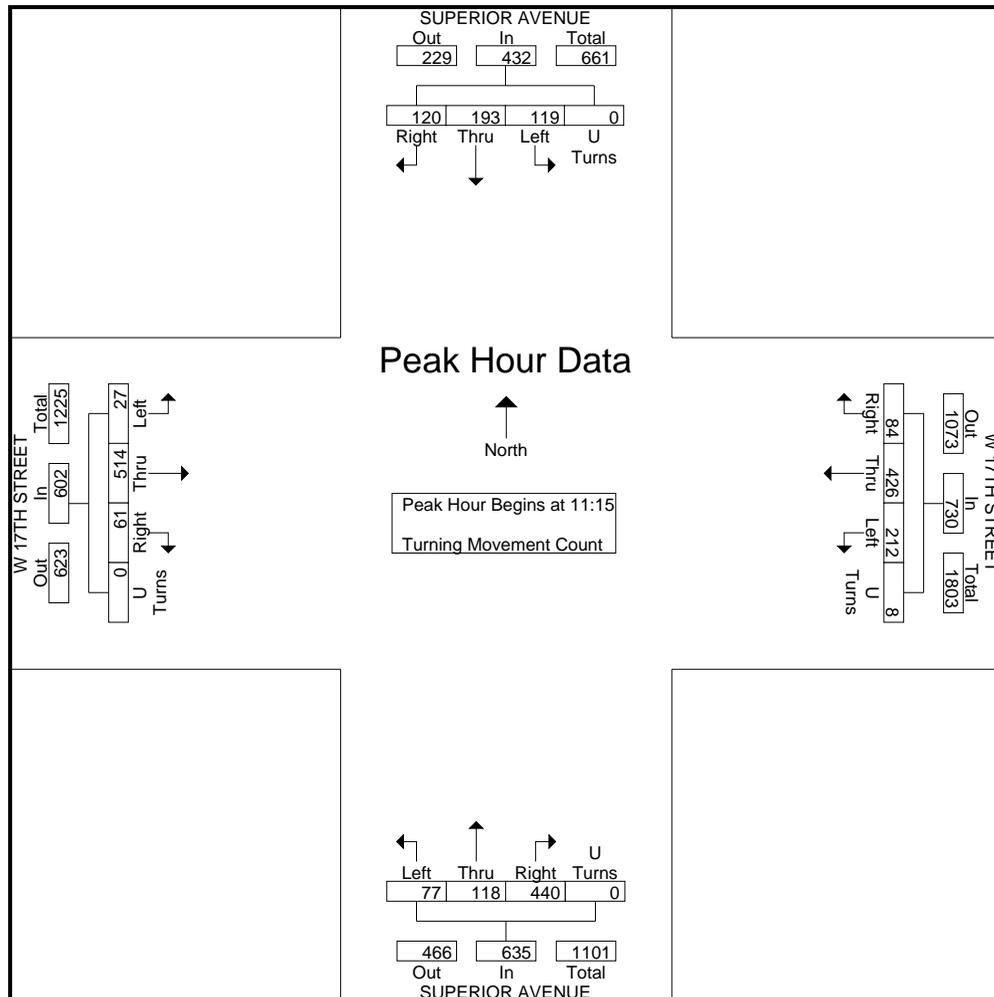
Groups Printed- Turning Movement Count

Start Time	SUPERIOR AVENUE Southbound				W 17TH STREET Westbound				SUPERIOR AVENUE Northbound				W 17TH STREET Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	20	66	25	0	20	97	53	1	111	31	20	0	13	122	5	0	584
11:15	24	46	30	0	16	123	59	1	99	30	13	0	17	111	4	0	573
11:30	38	51	32	0	27	90	67	3	123	36	27	0	17	125	7	0	643
11:45	32	49	28	0	16	109	40	2	109	19	17	0	14	120	9	0	564
Total	114	212	115	0	79	419	219	7	442	116	77	0	61	478	25	0	2364
12:00	26	47	29	0	25	104	46	2	109	33	20	0	13	158	7	0	619
12:15	26	53	35	0	19	117	38	1	103	42	14	0	15	103	5	0	571
12:30	24	62	31	0	19	90	51	1	109	36	22	0	14	125	8	0	592
12:45	24	54	36	0	22	94	40	1	94	24	18	0	11	105	8	0	531
Total	100	216	131	0	85	405	175	5	415	135	74	0	53	491	28	0	2313
Grand Total	214	428	246	0	164	824	394	12	857	251	151	0	114	969	53	0	4677
Apprch %	24.1	48.2	27.7	0	11.8	59.1	28.3	0.9	68.1	19.9	12	0	10	85.3	4.7	0	
Total %	4.6	9.2	5.3	0	3.5	17.6	8.4	0.3	18.3	5.4	3.2	0	2.4	20.7	1.1	0	

City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: W 17TH STREET

File Name : H2302013
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 2

Start Time	SUPERIOR AVENUE Southbound					W 17TH STREET Westbound					SUPERIOR AVENUE Northbound					W 17TH STREET Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:15																					
11:15	24	46	30	0	100	16	123	59	1	199	99	30	13	0	142	17	111	4	0	132	573
11:30	38	51	32	0	121	27	90	67	3	187	123	36	27	0	186	17	125	7	0	149	643
11:45	32	49	28	0	109	16	109	40	2	167	109	19	17	0	145	14	120	9	0	143	564
12:00	26	47	29	0	102	25	104	46	2	177	109	33	20	0	162	13	158	7	0	178	619
Total Volume	120	193	119	0	432	84	426	212	8	730	440	118	77	0	635	61	514	27	0	602	2399
% App. Total	27.8	44.7	27.5	0		11.5	58.4	29	1.1		69.3	18.6	12.1	0		10.1	85.4	4.5	0		
PHF	.789	.946	.930	.000	.893	.778	.866	.791	.667	.917	.894	.819	.713	.000	.853	.897	.813	.750	.000	.846	.933



City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: E. 16TH STREET

File Name : h2302011
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 1

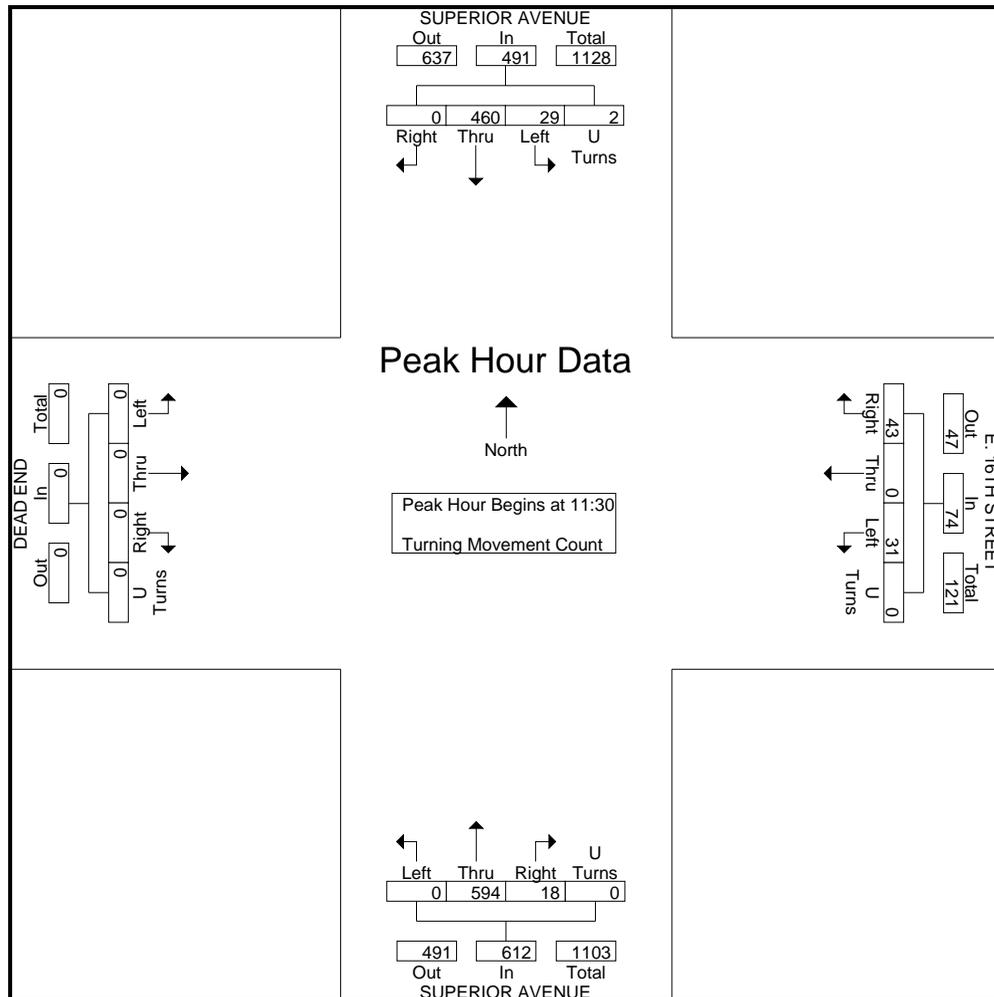
Groups Printed- Turning Movement Count

Start Time	SUPERIOR AVENUE Southbound				E. 16TH STREET Westbound				SUPERIOR AVENUE Northbound				DEAD END Eastbound				Int. Total	
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns		
11:00	0	128	8	0	12	0	5	0	7	149	0	0	0	0	0	0	0	309
11:15	0	119	7	0	5	0	3	0	8	139	0	0	0	0	0	0	0	281
11:30	0	123	6	1	12	0	8	0	4	166	0	0	0	0	0	0	0	320
11:45	0	107	7	1	10	0	6	0	3	118	0	0	0	0	0	0	0	252
Total	0	477	28	2	39	0	22	0	22	572	0	0	0	0	0	0	0	1162
12:00	0	109	10	0	10	0	8	0	4	166	0	0	0	0	0	0	0	307
12:15	0	121	6	0	11	0	9	0	7	144	0	0	0	0	0	0	0	298
12:30	0	122	7	0	16	0	8	0	6	146	0	0	0	0	0	0	0	305
12:45	0	113	10	1	10	0	7	0	4	113	0	0	0	0	0	0	0	258
Total	0	465	33	1	47	0	32	0	21	569	0	0	0	0	0	0	0	1168
Grand Total	0	942	61	3	86	0	54	0	43	1141	0	0	0	0	0	0	0	2330
Apprch %	0	93.6	6.1	0.3	61.4	0	38.6	0	3.6	96.4	0	0	0	0	0	0	0	
Total %	0	40.4	2.6	0.1	3.7	0	2.3	0	1.8	49	0	0	0	0	0	0	0	

City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: E. 16TH STREET

File Name : h2302011
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 2

Start Time	SUPERIOR AVENUE Southbound					E. 16TH STREET Westbound					SUPERIOR AVENUE Northbound					DEAD END Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30																					
11:30	0	123	6	1	130	12	0	8	0	20	4	166	0	0	170	0	0	0	0	0	320
11:45	0	107	7	1	115	10	0	6	0	16	3	118	0	0	121	0	0	0	0	0	252
12:00	0	109	10	0	119	10	0	8	0	18	4	166	0	0	170	0	0	0	0	0	307
12:15	0	121	6	0	127	11	0	9	0	20	7	144	0	0	151	0	0	0	0	0	298
Total Volume	0	460	29	2	491	43	0	31	0	74	18	594	0	0	612	0	0	0	0	0	1177
% App. Total	0	93.7	5.9	0.4		58.1	0	41.9	0		2.9	97.1	0	0		0	0	0	0		
PHF	.000	.935	.725	.500	.944	.896	.000	.861	.000	.925	.643	.895	.000	.000	.900	.000	.000	.000	.000	.000	.920



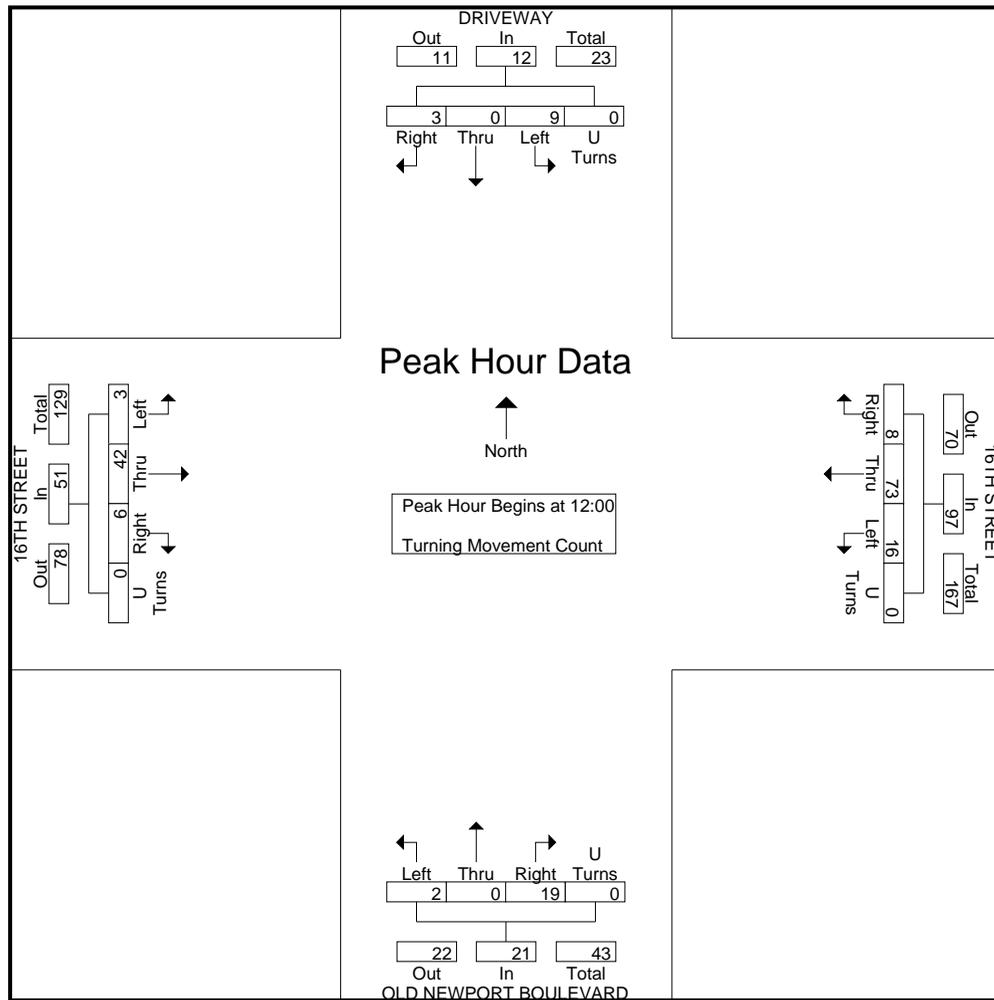
City: COSTA MESA
 N-S Direction: OLD NEWPORT BOULEVARD (W)
 E-W Direction: 16TH STREET

File Name : H2302003
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 1

Groups Printed- Turning Movement Count

Start Time	DRIVEWAY Southbound				16TH STREET Westbound				OLD NEWPORT BOULEVARD Northbound				16TH STREET Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	1	0	3	0	2	19	3	0	1	0	1	0	0	15	1	0	46
11:15	0	0	1	0	1	7	1	0	3	0	0	0	3	12	1	0	29
11:30	1	0	0	0	3	19	2	0	0	0	1	0	1	9	0	0	36
11:45	1	0	2	0	0	17	1	0	2	0	0	0	0	8	1	0	32
Total	3	0	6	0	6	62	7	0	6	0	2	0	4	44	3	0	143
12:00	0	0	5	0	0	18	5	0	5	0	1	0	1	13	0	0	48
12:15	0	0	1	0	3	19	7	0	5	0	0	0	1	8	1	0	45
12:30	2	0	2	0	2	20	3	0	3	0	1	0	2	11	0	0	46
12:45	1	0	1	0	3	16	1	0	6	0	0	0	2	10	2	0	42
Total	3	0	9	0	8	73	16	0	19	0	2	0	6	42	3	0	181
Grand Total	6	0	15	0	14	135	23	0	25	0	4	0	10	86	6	0	324
Apprch %	28.6	0	71.4	0	8.1	78.5	13.4	0	86.2	0	13.8	0	9.8	84.3	5.9	0	
Total %	1.9	0	4.6	0	4.3	41.7	7.1	0	7.7	0	1.2	0	3.1	26.5	1.9	0	

Start Time	DRIVEWAY Southbound					16TH STREET Westbound					OLD NEWPORT BOULEVARD Northbound					16TH STREET Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00																					
12:00	0	0	5	0	5	0	18	5	0	23	5	0	1	0	6	1	13	0	0	14	48
12:15	0	0	1	0	1	3	19	7	0	29	5	0	0	0	5	1	8	1	0	10	45
12:30	2	0	2	0	4	2	20	3	0	25	3	0	1	0	4	2	11	0	0	13	46
12:45	1	0	1	0	2	3	16	1	0	20	6	0	0	0	6	2	10	2	0	14	42
Total Volume	3	0	9	0	12	8	73	16	0	97	19	0	2	0	21	6	42	3	0	51	181
% App. Total	25	0	75	0		8.2	75.3	16.5	0		90.5	0	9.5	0		11.8	82.4	5.9	0		
PHF	.375	.000	.450	.000	.600	.667	.913	.571	.000	.836	.792	.000	.500	.000	.875	.750	.808	.375	.000	.911	.943



City: COSTA MESA
 N-S Direction: NEWPORT BOULEVARD
 E-W Direction: E. 16TH STREET

File Name : H2302005
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 1

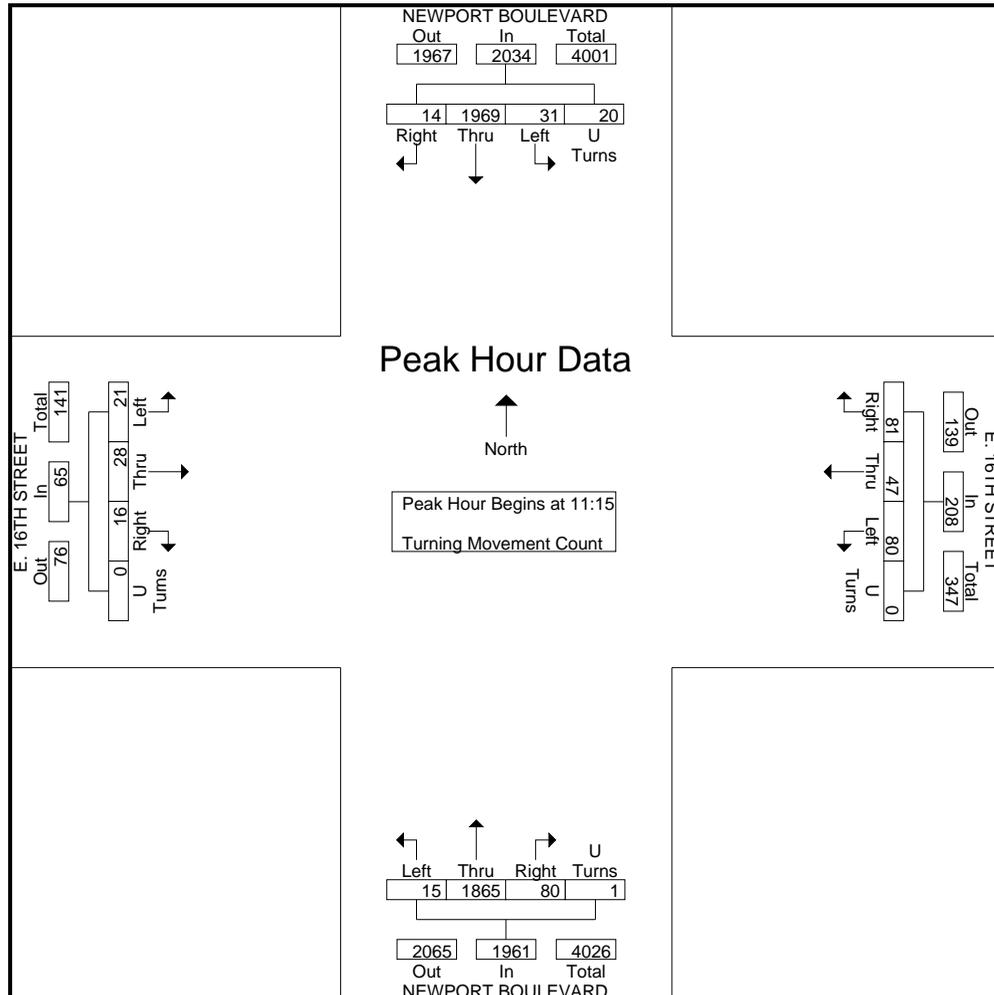
Groups Printed- Turning Movement Count

Start Time	NEWPORT BOULEVARD Southbound				E. 16TH STREET Westbound				NEWPORT BOULEVARD Northbound				E. 16TH STREET Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	2	481	9	4	16	15	13	0	19	448	3	3	5	11	1	0	1030
11:15	1	495	5	8	16	15	22	0	16	463	2	0	2	9	6	0	1060
11:30	5	472	7	6	19	11	17	0	21	424	4	0	2	5	2	0	995
11:45	3	544	11	3	26	10	17	0	22	503	4	0	7	3	2	0	1155
Total	11	1992	32	21	77	51	69	0	78	1838	13	3	16	28	11	0	4240
12:00	5	458	8	3	20	11	24	0	21	475	5	1	5	11	11	0	1058
12:15	4	486	12	4	12	19	9	0	13	424	7	1	1	5	4	0	1001
12:30	2	496	9	3	11	15	21	0	21	408	3	1	6	7	5	0	1008
12:45	5	499	6	4	11	16	17	0	20	452	8	0	3	10	4	0	1055
Total	16	1939	35	14	54	61	71	0	75	1759	23	3	15	33	24	0	4122
Grand Total	27	3931	67	35	131	112	140	0	153	3597	36	6	31	61	35	0	8362
Apprch %	0.7	96.8	1.7	0.9	34.2	29.2	36.6	0	4	94.9	0.9	0.2	24.4	48	27.6	0	
Total %	0.3	47	0.8	0.4	1.6	1.3	1.7	0	1.8	43	0.4	0.1	0.4	0.7	0.4	0	

City: COSTA MESA
 N-S Direction: NEWPORT BOULEVARD
 E-W Direction: E. 16TH STREET

File Name : H2302005
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 2

Start Time	NEWPORT BOULEVARD Southbound					E. 16TH STREET Westbound					NEWPORT BOULEVARD Northbound					E. 16TH STREET Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:15																					
11:15	1	495	5	8	509	16	15	22	0	53	16	463	2	0	481	2	9	6	0	17	1060
11:30	5	472	7	6	490	19	11	17	0	47	21	424	4	0	449	2	5	2	0	9	995
11:45	3	544	11	3	561	26	10	17	0	53	22	503	4	0	529	7	3	2	0	12	1155
12:00	5	458	8	3	474	20	11	24	0	55	21	475	5	1	502	5	11	11	0	27	1058
Total Volume	14	1969	31	20	2034	81	47	80	0	208	80	1865	15	1	1961	16	28	21	0	65	4268
% App. Total	0.7	96.8	1.5	1		38.9	22.6	38.5	0		4.1	95.1	0.8	0.1		24.6	43.1	32.3	0		
PHF	.700	.905	.705	.625	.906	.779	.783	.833	.000	.945	.909	.927	.750	.250	.927	.571	.636	.477	.000	.602	.924



City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: INDUSTRIAL WAY

File Name : H2302015
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 1

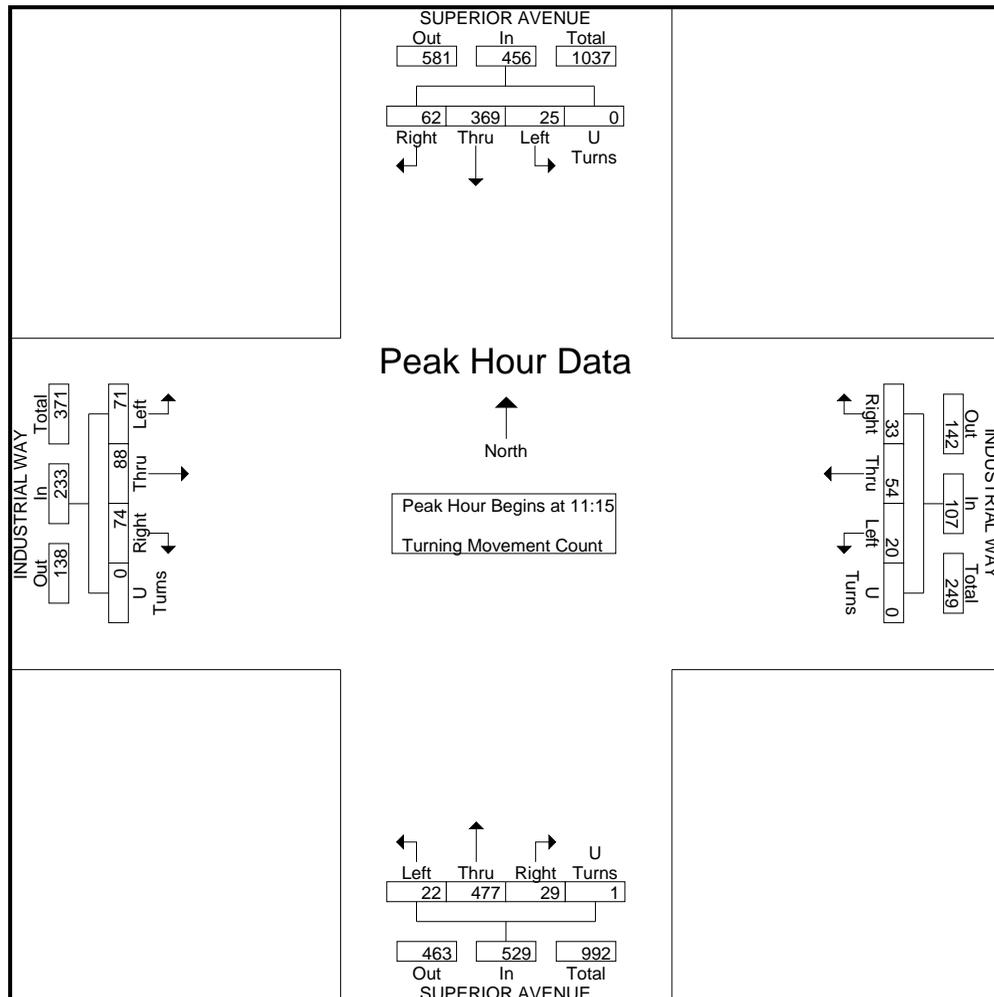
Groups Printed- Turning Movement Count

Start Time	SUPERIOR AVENUE Southbound				INDUSTRIAL WAY Westbound				SUPERIOR AVENUE Northbound				INDUSTRIAL WAY Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	17	97	6	2	5	6	1	0	6	110	5	0	8	21	22	0	306
11:15	17	96	9	0	12	13	9	0	7	121	4	0	15	17	17	0	337
11:30	20	98	3	0	10	12	1	0	6	116	6	0	13	16	20	0	321
11:45	13	84	6	0	2	13	7	0	8	104	5	1	27	34	14	0	318
Total	67	375	24	2	29	44	18	0	27	451	20	1	63	88	73	0	1282
12:00	12	91	7	0	9	16	3	0	8	136	7	0	19	21	20	0	349
12:15	10	104	8	0	7	9	6	0	5	115	5	0	15	19	10	0	313
12:30	23	96	6	0	8	16	6	0	10	105	7	0	16	14	14	0	321
12:45	14	84	6	0	7	22	4	0	4	94	4	1	9	16	16	0	281
Total	59	375	27	0	31	63	19	0	27	450	23	1	59	70	60	0	1264
Grand Total	126	750	51	2	60	107	37	0	54	901	43	2	122	158	133	0	2546
Apprch %	13.6	80.7	5.5	0.2	29.4	52.5	18.1	0	5.4	90.1	4.3	0.2	29.5	38.3	32.2	0	
Total %	4.9	29.5	2	0.1	2.4	4.2	1.5	0	2.1	35.4	1.7	0.1	4.8	6.2	5.2	0	

City: COSTA MESA
 N-S Direction: SUPERIOR AVENUE
 E-W Direction: INDUSTRIAL WAY

File Name : H2302015
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 2

Start Time	SUPERIOR AVENUE Southbound					INDUSTRIAL WAY Westbound					SUPERIOR AVENUE Northbound					INDUSTRIAL WAY Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:15																					
11:15	17	96	9	0	122	12	13	9	0	34	7	121	4	0	132	15	17	17	0	49	337
11:30	20	98	3	0	121	10	12	1	0	23	6	116	6	0	128	13	16	20	0	49	321
11:45	13	84	6	0	103	2	13	7	0	22	8	104	5	1	118	27	34	14	0	75	318
12:00	12	91	7	0	110	9	16	3	0	28	8	136	7	0	151	19	21	20	0	60	349
Total Volume	62	369	25	0	456	33	54	20	0	107	29	477	22	1	529	74	88	71	0	233	1325
% App. Total	13.6	80.9	5.5	0		30.8	50.5	18.7	0		5.5	90.2	4.2	0.2		31.8	37.8	30.5	0		
PHF	.775	.941	.694	.000	.934	.688	.844	.556	.000	.787	.906	.877	.786	.250	.876	.685	.647	.888	.000	.777	.949



City: COSTA MESA
 N-S Direction: OLD NEWPORT BOULEVARD
 E-W Direction: INDUSTRIAL WAY

File Name : H2302007
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 1

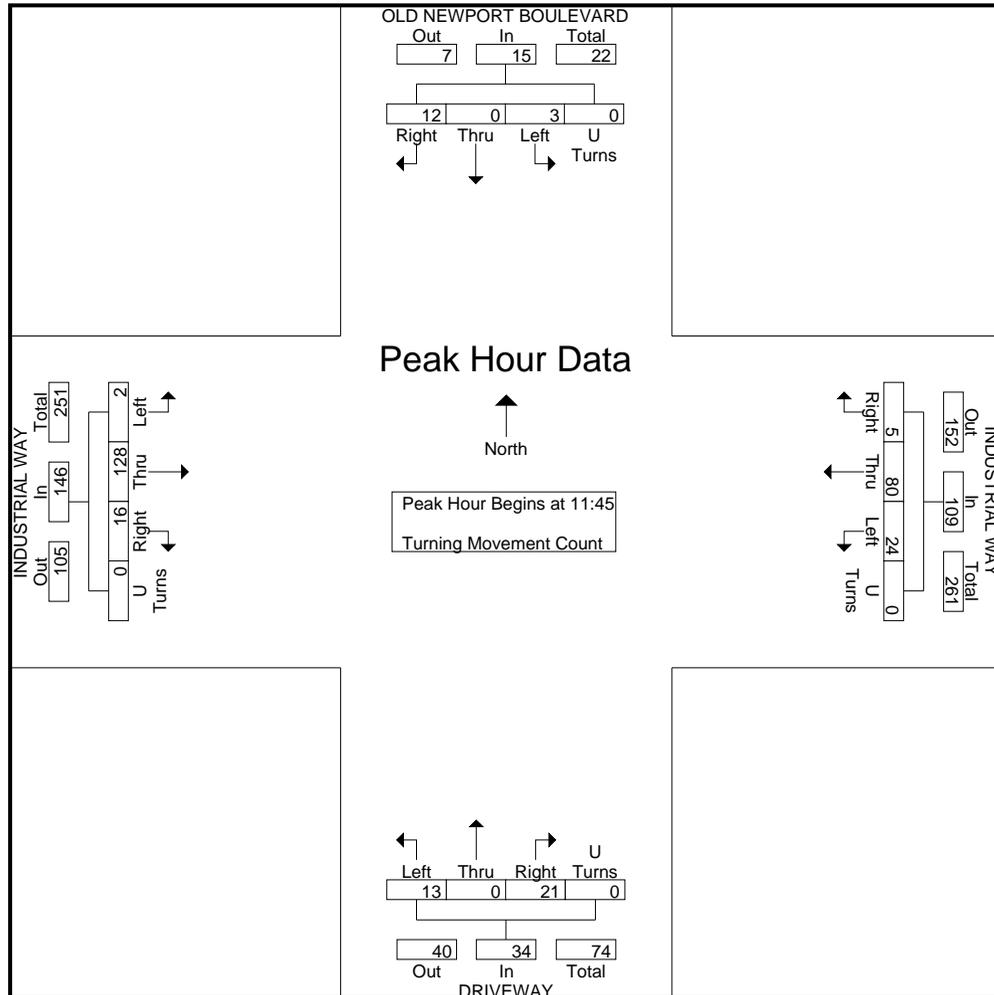
Groups Printed- Turning Movement Count

Start Time	OLD NEWPORT BOULEVARD Southbound				INDUSTRIAL WAY Westbound				DRIVEWAY Northbound				INDUSTRIAL WAY Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	1	0	2	0	2	12	5	0	3	0	0	0	1	28	0	0	54
11:15	3	0	1	0	4	27	3	0	4	0	3	0	3	30	1	0	79
11:30	0	0	4	0	2	17	3	0	5	0	2	0	2	26	0	0	61
11:45	1	0	0	0	0	16	10	0	3	0	6	0	4	45	0	0	85
Total	5	0	7	0	8	72	21	0	15	0	11	0	10	129	1	0	279
12:00	3	0	2	0	2	22	3	0	6	0	0	0	5	30	0	0	73
12:15	2	0	0	0	1	19	6	0	6	0	4	0	1	32	0	0	71
12:30	6	0	1	0	2	23	5	0	6	0	3	0	6	21	2	0	75
12:45	3	0	0	0	2	28	5	0	9	0	1	0	2	26	1	0	77
Total	14	0	3	0	7	92	19	0	27	0	8	0	14	109	3	0	296
Grand Total	19	0	10	0	15	164	40	0	42	0	19	0	24	238	4	0	575
Apprch %	65.5	0	34.5	0	6.8	74.9	18.3	0	68.9	0	31.1	0	9	89.5	1.5	0	
Total %	3.3	0	1.7	0	2.6	28.5	7	0	7.3	0	3.3	0	4.2	41.4	0.7	0	

City: COSTA MESA
 N-S Direction: OLD NEWPORT BOULEVARD
 E-W Direction: INDUSTRIAL WAY

File Name : H2302007
 Site Code : 0000000
 Start Date : 2/4/2023
 Page No : 2

Start Time	OLD NEWPORT BOULEVARD Southbound					INDUSTRIAL WAY Westbound					DRIVEWAY Northbound					INDUSTRIAL WAY Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45																					
11:45	1	0	0	0	1	0	16	10	0	26	3	0	6	0	9	4	45	0	0	49	85
12:00	3	0	2	0	5	2	22	3	0	27	6	0	0	0	6	5	30	0	0	35	73
12:15	2	0	0	0	2	1	19	6	0	26	6	0	4	0	10	1	32	0	0	33	71
12:30	6	0	1	0	7	2	23	5	0	30	6	0	3	0	9	6	21	2	0	29	75
Total Volume	12	0	3	0	15	5	80	24	0	109	21	0	13	0	34	16	128	2	0	146	304
% App. Total	80	0	20	0		4.6	73.4	22	0		61.8	0	38.2	0		11	87.7	1.4	0		
PHF	.500	.000	.375	.000	.536	.625	.870	.600	.000	.908	.875	.000	.542	.000	.850	.667	.711	.250	.000	.745	.894



City: COSTA MESA
 N-S Direction: NEWPORT BOULEVARD
 E-W Direction: INDUSTRIAL WAY

File Name : H2302009
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 1

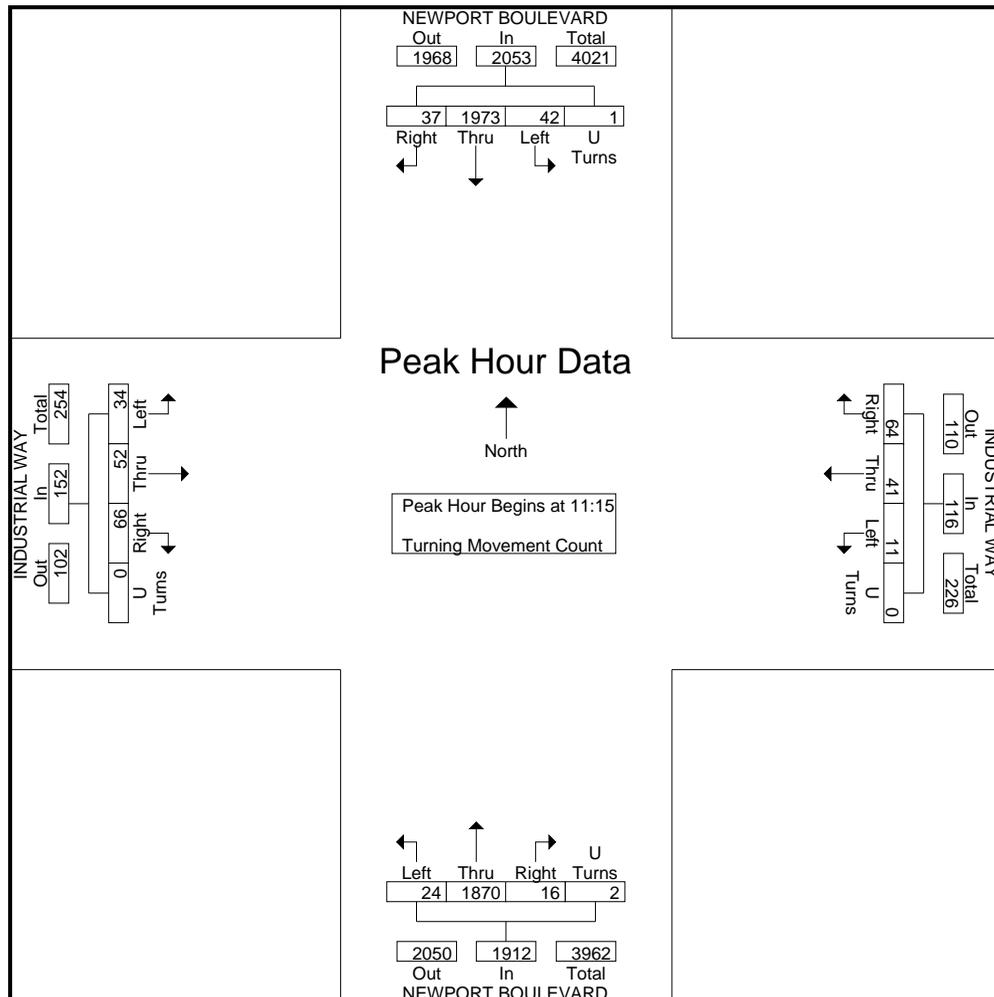
Groups Printed- Turning Movement Count

Start Time	NEWPORT BOULEVARD Southbound				INDUSTRIAL WAY Westbound				NEWPORT BOULEVARD Northbound				INDUSTRIAL WAY Eastbound				Int. Total
	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	Right	Thru	Left	U Turns	
11:00	6	507	7	0	22	6	1	0	1	445	8	1	15	7	12	0	1038
11:15	13	479	19	1	21	7	2	0	6	444	10	1	16	11	10	0	1040
11:30	7	481	7	0	15	9	2	0	4	463	8	0	14	11	4	0	1025
11:45	8	527	10	0	17	15	3	0	2	464	3	0	19	19	12	0	1099
Total	34	1994	43	1	75	37	8	0	13	1816	29	2	64	48	38	0	4202
12:00	9	486	6	0	11	10	4	0	4	499	3	1	17	11	8	0	1069
12:15	8	477	19	0	18	17	2	0	7	421	8	1	17	11	12	0	1018
12:30	8	491	10	0	14	13	2	0	1	418	4	0	12	12	12	0	997
12:45	9	492	11	0	16	16	2	0	0	430	8	0	8	12	7	0	1011
Total	34	1946	46	0	59	56	10	0	12	1768	23	2	54	46	39	0	4095
Grand Total	68	3940	89	1	134	93	18	0	25	3584	52	4	118	94	77	0	8297
Apprch %	1.7	96.1	2.2	0	54.7	38	7.3	0	0.7	97.8	1.4	0.1	40.8	32.5	26.6	0	
Total %	0.8	47.5	1.1	0	1.6	1.1	0.2	0	0.3	43.2	0.6	0	1.4	1.1	0.9	0	

City: COSTA MESA
 N-S Direction: NEWPORT BOULEVARD
 E-W Direction: INDUSTRIAL WAY

File Name : H2302009
 Site Code : 00000000
 Start Date : 2/4/2023
 Page No : 2

Start Time	NEWPORT BOULEVARD Southbound					INDUSTRIAL WAY Westbound					NEWPORT BOULEVARD Northbound					INDUSTRIAL WAY Eastbound					Int. Total
	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	Right	Thru	Left	U Turns	App. Total	
Peak Hour Analysis From 11:00 to 12:45 - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:15																					
11:15	13	479	19	1	512	21	7	2	0	30	6	444	10	1	461	16	11	10	0	37	1040
11:30	7	481	7	0	495	15	9	2	0	26	4	463	8	0	475	14	11	4	0	29	1025
11:45	8	527	10	0	545	17	15	3	0	35	2	464	3	0	469	19	19	12	0	50	1099
12:00	9	486	6	0	501	11	10	4	0	25	4	499	3	1	507	17	11	8	0	36	1069
Total Volume	37	1973	42	1	2053	64	41	11	0	116	16	1870	24	2	1912	66	52	34	0	152	4233
% App. Total	1.8	96.1	2	0		55.2	35.3	9.5	0		0.8	97.8	1.3	0.1		43.4	34.2	22.4	0		
PHF	.712	.936	.553	.250	.942	.762	.683	.688	.000	.829	.667	.937	.600	.500	.943	.868	.684	.708	.000	.760	.963



Appendix C LOS WORKSHEETS



EXISTING CONDITIONS

MID-DAY

Existing Conditions - Mid-Day
1: Superior Ave & 17th St

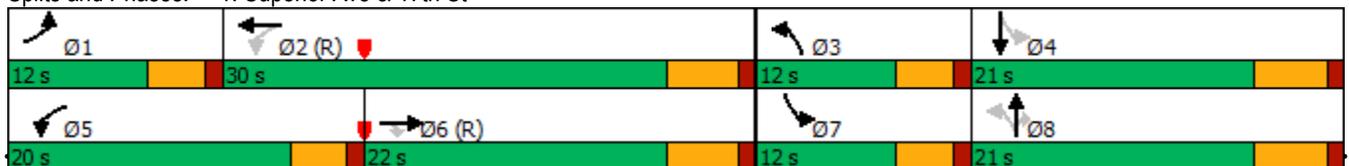
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	53	585	73	216	457	72	109	156	523	101	316	98
Future Volume (vph)	53	585	73	216	457	72	109	156	523	101	316	98
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		250	0		0	80		0	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3468	0	1770	1623	1504	1770	3412	0
Flt Permitted	0.950			0.294			0.407			0.260		
Satd. Flow (perm)	1770	3539	1583	548	3468	0	758	1623	1504	484	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			214		25			75	333		50	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		556			357			606			247	
Travel Time (s)		10.8			8.1			11.8			4.8	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)									37%			
Lane Group Flow (vph)	54	591	74	218	535	0	110	353	333	102	418	0
Turn Type	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6	2			8		8	4		
Total Split (s)	12.0	22.0	22.0	20.0	30.0		12.0	21.0	21.0	12.0	21.0	
Total Lost Time (s)	4.2	5.1	5.1	4.2	5.1		4.2	5.1	5.1	4.2	5.1	
Act Effct Green (s)	6.3	26.5	26.5	41.0	33.6		21.8	15.2	15.2	22.2	15.4	
Actuated g/C Ratio	0.08	0.35	0.35	0.55	0.45		0.29	0.20	0.20	0.30	0.21	
v/c Ratio	0.36	0.47	0.11	0.48	0.34		0.35	0.91	0.58	0.39	0.56	
Control Delay	39.1	22.6	0.3	13.7	16.2		19.3	52.2	7.9	20.3	26.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	39.1	22.6	0.3	13.7	16.2		19.3	52.2	7.9	20.3	26.6	
LOS	D	C	A	B	B		B	D	A	C	C	
Approach Delay		21.5			15.5			29.1			25.3	
Approach LOS		C			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 28 (37%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay: 22.8 Intersection LOS: C
 Intersection Capacity Utilization 68.1% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: Superior Ave & 17th St



Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	34	47	721	18	52	643
Future Vol, veh/h	34	47	721	18	52	643
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	48	743	19	54	663

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1193	381	0	0	762
Stage 1	753	-	-	-	-
Stage 2	440	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	180	617	-	-	846
Stage 1	426	-	-	-	-
Stage 2	616	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	168	617	-	-	846
Mov Cap-2 Maneuver	298	-	-	-	-
Stage 1	426	-	-	-	-
Stage 2	577	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.5	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	426	846
HCM Lane V/C Ratio	-	-	0.196	0.063
HCM Control Delay (s)	-	-	15.5	9.5
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.7	0.2

Existing Conditions - Mid-Day
3: Old Newport Blvd (W) & E 16th St

HCM 6th TWSC
Synchro 11 Report

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	3	55	9	21	66	7	4	0	15	9	3	0
Future Vol, veh/h	3	55	9	21	66	7	4	0	15	9	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	60	10	23	73	8	4	0	16	10	3	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	81	0	0	70	0	0	196	198	65	202	199	77
Stage 1	-	-	-	-	-	-	71	71	-	123	123	-
Stage 2	-	-	-	-	-	-	125	127	-	79	76	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1517	-	-	1531	-	-	763	698	999	756	697	984
Stage 1	-	-	-	-	-	-	939	836	-	881	794	-
Stage 2	-	-	-	-	-	-	879	791	-	930	832	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1517	-	-	1531	-	-	750	685	999	733	684	984
Mov Cap-2 Maneuver	-	-	-	-	-	-	750	685	-	733	684	-
Stage 1	-	-	-	-	-	-	937	834	-	879	781	-
Stage 2	-	-	-	-	-	-	861	778	-	913	830	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			1.7			8.9			10.1		
HCM LOS							A			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	934	1517	-	-	1531	-	-	720
HCM Lane V/C Ratio	0.022	0.002	-	-	0.015	-	-	0.018
HCM Control Delay (s)	8.9	7.4	-	-	7.4	0	-	10.1
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Existing Conditions - Mid-Day
4: Newport Blvd & E 16th St

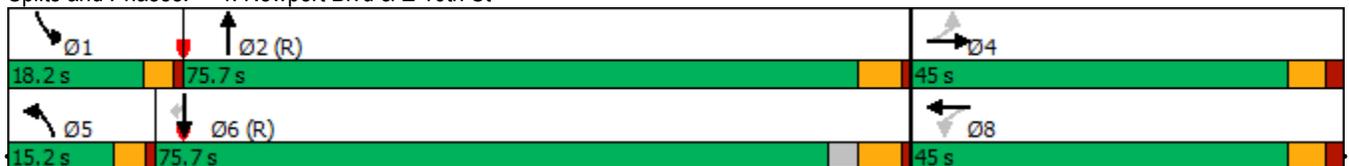
Lanes, Volumes, Timings
Synchro 11 Report

	↖	→	↘	↙	←	↖	↙	↑	↘	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↙	↕↕↕		↙	↕↕↕	↙
Traffic Volume (vph)	31	23	12	67	37	76	31	1730	86	80	1717	28
Future Volume (vph)	31	23	12	67	37	76	31	1730	86	80	1717	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	95		0	85		55
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1776	0	0	1725	0	1770	5050	0	1770	5085	1583
Flt Permitted		0.675			0.858		0.950			0.950		
Satd. Flow (perm)	0	1227	0	0	1507	0	1770	5050	0	1770	5085	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		8			26							57
Link Speed (mph)		25			25			50				50
Link Distance (ft)		160			479			1146				979
Travel Time (s)		4.4			13.1			15.6				13.4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	68	0	0	185	0	32	1873	0	82	1770	29
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Total Split (s)	45.0	45.0		45.0	45.0		15.2	75.7		18.2	75.7	75.7
Total Lost Time (s)		6.0			6.0		4.2	5.7		4.2	5.7	5.7
Act Effct Green (s)		19.6			19.6		9.2	92.0		11.4	99.5	99.5
Actuated g/C Ratio		0.14			0.14		0.07	0.66		0.08	0.72	0.72
v/c Ratio		0.38			0.79		0.28	0.56		0.57	0.49	0.03
Control Delay		51.6			71.3		68.0	14.5		76.3	10.7	0.5
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		51.6			71.3		68.0	14.5		76.3	10.7	0.5
LOS		D			E		E	B		E	B	A
Approach Delay		51.6			71.3			15.4				13.4
Approach LOS		D			E			B				B

Intersection Summary

Area Type: Other
 Cycle Length: 138.9
 Actuated Cycle Length: 138.9
 Offset: 102 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 17.6
 Intersection LOS: B
 Intersection Capacity Utilization 68.2%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 4: Newport Blvd & E 16th St



Existing Conditions - Mid-Day
5: Superior Ave & W 16th St/Industrial Way

Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	83	85	52	45	74	30	53	554	84	29	508	86
Future Volume (vph)	83	85	52	45	74	30	53	554	84	29	508	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		110	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1757	0	0	1785	0	1770	3539	1583	1770	3461	0
Flt Permitted	0.950				0.985		0.315			0.346		
Satd. Flow (perm)	1770	1757	0	0	1785	0	587	3539	1583	645	3461	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		31			10				64			
Link Speed (mph)		30			30			40				35
Link Distance (ft)		216			687			694				1138
Travel Time (s)		4.9			15.6			11.8				22.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	86	142	0	0	153	0	55	571	87	30	613	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	6	6		2	2			3			3	
Permitted Phases							3		3	3		
Total Split (s)	56.1	56.1		35.1	35.1		30.9	30.9	30.9	30.9	30.9	
Total Lost Time (s)	5.1	5.1			5.1		5.9	5.9	5.9	5.9	5.9	
Act Effct Green (s)	9.5	9.5			30.0		25.0	25.0	25.0	25.0	25.0	
Actuated g/C Ratio	0.12	0.12			0.37		0.31	0.31	0.31	0.31	0.31	
v/c Ratio	0.41	0.61			0.23		0.30	0.52	0.16	0.15	0.57	
Control Delay	38.8	37.3			18.0		28.0	25.4	9.6	23.8	26.3	
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	38.8	37.3			18.0		28.0	25.4	9.6	23.8	26.3	
LOS	D	D			B		C	C	A	C	C	
Approach Delay		37.9			18.0			23.7			26.2	
Approach LOS		D			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 122.1
 Actuated Cycle Length: 80.7
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.61
 Intersection Signal Delay: 26.0
 Intersection LOS: C
 Intersection Capacity Utilization 54.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Superior Ave & W 16th St/Industrial Way



Existing Conditions - Mid-Day
6: Industrial Way & Old Newport Blvd (W)

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	171	23	41	124	6	22	2	48	10	4	11
Future Vol, veh/h	8	171	23	41	124	6	22	2	48	10	4	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	180	24	43	131	6	23	2	51	11	4	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	137	0	0	204	0	0	436	431	192	455	440	134
Stage 1	-	-	-	-	-	-	208	208	-	220	220	-
Stage 2	-	-	-	-	-	-	228	223	-	235	220	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1447	-	-	1368	-	-	531	517	850	515	511	915
Stage 1	-	-	-	-	-	-	794	730	-	782	721	-
Stage 2	-	-	-	-	-	-	775	719	-	768	721	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1447	-	-	1368	-	-	505	496	850	468	491	915
Mov Cap-2 Maneuver	-	-	-	-	-	-	505	496	-	468	491	-
Stage 1	-	-	-	-	-	-	789	726	-	777	696	-
Stage 2	-	-	-	-	-	-	735	695	-	716	717	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			1.9			10.8			11.3		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	692	1447	-	-	1368	-	-	602
HCM Lane V/C Ratio	0.11	0.006	-	-	0.032	-	-	0.044
HCM Control Delay (s)	10.8	7.5	0	-	7.7	0	-	11.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.1

Existing Conditions - Mid-Day
7: Newport Blvd & Industrial Way

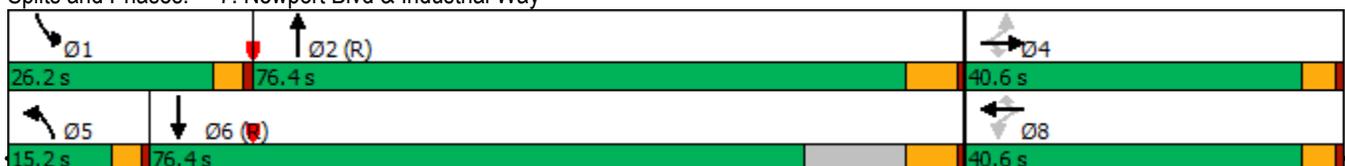
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	62	49	114	10	69	97	29	1650	14	111	1663	53
Future Volume (vph)	62	49	114	10	69	97	29	1650	14	111	1663	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	90		0	95		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1812	1583	1770	1863	1583	1770	5080	0	1770	5060	0
Flt Permitted		0.751		0.501			0.950			0.950		
Satd. Flow (perm)	0	1399	1583	933	1863	1583	1770	5080	0	1770	5060	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			119			101		1				5
Link Speed (mph)		30			30			50				50
Link Distance (ft)		175			191			846				1146
Travel Time (s)		4.0			4.3			11.5				15.6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	116	119	10	72	101	30	1734	0	116	1787	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Total Split (s)	40.6	40.6	40.6	40.6	40.6	40.6	15.2	76.4		26.2	76.4	
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	4.2	6.4		4.2	6.4	
Act Effct Green (s)		15.7	15.7	15.7	15.7	15.7	9.0	98.7		13.5	108.5	
Actuated g/C Ratio		0.11	0.11	0.11	0.11	0.11	0.06	0.69		0.09	0.76	
v/c Ratio		0.76	0.43	0.10	0.35	0.38	0.27	0.50		0.69	0.47	
Control Delay		90.1	13.7	56.6	62.3	13.9	70.4	12.0		83.6	8.1	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		90.1	13.7	56.6	62.3	13.9	70.4	12.0		83.6	8.1	
LOS		F	B	E	E	B	E	B		F	A	
Approach Delay		51.4			35.3			13.0			12.7	
Approach LOS		D			D			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 143.2
 Actuated Cycle Length: 143.2
 Offset: 90 (63%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 16.0
 Intersection LOS: B
 Intersection Capacity Utilization 66.2%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 7: Newport Blvd & Industrial Way



EXISTING CONDITIONS

PM PEAK HOUR

Existing Conditions - PM Peak Hour

Lanes, Volumes, Timings

1: Superior Ave & 17th St

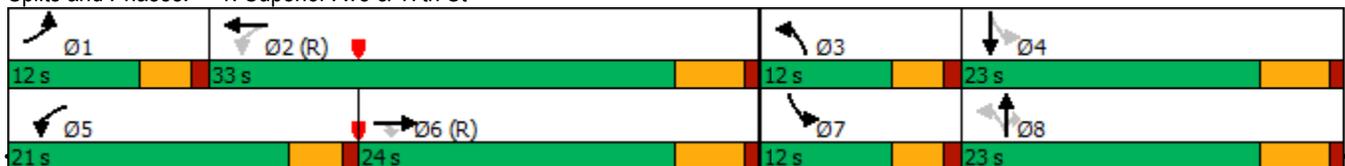
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	513	66	237	429	65	107	152	550	72	302	110
Future Volume (vph)	35	513	66	237	429	65	107	152	550	72	302	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		250	0		0	80		0	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3468	0	1770	1616	1504	1770	3398	0
Flt Permitted	0.950			0.306			0.371			0.223		
Satd. Flow (perm)	1770	3539	1583	570	3468	0	691	1616	1504	415	3398	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			200		23			80	371		60	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		556			357			606			247	
Travel Time (s)		10.8			8.1			11.8			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)									38%			
Lane Group Flow (vph)	38	558	72	258	537	0	116	392	371	78	448	0
Turn Type	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6	2			8		8	4		
Total Split (s)	12.0	24.0	24.0	21.0	33.0		12.0	23.0	23.0	12.0	23.0	
Total Lost Time (s)	4.2	5.1	5.1	4.2	5.1		4.2	5.1	5.1	4.2	5.1	
Act Effct Green (s)	6.0	27.5	27.5	43.6	36.2		24.8	18.1	18.1	24.4	17.9	
Actuated g/C Ratio	0.08	0.34	0.34	0.54	0.45		0.31	0.23	0.23	0.30	0.22	
v/c Ratio	0.29	0.46	0.11	0.54	0.34		0.38	0.92	0.59	0.33	0.56	
Control Delay	40.1	24.1	0.3	15.3	16.5		20.6	53.7	7.5	20.0	26.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	40.1	24.1	0.3	15.3	16.5		20.6	53.7	7.5	20.0	26.6	
LOS	D	C	A	B	B		C	D	A	B	C	
Approach Delay		22.5			16.1			29.8			25.6	
Approach LOS		C			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 28 (35%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 23.5
 Intersection LOS: C
 Intersection Capacity Utilization 66.2%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: Superior Ave & 17th St



Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕↔		↕	↕↕
Traffic Vol, veh/h	22	40	752	15	26	579
Future Vol, veh/h	22	40	752	15	26	579
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	48	895	18	31	689

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1311	457	0	0	913
Stage 1	904	-	-	-	-
Stage 2	407	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	150	551	-	-	742
Stage 1	355	-	-	-	-
Stage 2	641	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	144	551	-	-	742
Mov Cap-2 Maneuver	264	-	-	-	-
Stage 1	355	-	-	-	-
Stage 2	614	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	398	742
HCM Lane V/C Ratio	-	-	0.185	0.042
HCM Control Delay (s)	-	-	16.1	10.1
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.7	0.1

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	1	44	1	13	64	3	2	0	10	8	1	11
Future Vol, veh/h	1	44	1	13	64	3	2	0	10	8	1	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	61	1	18	89	4	3	0	14	11	1	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	93	0	0	62	0	0	199	193	62	198	191	91
Stage 1	-	-	-	-	-	-	64	64	-	127	127	-
Stage 2	-	-	-	-	-	-	135	129	-	71	64	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1501	-	-	1541	-	-	760	702	1003	761	704	967
Stage 1	-	-	-	-	-	-	947	842	-	877	791	-
Stage 2	-	-	-	-	-	-	868	789	-	939	842	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1501	-	-	1541	-	-	739	693	1003	743	695	967
Mov Cap-2 Maneuver	-	-	-	-	-	-	739	693	-	743	695	-
Stage 1	-	-	-	-	-	-	946	841	-	876	782	-
Stage 2	-	-	-	-	-	-	843	780	-	925	841	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			1.2			8.9			9.4		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	947	1501	-	-	1541	-	-	848
HCM Lane V/C Ratio	0.018	0.001	-	-	0.012	-	-	0.033
HCM Control Delay (s)	8.9	7.4	-	-	7.4	0	-	9.4
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Existing Conditions - PM Peak Hour
4: Newport Blvd & E 16th St

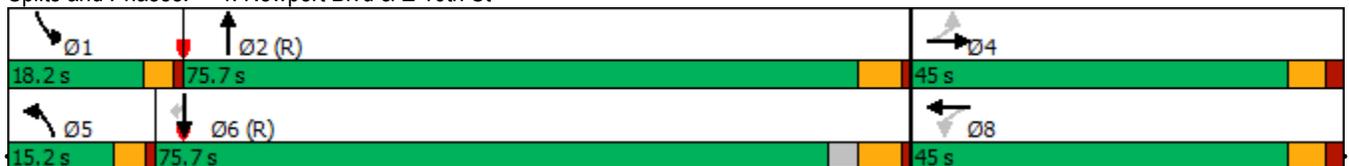
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	32	19	85	47	53	17	1689	74	49	1718	12
Future Volume (vph)	16	32	19	85	47	53	17	1689	74	49	1718	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	95		0	85		55
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1770	0	0	1751	0	1770	5055	0	1770	5085	1583
Flt Permitted		0.872			0.817		0.950			0.950		
Satd. Flow (perm)	0	1563	0	0	1463	0	1770	5055	0	1770	5085	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		14			15							57
Link Speed (mph)		25			25			50				50
Link Distance (ft)		160			479			1146				979
Travel Time (s)		4.4			13.1			15.6				13.4
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	1.00	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	0	0	209	0	17	1981	0	55	1930	13
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Total Split (s)	45.0	45.0		45.0	45.0		15.2	75.7		18.2	75.7	75.7
Total Lost Time (s)		6.0			6.0		4.2	5.7		4.2	5.7	5.7
Act Effct Green (s)		23.1			23.1		9.0	92.6		9.9	98.8	98.8
Actuated g/C Ratio		0.17			0.17		0.06	0.67		0.07	0.71	0.71
v/c Ratio		0.28			0.82		0.15	0.59		0.44	0.53	0.01
Control Delay		41.3			75.3		64.6	15.3		72.4	11.8	0.0
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		41.3			75.3		64.6	15.3		72.4	11.8	0.0
LOS		D			E		E	B		E	B	A
Approach Delay		41.3			75.3			15.7				13.4
Approach LOS		D			E			B				B

Intersection Summary

Area Type: Other
 Cycle Length: 138.9
 Actuated Cycle Length: 138.9
 Offset: 98 (71%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 18.0
 Intersection LOS: B
 Intersection Capacity Utilization 67.6%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 4: Newport Blvd & E 16th St



Existing Conditions - PM Peak Hour
5: Superior Ave & W 16th St/Industrial Way

Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	85	66	24	76	21	44	598	57	26	477	54
Future Volume (vph)	80	85	66	24	76	21	44	598	57	26	477	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		110	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1742	0	0	1800	0	1770	3539	1583	1770	3486	0
Flt Permitted	0.950				0.990		0.284			0.230		
Satd. Flow (perm)	1770	1742	0	0	1800	0	529	3539	1583	428	3486	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		39			8				64			
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		216			687			694			1138	
Travel Time (s)		4.9			15.6			11.8			22.2	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	184	0	0	148	0	54	729	70	32	648	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	6	6		2	2			3			3	
Permitted Phases							3		3	3		
Total Split (s)	56.1	56.1		35.1	35.1		30.9	30.9	30.9	30.9	30.9	
Total Lost Time (s)	5.1	5.1			5.1		5.9	5.9	5.9	5.9	5.9	
Act Effct Green (s)	11.3	11.3			30.0		25.0	25.0	25.0	25.0	25.0	
Actuated g/C Ratio	0.14	0.14			0.36		0.30	0.30	0.30	0.30	0.30	
v/c Ratio	0.40	0.68			0.22		0.34	0.68	0.13	0.25	0.61	
Control Delay	37.2	39.2			19.1		30.9	29.6	8.1	29.2	28.1	
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	37.2	39.2			19.1		30.9	29.6	8.1	29.2	28.1	
LOS	D	D			B		C	C	A	C	C	
Approach Delay		38.5			19.1			27.9			28.2	
Approach LOS		D			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 122.1
 Actuated Cycle Length: 82.5
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 28.9
 Intersection Capacity Utilization 53.3%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service A

Splits and Phases: 5: Superior Ave & W 16th St/Industrial Way



Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	159	9	16	107	7	7	0	14	6	0	12
Future Vol, veh/h	1	159	9	16	107	7	7	0	14	6	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	209	12	21	141	9	9	0	18	8	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	150	0	0	221	0	0	413	409	215	414	411	146
Stage 1	-	-	-	-	-	-	217	217	-	188	188	-
Stage 2	-	-	-	-	-	-	196	192	-	226	223	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1431	-	-	1348	-	-	549	532	825	549	531	901
Stage 1	-	-	-	-	-	-	785	723	-	814	745	-
Stage 2	-	-	-	-	-	-	806	742	-	777	719	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1431	-	-	1348	-	-	532	522	825	529	521	901
Mov Cap-2 Maneuver	-	-	-	-	-	-	532	522	-	529	521	-
Stage 1	-	-	-	-	-	-	784	722	-	813	732	-
Stage 2	-	-	-	-	-	-	778	729	-	759	718	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.9	10.4	10.1
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	697	1431	-	-	1348	-	-	730
HCM Lane V/C Ratio	0.04	0.001	-	-	0.016	-	-	0.032
HCM Control Delay (s)	10.4	7.5	0	-	7.7	0	-	10.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Existing Conditions - PM Peak Hour
7: Newport Blvd & Industrial Way

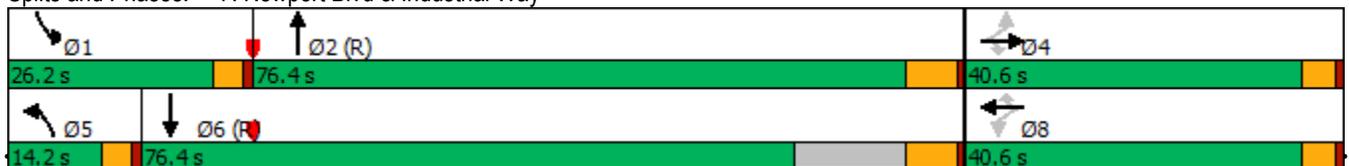
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	56	62	12	68	109	28	1610	8	62	1717	43
Future Volume (vph)	56	56	62	12	68	109	28	1610	8	62	1717	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	90		0	95		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1818	1583	1770	1863	1583	1770	5080	0	1770	5065	0
Flt Permitted		0.747		0.468			0.950			0.950		
Satd. Flow (perm)	0	1391	1583	872	1863	1583	1770	5080	0	1770	5065	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90			125		1				4
Link Speed (mph)		30			30			50				50
Link Distance (ft)		175			191			846				1146
Travel Time (s)		4.0			4.3			11.5				15.6
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	128	71	14	78	125	32	1860	0	71	2023	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Total Split (s)	40.6	40.6	40.6	40.6	40.6	40.6	14.2	76.4		26.2	76.4	
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	4.2	6.4		4.2	6.4	
Act Effct Green (s)		16.6	16.6	16.6	16.6	16.6	9.1	103.5		10.6	107.6	
Actuated g/C Ratio		0.12	0.12	0.12	0.12	0.12	0.06	0.72		0.07	0.75	
v/c Ratio		0.80	0.27	0.14	0.36	0.43	0.29	0.51		0.54	0.53	
Control Delay		93.3	8.0	57.2	61.6	13.1	70.8	10.6		79.0	9.3	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		93.3	8.0	57.2	61.6	13.1	70.8	10.6		79.0	9.3	
LOS		F	A	E	E	B	E	B		E	A	
Approach Delay		62.9			33.4			11.6			11.6	
Approach LOS		E			C			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 143.2
 Actuated Cycle Length: 143.2
 Offset: 88 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 15.0
 Intersection LOS: B
 Intersection Capacity Utilization 67.0%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 7: Newport Blvd & Industrial Way



EXISTING CONDITIONS MID-DAY (SATURDAY)

Existing Conditions - Mid-Day (Saturday)

Lanes, Volumes, Timings

1: Superior Ave & 17th St

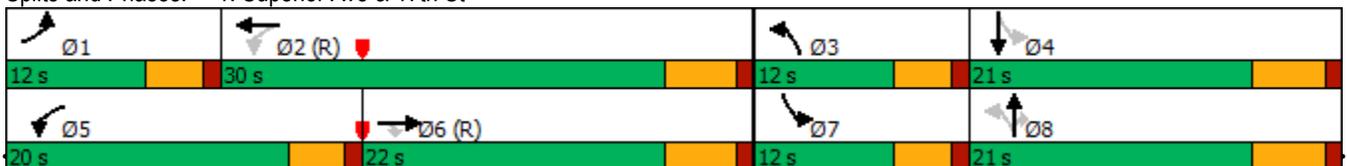
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	514	61	220	426	84	77	118	440	119	193	120
Future Volume (vph)	27	514	61	220	426	84	77	118	440	119	193	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		250	0		0	80		0	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3451	0	1770	1612	1504	1770	3337	0
Flt Permitted	0.950			0.324			0.506			0.284		
Satd. Flow (perm)	1770	3539	1583	604	3451	0	943	1612	1504	529	3337	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			214		33			88	289		129	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		556			357			606			247	
Travel Time (s)		10.8			8.1			11.8			4.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)									39%			
Lane Group Flow (vph)	29	553	66	237	548	0	83	311	289	128	337	0
Turn Type	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6	2			8		8	4		
Total Split (s)	12.0	22.0	22.0	20.0	30.0		12.0	21.0	21.0	12.0	21.0	
Total Lost Time (s)	4.2	5.1	5.1	4.2	5.1		4.2	5.1	5.1	4.2	5.1	
Act Effct Green (s)	5.7	27.5	27.5	42.6	37.4		20.2	13.6	13.6	21.0	14.1	
Actuated g/C Ratio	0.08	0.37	0.37	0.57	0.50		0.27	0.18	0.18	0.28	0.19	
v/c Ratio	0.22	0.43	0.09	0.47	0.32		0.25	0.85	0.57	0.48	0.46	
Control Delay	36.1	21.9	0.3	13.2	13.8		17.7	43.3	8.3	23.1	18.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	36.1	21.9	0.3	13.2	13.8		17.7	43.3	8.3	23.1	18.0	
LOS	D	C	A	B	B		B	D	A	C	B	
Approach Delay		20.3			13.6			25.4			19.4	
Approach LOS		C			B			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 9.6 (13%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 19.5 Intersection LOS: B
 Intersection Capacity Utilization 63.7% ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: Superior Ave & 17th St



Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕↔		↕	↕↕
Traffic Vol, veh/h	31	43	594	18	31	460
Future Vol, veh/h	31	43	594	18	31	460
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	100	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	43	646	20	34	500

Major/Minor	Minor1	Major1	Major2			
Conflicting Flow All	974	333	0	0	666	0
Stage 1	656	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	249	663	-	-	919	-
Stage 1	478	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	240	663	-	-	919	-
Mov Cap-2 Maneuver	361	-	-	-	-	-
Stage 1	478	-	-	-	-	-
Stage 2	684	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.8	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	485	919
HCM Lane V/C Ratio	-	-	0.158	0.037
HCM Control Delay (s)	-	-	13.8	9.1
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1

Existing Conditions - Mid-Day (Saturday)
 3: Old Newport Blvd (W) & E 16th St

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻			↻			↻	
Traffic Vol, veh/h	3	42	6	16	73	8	2	0	19	9	0	3
Future Vol, veh/h	3	42	6	16	73	8	2	0	19	9	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	45	6	17	78	9	2	0	20	10	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	87	0	0	51	0	0	172	175	48	181	174	83
Stage 1	-	-	-	-	-	-	54	54	-	117	117	-
Stage 2	-	-	-	-	-	-	118	121	-	64	57	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1509	-	-	1555	-	-	791	718	1021	781	719	976
Stage 1	-	-	-	-	-	-	958	850	-	888	799	-
Stage 2	-	-	-	-	-	-	887	796	-	947	847	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1509	-	-	1555	-	-	781	709	1021	758	710	976
Mov Cap-2 Maneuver	-	-	-	-	-	-	781	709	-	758	710	-
Stage 1	-	-	-	-	-	-	956	848	-	886	790	-
Stage 2	-	-	-	-	-	-	874	787	-	926	845	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			1.2			8.7			9.6		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	992	1509	-	-	1555	-	-	803
HCM Lane V/C Ratio	0.023	0.002	-	-	0.011	-	-	0.016
HCM Control Delay (s)	8.7	7.4	-	-	7.3	0	-	9.6
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Existing Conditions - Mid-Day (Saturday)

Lanes, Volumes, Timings

4: Newport Blvd & E 16th St

Synchro 11 Report

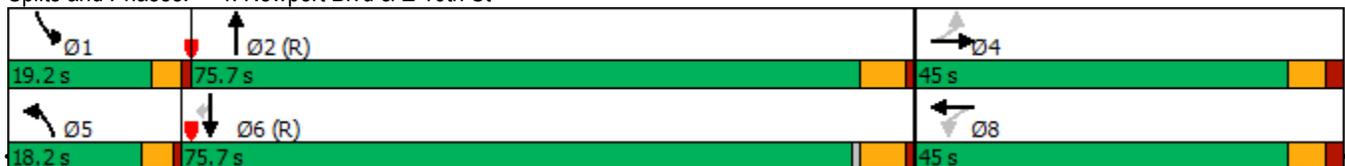


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↕↕		↕	↕↕↕	↕
Traffic Volume (vph)	21	28	16	80	47	81	16	1865	80	51	1969	14
Future Volume (vph)	21	28	16	80	47	81	16	1865	80	51	1969	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	95		0	85		55
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1772	0	0	1731	0	1770	5055	0	1770	5085	1583
Flt Permitted		0.790			0.851		0.950			0.950		
Satd. Flow (perm)	0	1423	0	0	1501	0	1770	5055	0	1770	5085	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		11			23							56
Link Speed (mph)		25			25			50			50	
Link Distance (ft)		160			479			1146			979	
Travel Time (s)		4.4			13.1			15.6			13.4	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	70	0	0	226	0	17	2114	0	55	2140	15
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Total Split (s)	45.0	45.0		45.0	45.0		18.2	75.7		19.2	75.7	75.7
Total Lost Time (s)		6.0			6.0		4.2	5.7		4.2	5.7	5.7
Act Effct Green (s)		23.8			23.8		9.0	92.8		10.0	99.1	99.1
Actuated g/C Ratio		0.17			0.17		0.06	0.66		0.07	0.71	0.71
v/c Ratio		0.28			0.82		0.15	0.63		0.44	0.59	0.01
Control Delay		42.9			72.8		65.2	16.6		73.1	13.1	0.0
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		42.9			72.8		65.2	16.6		73.1	13.1	0.0
LOS		D			E		E	B		E	B	A
Approach Delay		42.9			72.8			16.9			14.5	
Approach LOS		D			E			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 139.9
 Actuated Cycle Length: 139.9
 Offset: 103 (74%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 18.9
 Intersection LOS: B
 Intersection Capacity Utilization 68.9%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 4: Newport Blvd & E 16th St



Existing Conditions - Mid-Day (Saturday)
5: Superior Ave & W 16th St/Industrial Way

Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	88	74	20	54	33	23	477	29	25	369	62
Future Volume (vph)	71	88	74	20	54	33	23	477	29	25	369	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		110	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1736	0	0	1768	0	1770	3539	1583	1770	3461	0
Flt Permitted	0.950				0.991		0.437			0.396		
Satd. Flow (perm)	1770	1736	0	0	1768	0	814	3539	1583	738	3461	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		42			18				64			
Link Speed (mph)		30			30			40				35
Link Distance (ft)		216			687			694				1138
Travel Time (s)		4.9			15.6			11.8				22.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	75	171	0	0	113	0	24	502	31	26	453	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	6	6		2	2			3				3
Permitted Phases							3		3	3		
Total Split (s)	56.1	56.1		35.1	35.1		30.9	30.9	30.9	30.9		30.9
Total Lost Time (s)	5.1	5.1			5.1		5.9	5.9	5.9	5.9		5.9
Act Effct Green (s)	10.5	10.5			30.0		25.0	25.0	25.0	25.0		25.0
Actuated g/C Ratio	0.13	0.13			0.37		0.31	0.31	0.31	0.31		0.31
v/c Ratio	0.33	0.66			0.17		0.10	0.46	0.06	0.12		0.43
Control Delay	36.0	37.8			16.3		23.0	25.1	1.9	23.5		24.7
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Delay	36.0	37.8			16.3		23.0	25.1	1.9	23.5		24.7
LOS	D	D			B		C	C	A	C		C
Approach Delay		37.2			16.3			23.8				24.6
Approach LOS		D			B			C				C

Intersection Summary

Area Type: Other
 Cycle Length: 122.1
 Actuated Cycle Length: 81.7
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 25.8
 Intersection LOS: C
 Intersection Capacity Utilization 49.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Superior Ave & W 16th St/Industrial Way



Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	128	16	24	80	5	13	0	21	3	0	12
Future Vol, veh/h	2	128	16	24	80	5	13	0	21	3	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	144	18	27	90	6	15	0	24	3	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	96	0	0	162	0	0	311	307	153	316	313	93
Stage 1	-	-	-	-	-	-	157	157	-	147	147	-
Stage 2	-	-	-	-	-	-	154	150	-	169	166	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1498	-	-	1417	-	-	642	607	893	637	602	964
Stage 1	-	-	-	-	-	-	845	768	-	856	775	-
Stage 2	-	-	-	-	-	-	848	773	-	833	761	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1498	-	-	1417	-	-	623	594	893	610	589	964
Mov Cap-2 Maneuver	-	-	-	-	-	-	623	594	-	610	589	-
Stage 1	-	-	-	-	-	-	844	767	-	855	760	-
Stage 2	-	-	-	-	-	-	819	758	-	810	760	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			1.7			9.9			9.3		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	766	1498	-	-	1417	-	-	864
HCM Lane V/C Ratio	0.05	0.002	-	-	0.019	-	-	0.02
HCM Control Delay (s)	9.9	7.4	0	-	7.6	0	-	9.3
HCM Lane LOS	A	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.1

Existing Conditions - Mid-Day (Saturday)
7: Newport Blvd & Industrial Way

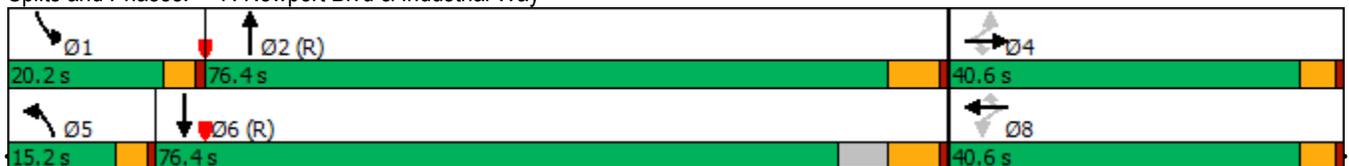
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	52	66	11	41	64	26	1870	16	43	1973	37
Future Volume (vph)	34	52	66	11	41	64	26	1870	16	43	1973	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	90		0	95		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1827	1583	1770	1863	1583	1770	5080	0	1770	5070	0
Flt Permitted		0.852		0.594			0.950			0.950		
Satd. Flow (perm)	0	1587	1583	1106	1863	1583	1770	5080	0	1770	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			94		1				3
Link Speed (mph)		30			30			50				50
Link Distance (ft)		175			191			846				1146
Travel Time (s)		4.0			4.3			11.5				15.6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	69	11	43	67	27	1965	0	45	2094	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Total Split (s)	40.6	40.6	40.6	40.6	40.6	40.6	15.2	76.4		20.2	76.4	
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	4.2	6.4		4.2	6.4	
Act Effct Green (s)		12.5	12.5	12.5	12.5	12.5	9.0	102.7		9.4	105.7	
Actuated g/C Ratio		0.09	0.09	0.09	0.09	0.09	0.07	0.75		0.07	0.77	
v/c Ratio		0.62	0.30	0.11	0.25	0.29	0.23	0.52		0.37	0.54	
Control Delay		77.8	8.0	57.8	60.6	7.5	66.0	8.4		70.1	7.7	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		77.8	8.0	57.8	60.6	7.5	66.0	8.4		70.1	7.7	
LOS		E	A	E	E	A	E	A		E	A	
Approach Delay		47.3			30.9			9.2			9.0	
Approach LOS		D			C			A			A	

Intersection Summary

Area Type: Other
 Cycle Length: 137.2
 Actuated Cycle Length: 137.2
 Offset: 102 (74%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.62
 Intersection Signal Delay: 11.1 Intersection LOS: B
 Intersection Capacity Utilization 68.6% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 7: Newport Blvd & Industrial Way



**CUMULATIVE CONDITIONS
WITHOUT PROJECT
MID-DAY**

Cumulative Conditions without Project - Mid-Day
 1: Superior Ave & 17th St

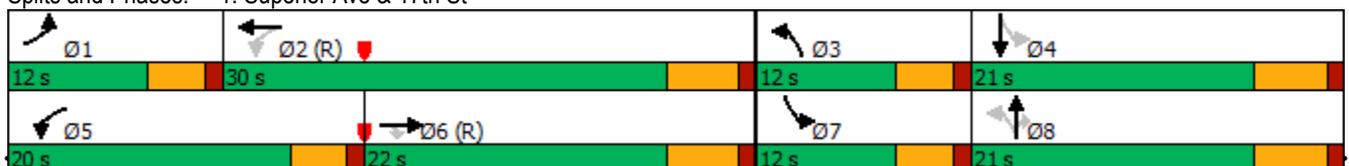
Lanes, Volumes, Timings
 Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	591	74	218	462	73	110	158	528	102	319	99
Future Volume (vph)	54	591	74	218	462	73	110	158	528	102	319	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		250	0		0	80		0	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3465	0	1770	1623	1504	1770	3412	0
Flt Permitted	0.950			0.288			0.405			0.256		
Satd. Flow (perm)	1770	3539	1583	536	3465	0	754	1623	1504	477	3412	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			214		25			75	336		50	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		556			357			606			247	
Travel Time (s)		10.8			8.1			11.8			4.8	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)									37%			
Lane Group Flow (vph)	55	597	75	220	541	0	111	357	336	103	422	0
Turn Type	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6	2			8		8	4		
Total Split (s)	12.0	22.0	22.0	20.0	30.0		12.0	21.0	21.0	12.0	21.0	
Total Lost Time (s)	4.2	5.1	5.1	4.2	5.1		4.2	5.1	5.1	4.2	5.1	
Act Effct Green (s)	6.3	26.3	26.3	40.9	33.4		22.0	15.4	15.4	22.3	15.5	
Actuated g/C Ratio	0.08	0.35	0.35	0.55	0.45		0.29	0.21	0.21	0.30	0.21	
v/c Ratio	0.37	0.48	0.11	0.49	0.35		0.36	0.91	0.58	0.40	0.57	
Control Delay	39.3	22.8	0.3	14.0	16.3		19.3	52.8	7.9	20.4	26.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	39.3	22.8	0.3	14.0	16.3		19.3	52.8	7.9	20.4	26.5	
LOS	D	C	A	B	B		B	D	A	C	C	
Approach Delay		21.7			15.6			29.4			25.3	
Approach LOS		C			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 28 (37%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay: 23.0 Intersection LOS: C
 Intersection Capacity Utilization 68.7% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: Superior Ave & 17th St



Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕↔		↔	↕↕
Traffic Vol, veh/h	34	47	728	18	53	649
Future Vol, veh/h	34	47	728	18	53	649
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	48	751	19	55	669

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1206	385	0	0	770
Stage 1	761	-	-	-	-
Stage 2	445	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	176	613	-	-	840
Stage 1	422	-	-	-	-
Stage 2	613	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	165	613	-	-	840
Mov Cap-2 Maneuver	295	-	-	-	-
Stage 1	422	-	-	-	-
Stage 2	573	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.6	0	0.7
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	422	840
HCM Lane V/C Ratio	-	-	0.198	0.065
HCM Control Delay (s)	-	-	15.6	9.6
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.7	0.2

Cumulative Conditions Without Project - Mid-Day
 3: Old Newport Blvd (W) & E 16th St

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻			↻			↻	
Traffic Vol, veh/h	3	56	9	21	67	7	4	0	15	9	3	0
Future Vol, veh/h	3	56	9	21	67	7	4	0	15	9	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	62	10	23	74	8	4	0	16	10	3	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	82	0	0	72	0	0	199	201	67	205	202	78
Stage 1	-	-	-	-	-	-	73	73	-	124	124	-
Stage 2	-	-	-	-	-	-	126	128	-	81	78	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1515	-	-	1528	-	-	760	695	997	753	694	983
Stage 1	-	-	-	-	-	-	937	834	-	880	793	-
Stage 2	-	-	-	-	-	-	878	790	-	927	830	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1515	-	-	1528	-	-	747	682	997	730	682	983
Mov Cap-2 Maneuver	-	-	-	-	-	-	747	682	-	730	682	-
Stage 1	-	-	-	-	-	-	935	832	-	878	780	-
Stage 2	-	-	-	-	-	-	860	777	-	910	828	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			1.6			9			10.1		
HCM LOS							A			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	931	1515	-	-	1528	-	-	717
HCM Lane V/C Ratio	0.022	0.002	-	-	0.015	-	-	0.018
HCM Control Delay (s)	9	7.4	-	-	7.4	0	-	10.1
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Cumulative Conditions without Project - Mid-Day
4: Newport Blvd & E 16th St

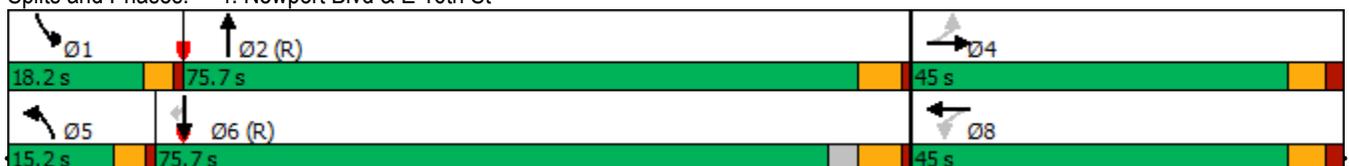
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕↕↕		↕	↕↕↕	↕
Traffic Volume (vph)	31	23	12	68	37	77	31	1747	87	81	1734	28
Future Volume (vph)	31	23	12	68	37	77	31	1747	87	81	1734	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	95		0	85		55
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1776	0	0	1725	0	1770	5050	0	1770	5085	1583
Flt Permitted		0.678			0.858		0.950			0.950		
Satd. Flow (perm)	0	1233	0	0	1507	0	1770	5050	0	1770	5085	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		8			26							57
Link Speed (mph)		25			25			50				50
Link Distance (ft)		160			479			1146				979
Travel Time (s)		4.4			13.1			15.6				13.4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	68	0	0	187	0	32	1891	0	84	1788	29
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Total Split (s)	45.0	45.0		45.0	45.0		15.2	75.7		18.2	75.7	75.7
Total Lost Time (s)		6.0			6.0		4.2	5.7		4.2	5.7	5.7
Act Effct Green (s)		19.9			19.9		9.2	91.6		11.5	99.3	99.3
Actuated g/C Ratio		0.14			0.14		0.07	0.66		0.08	0.71	0.71
v/c Ratio		0.37			0.79		0.28	0.57		0.58	0.49	0.03
Control Delay		51.1			71.1		68.0	14.8		76.4	10.9	0.5
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		51.1			71.1		68.0	14.8		76.4	10.9	0.5
LOS		D			E		E	B		E	B	A
Approach Delay		51.1			71.1			15.7				13.6
Approach LOS		D			E			B				B

Intersection Summary

Area Type: Other
 Cycle Length: 138.9
 Actuated Cycle Length: 138.9
 Offset: 102 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.79
 Intersection Signal Delay: 17.9 Intersection LOS: B
 Intersection Capacity Utilization 68.7% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 4: Newport Blvd & E 16th St



Cumulative Conditions without Project - Mid-Day
5: Superior Ave & W 16th St/Industrial Way

Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	86	53	45	75	30	54	560	85	29	513	87
Future Volume (vph)	84	86	53	45	75	30	54	560	85	29	513	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		110	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1757	0	0	1785	0	1770	3539	1583	1770	3461	0
Flt Permitted	0.950				0.985		0.310			0.341		
Satd. Flow (perm)	1770	1757	0	0	1785	0	577	3539	1583	635	3461	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		31			10				64			
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		216			687			694			1138	
Travel Time (s)		4.9			15.6			11.8			22.2	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	144	0	0	154	0	56	577	88	30	619	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	6	6		2	2			3			3	
Permitted Phases							3		3	3		
Total Split (s)	56.1	56.1		35.1	35.1		30.9	30.9	30.9	30.9	30.9	
Total Lost Time (s)	5.1	5.1			5.1		5.9	5.9	5.9	5.9	5.9	
Act Effct Green (s)	9.6	9.6			30.0		25.0	25.0	25.0	25.0	25.0	
Actuated g/C Ratio	0.12	0.12			0.37		0.31	0.31	0.31	0.31	0.31	
v/c Ratio	0.41	0.61			0.23		0.31	0.53	0.16	0.15	0.58	
Control Delay	38.8	37.6			18.1		28.4	25.6	9.8	23.9	26.5	
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	38.8	37.6			18.1		28.4	25.6	9.8	23.9	26.5	
LOS	D	D			B		C	C	A	C	C	
Approach Delay		38.0			18.1			23.9			26.4	
Approach LOS		D			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 122.1
 Actuated Cycle Length: 80.8
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.61
 Intersection Signal Delay: 26.1
 Intersection LOS: C
 Intersection Capacity Utilization 54.6%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Superior Ave & W 16th St/Industrial Way



Cumulative Conditions Without Project - Mid-Day
6: Industrial Way & Old Newport Blvd (W)

Intersection												
Int Delay, s/veh	3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	173	23	41	125	6	22	2	48	10	4	11
Future Vol, veh/h	8	173	23	41	125	6	22	2	48	10	4	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	182	24	43	132	6	23	2	51	11	4	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	138	0	0	206	0	0	439	434	194	458	443	135
Stage 1	-	-	-	-	-	-	210	210	-	221	221	-
Stage 2	-	-	-	-	-	-	229	224	-	237	222	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1446	-	-	1365	-	-	528	515	847	513	509	914
Stage 1	-	-	-	-	-	-	792	728	-	781	720	-
Stage 2	-	-	-	-	-	-	774	718	-	766	720	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1446	-	-	1365	-	-	502	494	847	466	489	914
Mov Cap-2 Maneuver	-	-	-	-	-	-	502	494	-	466	489	-
Stage 1	-	-	-	-	-	-	787	724	-	776	696	-
Stage 2	-	-	-	-	-	-	734	694	-	714	716	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			1.8			10.9			11.3		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	689	1446	-	-	1365	-	-	600
HCM Lane V/C Ratio	0.11	0.006	-	-	0.032	-	-	0.044
HCM Control Delay (s)	10.9	7.5	0	-	7.7	0	-	11.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.1

Cumulative Conditions without Project - Mid-Day
7: Newport Blvd & Industrial Way

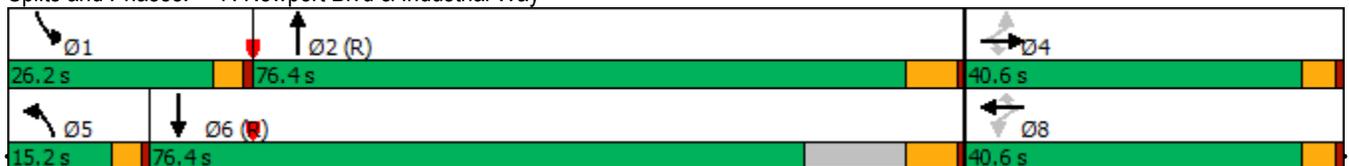
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	49	115	10	70	98	29	1667	14	112	1680	54
Future Volume (vph)	63	49	115	10	70	98	29	1667	14	112	1680	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	90		0	95		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1812	1583	1770	1863	1583	1770	5080	0	1770	5060	0
Flt Permitted		0.746		0.500			0.950			0.950		
Satd. Flow (perm)	0	1390	1583	931	1863	1583	1770	5080	0	1770	5060	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			120			102		1				5
Link Speed (mph)		30			30			50				50
Link Distance (ft)		175			191			846				1146
Travel Time (s)		4.0			4.3			11.5				15.6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	117	120	10	73	102	30	1751	0	117	1806	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Total Split (s)	40.6	40.6	40.6	40.6	40.6	40.6	15.2	76.4		26.2	76.4	
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	4.2	6.4		4.2	6.4	
Act Effct Green (s)		15.9	15.9	15.9	15.9	15.9	9.0	98.5		13.6	108.3	
Actuated g/C Ratio		0.11	0.11	0.11	0.11	0.11	0.06	0.69		0.09	0.76	
v/c Ratio		0.76	0.43	0.10	0.35	0.38	0.27	0.50		0.70	0.47	
Control Delay		90.1	13.6	56.4	62.2	13.9	70.4	12.2		83.5	8.2	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		90.1	13.6	56.4	62.2	13.9	70.4	12.2		83.5	8.2	
LOS		F	B	E	E	B	E	B		F	A	
Approach Delay		51.4			35.2			13.2			12.8	
Approach LOS		D			D			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 143.2
 Actuated Cycle Length: 143.2
 Offset: 90 (63%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 16.2 Intersection LOS: B
 Intersection Capacity Utilization 66.6% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 7: Newport Blvd & Industrial Way



**CUMULATIVE CONDITIONS
WITHOUT PROJECT
PM PEAK HOUR**

Cumulative Conditions without Project - PM Peak Hour

Lanes, Volumes, Timings

1: Superior Ave & 17th St

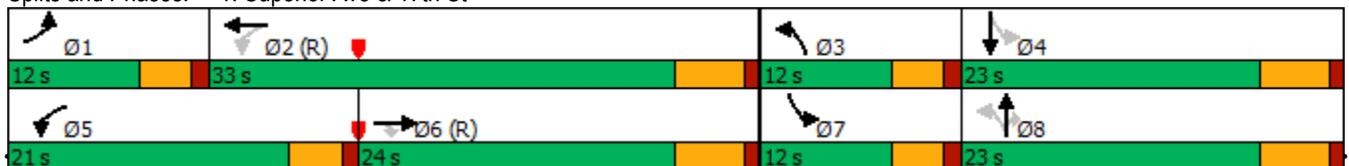
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	513	66	237	429	65	107	152	550	72	302	110
Future Volume (vph)	35	513	66	237	429	65	107	152	550	72	302	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		250	0		0	80		0	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3468	0	1770	1616	1504	1770	3398	0
Flt Permitted	0.950			0.306			0.371			0.223		
Satd. Flow (perm)	1770	3539	1583	570	3468	0	691	1616	1504	415	3398	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			200		23			80	371		60	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		556			357			606			247	
Travel Time (s)		10.8			8.1			11.8			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)									38%			
Lane Group Flow (vph)	38	558	72	258	537	0	116	392	371	78	448	0
Turn Type	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6	2			8		8	4		
Total Split (s)	12.0	24.0	24.0	21.0	33.0		12.0	23.0	23.0	12.0	23.0	
Total Lost Time (s)	4.2	5.1	5.1	4.2	5.1		4.2	5.1	5.1	4.2	5.1	
Act Effct Green (s)	6.0	27.5	27.5	43.6	36.2		24.8	18.1	18.1	24.4	17.9	
Actuated g/C Ratio	0.08	0.34	0.34	0.54	0.45		0.31	0.23	0.23	0.30	0.22	
v/c Ratio	0.29	0.46	0.11	0.54	0.34		0.38	0.92	0.59	0.33	0.56	
Control Delay	40.1	24.1	0.3	15.3	16.5		20.6	53.7	7.5	20.0	26.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	40.1	24.1	0.3	15.3	16.5		20.6	53.7	7.5	20.0	26.6	
LOS	D	C	A	B	B		C	D	A	B	C	
Approach Delay		22.5			16.1			29.8			25.6	
Approach LOS		C			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 28 (35%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 23.5
 Intersection LOS: C
 Intersection Capacity Utilization 66.2%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: Superior Ave & 17th St



Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	22	40	760	15	26	585
Future Vol, veh/h	22	40	760	15	26	585
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	48	905	18	31	696

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1324	462	0	0	923
Stage 1	914	-	-	-	-
Stage 2	410	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	147	547	-	-	736
Stage 1	351	-	-	-	-
Stage 2	638	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	141	547	-	-	736
Mov Cap-2 Maneuver	261	-	-	-	-
Stage 1	351	-	-	-	-
Stage 2	611	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	394	736
HCM Lane V/C Ratio	-	-	0.187	0.042
HCM Control Delay (s)	-	-	16.2	10.1
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.7	0.1

Cumulative Conditions Without Project - PM Peak Hour
 3: Old Newport Blvd (W) & E 16th St

HCM 6th TWSC
 Synchro 11 Report

Intersection												
Int Delay, s/veh	2.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶			↷			↷			↶	
Traffic Vol, veh/h	1	44	1	13	65	3	2	0	10	8	1	11
Future Vol, veh/h	1	44	1	13	65	3	2	0	10	8	1	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	61	1	18	90	4	3	0	14	11	1	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	94	0	0	62	0	0	200	194	62	199	192	92
Stage 1	-	-	-	-	-	-	64	64	-	128	128	-
Stage 2	-	-	-	-	-	-	136	130	-	71	64	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1500	-	-	1541	-	-	759	701	1003	760	703	965
Stage 1	-	-	-	-	-	-	947	842	-	876	790	-
Stage 2	-	-	-	-	-	-	867	789	-	939	842	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1500	-	-	1541	-	-	739	692	1003	742	694	965
Mov Cap-2 Maneuver	-	-	-	-	-	-	739	692	-	742	694	-
Stage 1	-	-	-	-	-	-	946	841	-	875	781	-
Stage 2	-	-	-	-	-	-	842	780	-	925	841	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.2			1.2			8.9			9.4		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	947	1500	-	-	1541	-	-	847
HCM Lane V/C Ratio	0.018	0.001	-	-	0.012	-	-	0.033
HCM Control Delay (s)	8.9	7.4	-	-	7.4	0	-	9.4
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Cumulative Conditions without Project - PM Peak Hour
4: Newport Blvd & E 16th St

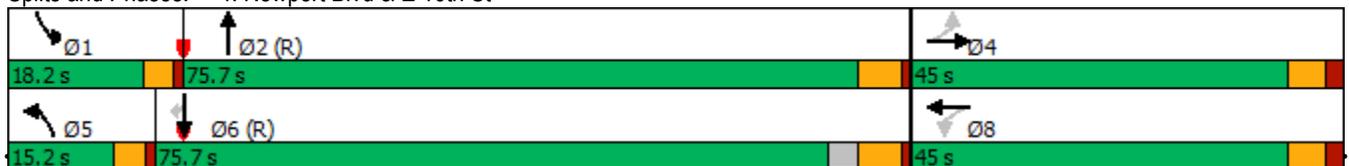
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	32	19	85	47	53	17	1689	74	49	1718	12
Future Volume (vph)	16	32	19	85	47	53	17	1689	74	49	1718	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	95		0	85		55
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1770	0	0	1751	0	1770	5055	0	1770	5085	1583
Flt Permitted		0.872			0.817		0.950			0.950		
Satd. Flow (perm)	0	1563	0	0	1463	0	1770	5055	0	1770	5085	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		14			15							57
Link Speed (mph)		25			25			50				50
Link Distance (ft)		160			479			1146				979
Travel Time (s)		4.4			13.1			15.6				13.4
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	1.00	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	75	0	0	209	0	17	1981	0	55	1930	13
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Total Split (s)	45.0	45.0		45.0	45.0		15.2	75.7		18.2	75.7	75.7
Total Lost Time (s)		6.0			6.0		4.2	5.7		4.2	5.7	5.7
Act Effct Green (s)		23.1			23.1		9.0	92.6		9.9	98.8	98.8
Actuated g/C Ratio		0.17			0.17		0.06	0.67		0.07	0.71	0.71
v/c Ratio		0.28			0.82		0.15	0.59		0.44	0.53	0.01
Control Delay		41.3			75.3		64.6	15.3		72.4	11.8	0.0
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		41.3			75.3		64.6	15.3		72.4	11.8	0.0
LOS		D			E		E	B		E	B	A
Approach Delay		41.3			75.3			15.7				13.4
Approach LOS		D			E			B				B

Intersection Summary

Area Type: Other
 Cycle Length: 138.9
 Actuated Cycle Length: 138.9
 Offset: 98 (71%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 18.0
 Intersection LOS: B
 Intersection Capacity Utilization 67.6%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 4: Newport Blvd & E 16th St



Cumulative Conditions without Project - PM Peak Hour
5: Superior Ave & W 16th St/Industrial Way

Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	85	66	24	76	21	44	598	57	26	477	54
Future Volume (vph)	80	85	66	24	76	21	44	598	57	26	477	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		110	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1742	0	0	1800	0	1770	3539	1583	1770	3486	0
Flt Permitted	0.950				0.990		0.284			0.230		
Satd. Flow (perm)	1770	1742	0	0	1800	0	529	3539	1583	428	3486	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		39			8				64			
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		216			687			694			1138	
Travel Time (s)		4.9			15.6			11.8			22.2	
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	98	184	0	0	148	0	54	729	70	32	648	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	6	6		2	2			3			3	
Permitted Phases							3		3	3		
Total Split (s)	56.1	56.1		35.1	35.1		30.9	30.9	30.9	30.9	30.9	
Total Lost Time (s)	5.1	5.1			5.1		5.9	5.9	5.9	5.9	5.9	
Act Effct Green (s)	11.3	11.3			30.0		25.0	25.0	25.0	25.0	25.0	
Actuated g/C Ratio	0.14	0.14			0.36		0.30	0.30	0.30	0.30	0.30	
v/c Ratio	0.40	0.68			0.22		0.34	0.68	0.13	0.25	0.61	
Control Delay	37.2	39.2			19.1		30.9	29.6	8.1	29.2	28.1	
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	37.2	39.2			19.1		30.9	29.6	8.1	29.2	28.1	
LOS	D	D			B		C	C	A	C	C	
Approach Delay		38.5			19.1			27.9			28.2	
Approach LOS		D			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 122.1
 Actuated Cycle Length: 82.5
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.68
 Intersection Signal Delay: 28.9
 Intersection LOS: C
 Intersection Capacity Utilization 53.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Superior Ave & W 16th St/Industrial Way



Cumulative Conditions Without Project - PM Peak Hour
6: Industrial Way & Old Newport Blvd (W)

HCM 6th TWSC
Synchro 11 Report

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	161	9	16	108	7	7	0	14	6	0	12
Future Vol, veh/h	1	161	9	16	108	7	7	0	14	6	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	212	12	21	142	9	9	0	18	8	0	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	151	0	0	224	0	0	417	413	218	418	415	147
Stage 1	-	-	-	-	-	-	220	220	-	189	189	-
Stage 2	-	-	-	-	-	-	197	193	-	229	226	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1430	-	-	1345	-	-	546	529	822	545	528	900
Stage 1	-	-	-	-	-	-	782	721	-	813	744	-
Stage 2	-	-	-	-	-	-	805	741	-	774	717	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1430	-	-	1345	-	-	529	519	822	525	518	900
Mov Cap-2 Maneuver	-	-	-	-	-	-	529	519	-	525	518	-
Stage 1	-	-	-	-	-	-	781	720	-	812	731	-
Stage 2	-	-	-	-	-	-	777	728	-	756	716	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.9			10.4			10.1		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	694	1430	-	-	1345	-	-	727
HCM Lane V/C Ratio	0.04	0.001	-	-	0.016	-	-	0.033
HCM Control Delay (s)	10.4	7.5	0	-	7.7	0	-	10.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Cumulative Conditions without Project - PM Peak Hour
7: Newport Blvd & Industrial Way

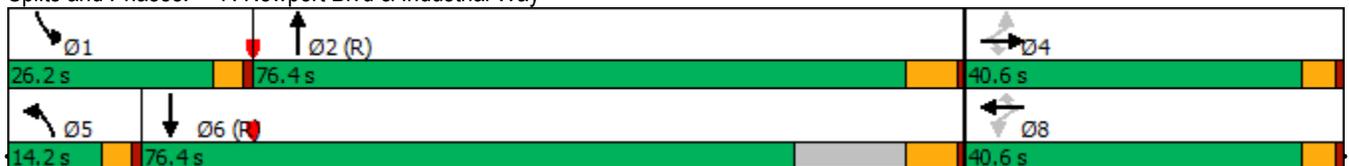
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	56	56	62	12	68	109	28	1610	8	62	1717	43
Future Volume (vph)	56	56	62	12	68	109	28	1610	8	62	1717	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	90		0	95		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1818	1583	1770	1863	1583	1770	5080	0	1770	5065	0
Flt Permitted		0.747		0.468			0.950			0.950		
Satd. Flow (perm)	0	1391	1583	872	1863	1583	1770	5080	0	1770	5065	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90			125		1				4
Link Speed (mph)		30			30			50				50
Link Distance (ft)		175			191			846				1146
Travel Time (s)		4.0			4.3			11.5				15.6
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	128	71	14	78	125	32	1860	0	71	2023	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Total Split (s)	40.6	40.6	40.6	40.6	40.6	40.6	14.2	76.4		26.2	76.4	
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	4.2	6.4		4.2	6.4	
Act Effct Green (s)		16.6	16.6	16.6	16.6	16.6	9.1	103.5		10.6	107.6	
Actuated g/C Ratio		0.12	0.12	0.12	0.12	0.12	0.06	0.72		0.07	0.75	
v/c Ratio		0.80	0.27	0.14	0.36	0.43	0.29	0.51		0.54	0.53	
Control Delay		93.3	8.0	57.2	61.6	13.1	70.8	10.6		79.0	9.3	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		93.3	8.0	57.2	61.6	13.1	70.8	10.6		79.0	9.3	
LOS		F	A	E	E	B	E	B		E	A	
Approach Delay		62.9			33.4			11.6			11.6	
Approach LOS		E			C			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 143.2
 Actuated Cycle Length: 143.2
 Offset: 88 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.80
 Intersection Signal Delay: 15.0
 Intersection LOS: B
 Intersection Capacity Utilization 67.0%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 7: Newport Blvd & Industrial Way



**CUMULATIVE CONDITIONS
WITHOUT PROJECT
MID-DAY (SATURDAY)**

Cumulative Conditions without Project - Mid-Day (Saturday)

Lanes, Volumes, Timings

1: Superior Ave & 17th St

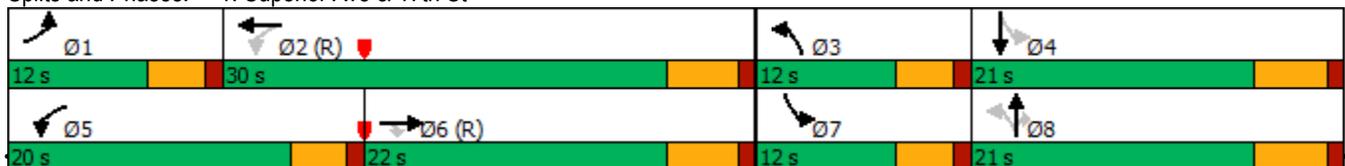
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	514	61	220	426	84	77	118	440	119	193	120
Future Volume (vph)	27	514	61	220	426	84	77	118	440	119	193	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		250	0		0	80		0	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3451	0	1770	1612	1504	1770	3337	0
Flt Permitted	0.950			0.324			0.506			0.284		
Satd. Flow (perm)	1770	3539	1583	604	3451	0	943	1612	1504	529	3337	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			214		33			88	289		129	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		556			357			606			247	
Travel Time (s)		10.8			8.1			11.8			4.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)									39%			
Lane Group Flow (vph)	29	553	66	237	548	0	83	311	289	128	337	0
Turn Type	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6	2			8		8	4		
Total Split (s)	12.0	22.0	22.0	20.0	30.0		12.0	21.0	21.0	12.0	21.0	
Total Lost Time (s)	4.2	5.1	5.1	4.2	5.1		4.2	5.1	5.1	4.2	5.1	
Act Effct Green (s)	5.7	27.5	27.5	42.6	37.4		20.2	13.6	13.6	21.0	14.1	
Actuated g/C Ratio	0.08	0.37	0.37	0.57	0.50		0.27	0.18	0.18	0.28	0.19	
v/c Ratio	0.22	0.43	0.09	0.47	0.32		0.25	0.85	0.57	0.48	0.46	
Control Delay	36.1	21.9	0.3	13.2	13.8		17.7	43.3	8.3	23.1	18.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	36.1	21.9	0.3	13.2	13.8		17.7	43.3	8.3	23.1	18.0	
LOS	D	C	A	B	B		B	D	A	C	B	
Approach Delay		20.3			13.6			25.4			19.4	
Approach LOS		C			B			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 9.6 (13%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 19.5 Intersection LOS: B
 Intersection Capacity Utilization 63.7% ICU Level of Service B
 Analysis Period (min) 15

Splits and Phases: 1: Superior Ave & 17th St



Cumulative Conditions Without Project - Mid-Day (Saturday)
 2: Superior Ave & E 16th St

HCM 6th TWSC
 Synchro 11 Report

Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕↔		↕	↕↕
Traffic Vol, veh/h	31	43	600	18	31	465
Future Vol, veh/h	31	43	600	18	31	465
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	100	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	34	43	652	20	34	505

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	983	336	0	0	672
Stage 1	662	-	-	-	-
Stage 2	321	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	246	660	-	-	915
Stage 1	475	-	-	-	-
Stage 2	708	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	237	660	-	-	915
Mov Cap-2 Maneuver	358	-	-	-	-
Stage 1	475	-	-	-	-
Stage 2	682	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.9	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	482	915
HCM Lane V/C Ratio	-	-	0.159	0.037
HCM Control Delay (s)	-	-	13.9	9.1
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1

Cumulative Conditions Without Project - Mid-Day (Saturday)
 3: Old Newport Blvd (W) & E 16th St

HCM 6th TWSC
 Synchro 11 Report

Intersection												
Int Delay, s/veh	2.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔			↔			↔	
Traffic Vol, veh/h	3	42	6	16	74	8	2	0	19	9	0	3
Future Vol, veh/h	3	42	6	16	74	8	2	0	19	9	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	45	6	17	79	9	2	0	20	10	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	88	0	0	51	0	0	173	176	48	182	175	84
Stage 1	-	-	-	-	-	-	54	54	-	118	118	-
Stage 2	-	-	-	-	-	-	119	122	-	64	57	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1508	-	-	1555	-	-	790	717	1021	779	718	975
Stage 1	-	-	-	-	-	-	958	850	-	887	798	-
Stage 2	-	-	-	-	-	-	885	795	-	947	847	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1508	-	-	1555	-	-	779	707	1021	756	708	975
Mov Cap-2 Maneuver	-	-	-	-	-	-	779	707	-	756	708	-
Stage 1	-	-	-	-	-	-	956	848	-	885	788	-
Stage 2	-	-	-	-	-	-	872	785	-	926	845	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			1.2			8.7			9.6		
HCM LOS							A			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	992	1508	-	-	1555	-	-	801
HCM Lane V/C Ratio	0.023	0.002	-	-	0.011	-	-	0.016
HCM Control Delay (s)	8.7	7.4	-	-	7.3	0	-	9.6
HCM Lane LOS	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0

Cumulative Conditions without Project - Mid-Day (Saturday)

Lanes, Volumes, Timings

4: Newport Blvd & E 16th St

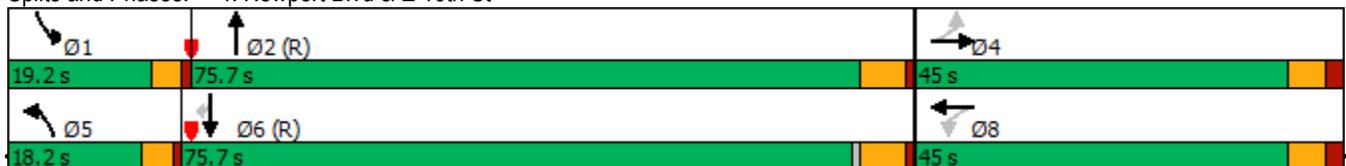
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	28	16	80	47	81	16	1865	80	51	1969	14
Future Volume (vph)	21	28	16	80	47	81	16	1865	80	51	1969	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	95		0	85		55
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1772	0	0	1731	0	1770	5055	0	1770	5085	1583
Flt Permitted		0.790			0.851		0.950			0.950		
Satd. Flow (perm)	0	1423	0	0	1501	0	1770	5055	0	1770	5085	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		11			23							56
Link Speed (mph)		25			25			50				50
Link Distance (ft)		160			479			1146				979
Travel Time (s)		4.4			13.1			15.6				13.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	70	0	0	226	0	17	2114	0	55	2140	15
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Total Split (s)	45.0	45.0		45.0	45.0		18.2	75.7		19.2	75.7	75.7
Total Lost Time (s)		6.0			6.0		4.2	5.7		4.2	5.7	5.7
Act Effct Green (s)		23.8			23.8		9.0	92.8		10.0	99.1	99.1
Actuated g/C Ratio		0.17			0.17		0.06	0.66		0.07	0.71	0.71
v/c Ratio		0.28			0.82		0.15	0.63		0.44	0.59	0.01
Control Delay		42.9			72.8		65.2	16.6		73.1	13.1	0.0
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		42.9			72.8		65.2	16.6		73.1	13.1	0.0
LOS		D			E		E	B		E	B	A
Approach Delay		42.9			72.8			16.9			14.5	
Approach LOS		D			E			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 139.9
 Actuated Cycle Length: 139.9
 Offset: 103 (74%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 18.9 Intersection LOS: B
 Intersection Capacity Utilization 68.9% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 4: Newport Blvd & E 16th St



Cumulative Conditions without Project - Mid-Day (Saturday)
 5: Superior Ave & W 16th St/Industrial Way

Lanes, Volumes, Timings
 Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	71	88	74	20	54	33	23	477	29	25	369	62
Future Volume (vph)	71	88	74	20	54	33	23	477	29	25	369	62
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		110	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1736	0	0	1768	0	1770	3539	1583	1770	3461	0
Flt Permitted	0.950				0.991		0.437			0.396		
Satd. Flow (perm)	1770	1736	0	0	1768	0	814	3539	1583	738	3461	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		42			18				64			
Link Speed (mph)		30			30			40				35
Link Distance (ft)		216			687			694				1138
Travel Time (s)		4.9			15.6			11.8				22.2
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	75	171	0	0	113	0	24	502	31	26	453	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	6	6		2	2			3				3
Permitted Phases							3		3	3		
Total Split (s)	56.1	56.1		35.1	35.1		30.9	30.9	30.9	30.9		30.9
Total Lost Time (s)	5.1	5.1			5.1		5.9	5.9	5.9	5.9		5.9
Act Effct Green (s)	10.5	10.5			30.0		25.0	25.0	25.0	25.0		25.0
Actuated g/C Ratio	0.13	0.13			0.37		0.31	0.31	0.31	0.31		0.31
v/c Ratio	0.33	0.66			0.17		0.10	0.46	0.06	0.12		0.43
Control Delay	36.0	37.8			16.3		23.0	25.1	1.9	23.5		24.7
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Delay	36.0	37.8			16.3		23.0	25.1	1.9	23.5		24.7
LOS	D	D			B		C	C	A	C		C
Approach Delay		37.2			16.3			23.8				24.6
Approach LOS		D			B			C				C

Intersection Summary

Area Type: Other
 Cycle Length: 122.1
 Actuated Cycle Length: 81.7
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.66
 Intersection Signal Delay: 25.8
 Intersection LOS: C
 Intersection Capacity Utilization 49.3%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Superior Ave & W 16th St/Industrial Way



Cumulative Conditions Without Project - Mid-Day (Saturday)
6: Industrial Way & Old Newport Blvd (W)

HCM 6th TWSC
Synchro 11 Report

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	129	16	24	81	5	13	0	21	3	0	12
Future Vol, veh/h	2	129	16	24	81	5	13	0	21	3	0	12
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	145	18	27	91	6	15	0	24	3	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	97	0	0	163	0	0	313	309	154	318	315	94
Stage 1	-	-	-	-	-	-	158	158	-	148	148	-
Stage 2	-	-	-	-	-	-	155	151	-	170	167	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1496	-	-	1416	-	-	640	605	892	635	601	963
Stage 1	-	-	-	-	-	-	844	767	-	855	775	-
Stage 2	-	-	-	-	-	-	847	772	-	832	760	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1496	-	-	1416	-	-	621	592	892	608	588	963
Mov Cap-2 Maneuver	-	-	-	-	-	-	621	592	-	608	588	-
Stage 1	-	-	-	-	-	-	843	766	-	854	760	-
Stage 2	-	-	-	-	-	-	818	757	-	809	759	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			1.7			10			9.3		
HCM LOS							B			A		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	764	1496	-	-	1416	-	-	862
HCM Lane V/C Ratio	0.05	0.002	-	-	0.019	-	-	0.02
HCM Control Delay (s)	10	7.4	0	-	7.6	0	-	9.3
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.1

Cumulative Conditions without Project - Mid-Day (Saturday)
7: Newport Blvd & Industrial Way

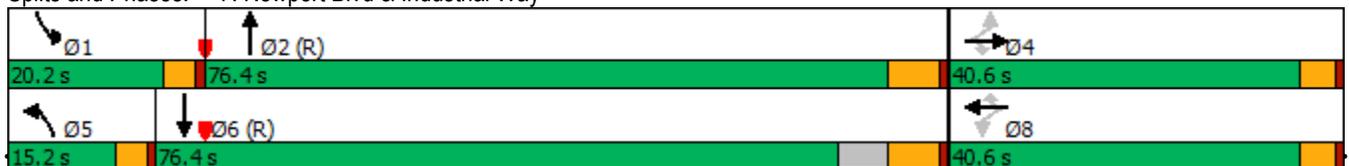
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	34	52	66	11	41	64	26	1870	16	43	1973	37
Future Volume (vph)	34	52	66	11	41	64	26	1870	16	43	1973	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	90		0	95		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1827	1583	1770	1863	1583	1770	5080	0	1770	5070	0
Flt Permitted		0.852		0.594			0.950			0.950		
Satd. Flow (perm)	0	1587	1583	1106	1863	1583	1770	5080	0	1770	5070	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			94		1				3
Link Speed (mph)		30			30			50				50
Link Distance (ft)		175			191			846				1146
Travel Time (s)		4.0			4.3			11.5				15.6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	89	69	11	43	67	27	1965	0	45	2094	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Total Split (s)	40.6	40.6	40.6	40.6	40.6	40.6	15.2	76.4		20.2	76.4	
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	4.2	6.4		4.2	6.4	
Act Effct Green (s)		12.5	12.5	12.5	12.5	12.5	9.0	102.7		9.4	105.7	
Actuated g/C Ratio		0.09	0.09	0.09	0.09	0.09	0.07	0.75		0.07	0.77	
v/c Ratio		0.62	0.30	0.11	0.25	0.29	0.23	0.52		0.37	0.54	
Control Delay		77.8	8.0	57.8	60.6	7.5	66.0	8.4		70.1	7.7	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		77.8	8.0	57.8	60.6	7.5	66.0	8.4		70.1	7.7	
LOS		E	A	E	E	A	E	A		E	A	
Approach Delay		47.3			30.9			9.2			9.0	
Approach LOS		D			C			A			A	

Intersection Summary

Area Type: Other
 Cycle Length: 137.2
 Actuated Cycle Length: 137.2
 Offset: 102 (74%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.62
 Intersection Signal Delay: 11.1 Intersection LOS: B
 Intersection Capacity Utilization 68.6% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 7: Newport Blvd & Industrial Way



**CUMULATIVE CONDITIONS
WITH PROJECT
MID-DAY**

Cumulative Conditions with Project - Mid-Day
1: Superior Ave & 17th St

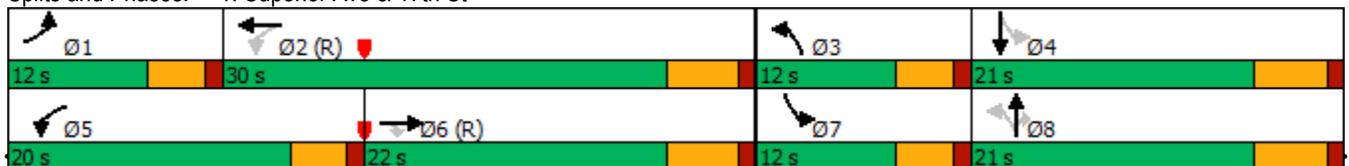
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	54	591	76	218	462	73	112	160	528	102	321	99
Future Volume (vph)	54	591	76	218	462	73	112	160	528	102	321	99
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		250	0		0	80		0	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3465	0	1770	1624	1504	1770	3415	0
Flt Permitted	0.950			0.287			0.404			0.255		
Satd. Flow (perm)	1770	3539	1583	535	3465	0	753	1624	1504	475	3415	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			214		25			74	336		50	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		556			357			606			247	
Travel Time (s)		10.8			8.1			11.8			4.8	
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Shared Lane Traffic (%)									37%			
Lane Group Flow (vph)	55	597	77	220	541	0	113	359	336	103	424	0
Turn Type	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6	2			8		8	4		
Total Split (s)	12.0	22.0	22.0	20.0	30.0		12.0	21.0	21.0	12.0	21.0	
Total Lost Time (s)	4.2	5.1	5.1	4.2	5.1		4.2	5.1	5.1	4.2	5.1	
Act Effct Green (s)	6.3	26.2	26.2	40.8	33.3		22.1	15.5	15.5	22.4	15.6	
Actuated g/C Ratio	0.08	0.35	0.35	0.54	0.44		0.29	0.21	0.21	0.30	0.21	
v/c Ratio	0.37	0.48	0.11	0.49	0.35		0.36	0.91	0.58	0.40	0.57	
Control Delay	39.3	22.9	0.3	14.0	16.4		19.3	53.0	7.9	20.4	26.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	39.3	22.9	0.3	14.0	16.4		19.3	53.0	7.9	20.4	26.5	
LOS	D	C	A	B	B		B	D	A	C	C	
Approach Delay		21.7			15.7			29.5			25.3	
Approach LOS		C			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 28 (37%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.91
 Intersection Signal Delay: 23.0
 Intersection LOS: C
 Intersection Capacity Utilization 68.8%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: Superior Ave & 17th St



Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕		↔	↕
Traffic Vol, veh/h	35	50	728	19	57	649
Future Vol, veh/h	35	50	728	19	57	649
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	36	52	751	20	59	669

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1214	386	0	0	771
Stage 1	761	-	-	-	-
Stage 2	453	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	174	612	-	-	840
Stage 1	422	-	-	-	-
Stage 2	607	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	162	612	-	-	840
Mov Cap-2 Maneuver	292	-	-	-	-
Stage 1	422	-	-	-	-
Stage 2	565	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	15.8	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	422	840
HCM Lane V/C Ratio	-	-	0.208	0.07
HCM Control Delay (s)	-	-	15.8	9.6
HCM Lane LOS	-	-	C	A
HCM 95th %tile Q(veh)	-	-	0.8	0.2

Cumulative Conditions With Project - Mid-Day
 3: Old Newport Blvd (W) & E 16th St

HCM 6th TWSC
 Synchro 11 Report

Intersection												
Int Delay, s/veh	3.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↕			↕			↕	
Traffic Vol, veh/h	3	56	13	53	67	7	8	0	45	9	3	0
Future Vol, veh/h	3	56	13	53	67	7	8	0	45	9	3	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	62	14	58	74	8	9	0	49	10	3	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	82	0	0	76	0	0	271	273	69	294	276	78
Stage 1	-	-	-	-	-	-	75	75	-	194	194	-
Stage 2	-	-	-	-	-	-	196	198	-	100	82	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1515	-	-	1523	-	-	682	634	994	658	632	983
Stage 1	-	-	-	-	-	-	934	833	-	808	740	-
Stage 2	-	-	-	-	-	-	806	737	-	906	827	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1515	-	-	1523	-	-	657	607	994	605	605	983
Mov Cap-2 Maneuver	-	-	-	-	-	-	657	607	-	605	605	-
Stage 1	-	-	-	-	-	-	932	831	-	806	710	-
Stage 2	-	-	-	-	-	-	770	708	-	859	825	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			3.1			9.2			11.1		
HCM LOS							A			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	923	1515	-	-	1523	-	-	605
HCM Lane V/C Ratio	0.063	0.002	-	-	0.038	-	-	0.022
HCM Control Delay (s)	9.2	7.4	-	-	7.5	0	-	11.1
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.1

Cumulative Conditions with Project - Mid-Day
4: Newport Blvd & E 16th St

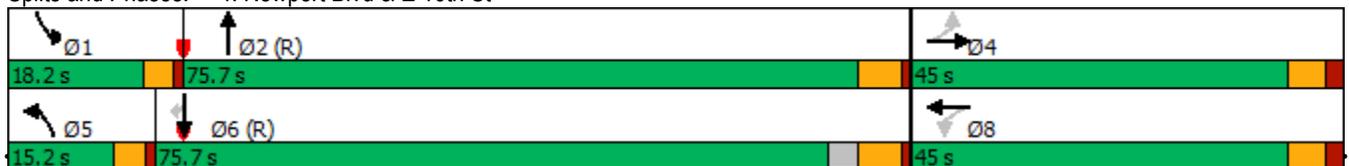
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	28	24	68	42	77	44	1750	87	81	1729	42
Future Volume (vph)	44	28	24	68	42	77	44	1750	87	81	1729	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	95		0	85		55
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1760	0	0	1727	0	1770	5050	0	1770	5085	1583
Flt Permitted		0.644			0.821		0.950			0.950		
Satd. Flow (perm)	0	1159	0	0	1444	0	1770	5050	0	1770	5085	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		12			25							57
Link Speed (mph)		25			25			50				50
Link Distance (ft)		160			479			1146				979
Travel Time (s)		4.4			13.1			15.6				13.4
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	99	0	0	192	0	45	1894	0	84	1782	43
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Total Split (s)	45.0	45.0		45.0	45.0		15.2	75.7		18.2	75.7	75.7
Total Lost Time (s)		6.0			6.0		4.2	5.7		4.2	5.7	5.7
Act Effct Green (s)		20.4			20.4		9.5	91.1		11.5	95.7	95.7
Actuated g/C Ratio		0.15			0.15		0.07	0.66		0.08	0.69	0.69
v/c Ratio		0.55			0.82		0.37	0.57		0.58	0.51	0.04
Control Delay		58.2			75.9		70.7	15.2		76.4	12.4	1.8
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		58.2			75.9		70.7	15.2		76.4	12.4	1.8
LOS		E			E		E	B		E	B	A
Approach Delay		58.2			75.9			16.5			14.9	
Approach LOS		E			E			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 138.9
 Actuated Cycle Length: 138.9
 Offset: 102 (73%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.82
 Intersection Signal Delay: 19.5 Intersection LOS: B
 Intersection Capacity Utilization 69.1% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 4: Newport Blvd & E 16th St



Cumulative Conditions with Project - Mid-Day
5: Superior Ave & W 16th St/Industrial Way

Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	88	53	47	77	30	54	560	87	29	513	87
Future Volume (vph)	84	88	53	47	77	30	54	560	87	29	513	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		110	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1757	0	0	1787	0	1770	3539	1583	1770	3461	0
Flt Permitted	0.950				0.985		0.310			0.340		
Satd. Flow (perm)	1770	1757	0	0	1787	0	577	3539	1583	633	3461	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		31			10				64			
Link Speed (mph)		30			30			40				35
Link Distance (ft)		216			687			694				1138
Travel Time (s)		4.9			15.6			11.8				22.2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	146	0	0	158	0	56	577	90	30	619	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	6	6		2	2			3			3	
Permitted Phases							3		3	3		
Total Split (s)	56.1	56.1		35.1	35.1		30.9	30.9	30.9	30.9	30.9	
Total Lost Time (s)	5.1	5.1			5.1		5.9	5.9	5.9	5.9	5.9	
Act Effct Green (s)	9.7	9.7			30.0		25.0	25.0	25.0	25.0	25.0	
Actuated g/C Ratio	0.12	0.12			0.37		0.31	0.31	0.31	0.31	0.31	
v/c Ratio	0.41	0.61			0.24		0.31	0.53	0.17	0.15	0.58	
Control Delay	38.6	37.8			18.2		28.5	25.6	10.0	24.0	26.6	
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	38.6	37.8			18.2		28.5	25.6	10.0	24.0	26.6	
LOS	D	D			B		C	C	A	C	C	
Approach Delay		38.1			18.2			23.9			26.4	
Approach LOS		D			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 122.1
 Actuated Cycle Length: 80.9
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.61
 Intersection Signal Delay: 26.2
 Intersection LOS: C
 Intersection Capacity Utilization 55.0%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Superior Ave & W 16th St/Industrial Way



Intersection												
Int Delay, s/veh	3.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	173	23	41	125	37	22	2	48	38	4	15
Future Vol, veh/h	13	173	23	41	125	37	22	2	48	38	4	15
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	182	24	43	132	39	23	2	51	40	4	16

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	171	0	0	206	0	0	470	479	194	487	472	152
Stage 1	-	-	-	-	-	-	222	222	-	238	238	-
Stage 2	-	-	-	-	-	-	248	257	-	249	234	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1406	-	-	1365	-	-	504	486	847	491	490	894
Stage 1	-	-	-	-	-	-	780	720	-	765	708	-
Stage 2	-	-	-	-	-	-	756	695	-	755	711	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1406	-	-	1365	-	-	475	464	847	444	467	894
Mov Cap-2 Maneuver	-	-	-	-	-	-	475	464	-	444	467	-
Stage 1	-	-	-	-	-	-	771	712	-	757	683	-
Stage 2	-	-	-	-	-	-	712	671	-	700	703	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.5			1.6			11			12.9		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	671	1406	-	-	1365	-	-	514
HCM Lane V/C Ratio	0.113	0.01	-	-	0.032	-	-	0.117
HCM Control Delay (s)	11	7.6	0	-	7.7	0	-	12.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.4	0	-	-	0.1	-	-	0.4

Cumulative Conditions with Project - Mid-Day
7: Newport Blvd & Industrial Way

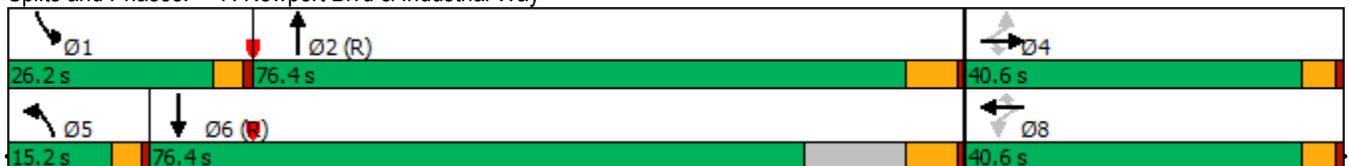
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	75	53	127	10	74	98	43	1662	14	112	1683	67
Future Volume (vph)	75	53	127	10	74	98	43	1662	14	112	1683	67
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	90		0	95		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1811	1583	1770	1863	1583	1770	5080	0	1770	5055	0
Flt Permitted		0.730		0.462			0.950			0.950		
Satd. Flow (perm)	0	1360	1583	861	1863	1583	1770	5080	0	1770	5055	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			132			102		1				7
Link Speed (mph)		30			30			50				50
Link Distance (ft)		175			191			846				1146
Travel Time (s)		4.0			4.3			11.5				15.6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	133	132	10	77	102	45	1746	0	117	1823	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Total Split (s)	40.6	40.6	40.6	40.6	40.6	40.6	15.2	76.4		26.2	76.4	
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	4.2	6.4		4.2	6.4	
Act Effct Green (s)		17.4	17.4	17.4	17.4	17.4	9.4	96.9		13.6	103.8	
Actuated g/C Ratio		0.12	0.12	0.12	0.12	0.12	0.07	0.68		0.09	0.72	
v/c Ratio		0.81	0.43	0.10	0.34	0.36	0.39	0.51		0.70	0.50	
Control Delay		93.2	12.5	54.6	60.0	13.0	74.0	13.1		83.5	10.1	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		93.2	12.5	54.6	60.0	13.0	74.0	13.1		83.5	10.1	
LOS		F	B	D	E	B	E	B		F	B	
Approach Delay		53.0			34.3			14.6			14.6	
Approach LOS		D			C			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 143.2
 Actuated Cycle Length: 143.2
 Offset: 90 (63%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.81
 Intersection Signal Delay: 17.9
 Intersection LOS: B
 Intersection Capacity Utilization 67.8%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 7: Newport Blvd & Industrial Way



**CUMULATIVE CONDITIONS
WITH PROJECT
PM PEAK HOUR**

Cumulative Conditions with Project - PM Peak Hour

Lanes, Volumes, Timings

1: Superior Ave & 17th St

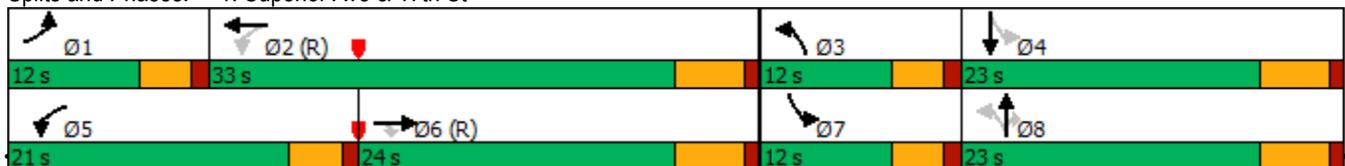
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	35	518	69	239	433	66	110	156	556	73	307	111
Future Volume (vph)	35	518	69	239	433	66	110	156	556	73	307	111
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		250	0		0	80		0	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3468	0	1770	1617	1504	1770	3398	0
Flt Permitted	0.950			0.298			0.368			0.217		
Satd. Flow (perm)	1770	3539	1583	555	3468	0	685	1617	1504	404	3398	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			200		23			78	374		59	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		556			357			606			247	
Travel Time (s)		10.8			8.1			11.8			4.8	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)									38%			
Lane Group Flow (vph)	38	563	75	260	543	0	120	400	374	79	455	0
Turn Type	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6	2			8		8	4		
Total Split (s)	12.0	24.0	24.0	21.0	33.0		12.0	23.0	23.0	12.0	23.0	
Total Lost Time (s)	4.2	5.1	5.1	4.2	5.1		4.2	5.1	5.1	4.2	5.1	
Act Effct Green (s)	6.0	26.8	26.8	43.1	35.7		25.3	18.6	18.6	24.9	18.4	
Actuated g/C Ratio	0.08	0.34	0.34	0.54	0.45		0.32	0.23	0.23	0.31	0.23	
v/c Ratio	0.29	0.48	0.11	0.55	0.35		0.39	0.92	0.59	0.33	0.55	
Control Delay	40.1	24.7	0.3	15.8	16.8		20.6	53.7	7.4	19.9	26.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	40.1	24.7	0.3	15.8	16.8		20.6	53.7	7.4	19.9	26.5	
LOS	D	C	A	B	B		C	D	A	B	C	
Approach Delay		22.8			16.5			29.9			25.5	
Approach LOS		C			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 80
 Offset: 28 (35%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.92
 Intersection Signal Delay: 23.7
 Intersection LOS: C
 Intersection Capacity Utilization 66.8%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: Superior Ave & 17th St



Intersection						
Int Delay, s/veh	1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↕↔		↔	↕↕
Traffic Vol, veh/h	23	44	760	16	30	585
Future Vol, veh/h	23	44	760	16	30	585
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	84	84	84	84	84	84
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	27	52	905	19	36	696

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	1335	462	0	0	924
Stage 1	915	-	-	-	-
Stage 2	420	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	145	547	-	-	735
Stage 1	351	-	-	-	-
Stage 2	631	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	138	547	-	-	735
Mov Cap-2 Maneuver	259	-	-	-	-
Stage 1	351	-	-	-	-
Stage 2	600	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.4	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	396	735
HCM Lane V/C Ratio	-	-	0.201	0.049
HCM Control Delay (s)	-	-	16.4	10.1
HCM Lane LOS	-	-	C	B
HCM 95th %tile Q(veh)	-	-	0.7	0.2

Cumulative Conditions With Project - PM Peak Hour
 3: Old Newport Blvd (W) & E 16th St

HCM 6th TWSC
 Synchro 11 Report

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻			↻			↻	
Traffic Vol, veh/h	1	44	6	50	65	3	7	0	45	8	1	11
Future Vol, veh/h	1	44	6	50	65	3	7	0	45	8	1	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	72	72	72	72	72	72	72	72	72
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	61	8	69	90	4	10	0	63	11	1	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	94	0	0	69	0	0	305	299	65	329	301	92
Stage 1	-	-	-	-	-	-	67	67	-	230	230	-
Stage 2	-	-	-	-	-	-	238	232	-	99	71	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1500	-	-	1532	-	-	647	613	999	624	612	965
Stage 1	-	-	-	-	-	-	943	839	-	773	714	-
Stage 2	-	-	-	-	-	-	765	713	-	907	836	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1500	-	-	1532	-	-	612	583	999	563	582	965
Mov Cap-2 Maneuver	-	-	-	-	-	-	612	583	-	563	582	-
Stage 1	-	-	-	-	-	-	942	838	-	772	680	-
Stage 2	-	-	-	-	-	-	715	679	-	849	835	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.1			3.2			9.2			10.1		
HCM LOS							A			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	921	1500	-	-	1532	-	-	732
HCM Lane V/C Ratio	0.078	0.001	-	-	0.045	-	-	0.038
HCM Control Delay (s)	9.2	7.4	-	-	7.5	0	-	10.1
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.1

Cumulative Conditions with Project - PM Peak Hour
 4: Newport Blvd & E 16th St

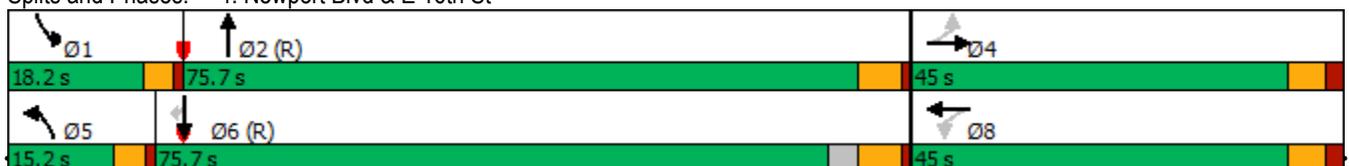
Lanes, Volumes, Timings
 Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	37	34	86	52	54	32	1711	75	49	1729	29
Future Volume (vph)	31	37	34	86	52	54	32	1711	75	49	1729	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	95		0	85		55
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1752	0	0	1753	0	1770	5055	0	1770	5085	1583
Flt Permitted		0.803			0.758		0.950			0.950		
Satd. Flow (perm)	0	1428	0	0	1358	0	1770	5055	0	1770	5085	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		18			14							57
Link Speed (mph)		25			25			50				50
Link Distance (ft)		160			479			1146				979
Travel Time (s)		4.4			13.1			15.6				13.4
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	1.00	0.89	0.89	0.89	0.89	0.89
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	115	0	0	216	0	32	2006	0	55	1943	33
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Total Split (s)	45.0	45.0		45.0	45.0		15.2	75.7		18.2	75.7	75.7
Total Lost Time (s)		6.0			6.0		4.2	5.7		4.2	5.7	5.7
Act Effct Green (s)		24.8			24.8		9.2	90.9		9.9	94.4	94.4
Actuated g/C Ratio		0.18			0.18		0.07	0.65		0.07	0.68	0.68
v/c Ratio		0.43			0.85		0.28	0.61		0.44	0.56	0.03
Control Delay		45.8			79.5		68.0	16.6		72.4	14.3	1.0
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		45.8			79.5		68.0	16.6		72.4	14.3	1.0
LOS		D			E		E	B		E	B	A
Approach Delay		45.8			79.5			17.4			15.7	
Approach LOS		D			E			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 138.9
 Actuated Cycle Length: 138.9
 Offset: 98 (71%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 20.4
 Intersection LOS: C
 Intersection Capacity Utilization 67.4%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 4: Newport Blvd & E 16th St



Cumulative Conditions with Project - PM Peak Hour
5: Superior Ave & W 16th St/Industrial Way

Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	88	67	26	79	21	44	604	60	26	482	55
Future Volume (vph)	81	88	67	26	79	21	44	604	60	26	482	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		110	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1742	0	0	1802	0	1770	3539	1583	1770	3486	0
Flt Permitted	0.950				0.990		0.277			0.223		
Satd. Flow (perm)	1770	1742	0	0	1802	0	516	3539	1583	415	3486	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		39			8				64			
Link Speed (mph)		30			30			40				35
Link Distance (ft)		216			687			694				1138
Travel Time (s)		4.9			15.6			11.8				22.2
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	189	0	0	154	0	54	737	73	32	655	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	6	6		2	2			3				3
Permitted Phases							3		3	3		
Total Split (s)	56.1	56.1		35.1	35.1		30.9	30.9	30.9	30.9		30.9
Total Lost Time (s)	5.1	5.1			5.1		5.9	5.9	5.9	5.9		5.9
Act Effct Green (s)	11.6	11.6			30.0		25.0	25.0	25.0	25.0		25.0
Actuated g/C Ratio	0.14	0.14			0.36		0.30	0.30	0.30	0.30		0.30
v/c Ratio	0.40	0.68			0.23		0.35	0.69	0.14	0.26		0.62
Control Delay	37.0	39.5			19.4		31.6	30.0	8.5	29.8		28.5
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0		0.0
Total Delay	37.0	39.5			19.4		31.6	30.0	8.5	29.8		28.5
LOS	D	D			B		C	C	A	C		C
Approach Delay		38.6			19.4			28.3				28.5
Approach LOS		D			B			C				C

Intersection Summary

Area Type: Other
 Cycle Length: 122.1
 Actuated Cycle Length: 82.8
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 29.2
 Intersection Capacity Utilization 54.0%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service A

Splits and Phases: 5: Superior Ave & W 16th St/Industrial Way



Cumulative Conditions With Project - PM Peak Hour
6: Industrial Way & Old Newport Blvd (W)

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	161	9	16	108	42	7	0	14	40	0	17
Future Vol, veh/h	6	161	9	16	108	42	7	0	14	40	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	212	12	21	142	55	9	0	18	53	0	22

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	197	0	0	224	0	0	457	473	218	455	452	170
Stage 1	-	-	-	-	-	-	234	234	-	212	212	-
Stage 2	-	-	-	-	-	-	223	239	-	243	240	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1376	-	-	1345	-	-	514	490	822	515	503	874
Stage 1	-	-	-	-	-	-	769	711	-	790	727	-
Stage 2	-	-	-	-	-	-	780	708	-	761	707	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1376	-	-	1345	-	-	491	478	822	494	490	874
Mov Cap-2 Maneuver	-	-	-	-	-	-	491	478	-	494	490	-
Stage 1	-	-	-	-	-	-	764	706	-	784	714	-
Stage 2	-	-	-	-	-	-	746	695	-	739	702	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.3			0.7			10.6			12.3		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	671	1376	-	-	1345	-	-	568
HCM Lane V/C Ratio	0.041	0.006	-	-	0.016	-	-	0.132
HCM Control Delay (s)	10.6	7.6	0	-	7.7	0	-	12.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.5

Cumulative Conditions with Project - PM Peak Hour
7: Newport Blvd & Industrial Way

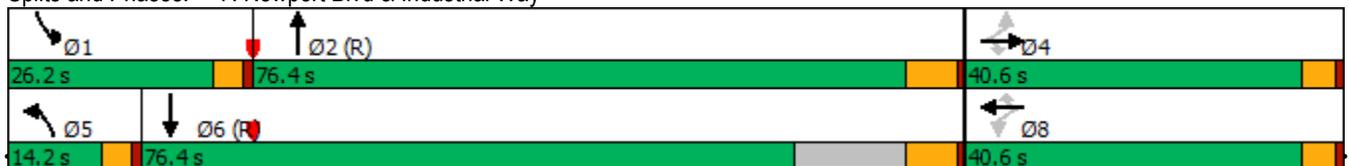
Lanes, Volumes, Timings
Synchro 11 Report

	↖	→	↘	↙	←	↖	↙	↑	↘	↘	↓	↙
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↕	↕	↕	↕	↕	↕↕↕		↕	↕↕↕	
Traffic Volume (vph)	72	62	77	12	74	110	43	1621	8	63	1739	58
Future Volume (vph)	72	62	77	12	74	110	43	1621	8	63	1739	58
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	90		0	95		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1814	1583	1770	1863	1583	1770	5080	0	1770	5060	0
Flt Permitted		0.724		0.422			0.950			0.950		
Satd. Flow (perm)	0	1349	1583	786	1863	1583	1770	5080	0	1770	5060	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			90			126		1				6
Link Speed (mph)		30			30			50				50
Link Distance (ft)		175			191			846				1146
Travel Time (s)		4.0			4.3			11.5				15.6
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	154	89	14	85	126	49	1872	0	72	2066	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Total Split (s)	40.6	40.6	40.6	40.6	40.6	40.6	14.2	76.4		26.2	76.4	
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	4.2	6.4		4.2	6.4	
Act Effct Green (s)		19.4	19.4	19.4	19.4	19.4	9.6	100.6		10.7	101.7	
Actuated g/C Ratio		0.14	0.14	0.14	0.14	0.14	0.07	0.70		0.07	0.71	
v/c Ratio		0.85	0.30	0.13	0.34	0.39	0.42	0.52		0.55	0.57	
Control Delay		95.2	12.1	54.1	58.0	11.6	74.8	12.2		79.1	12.3	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		95.2	12.1	54.1	58.0	11.6	74.8	12.2		79.1	12.3	
LOS		F	B	D	E	B	E	B		E	B	
Approach Delay		64.8			31.8			13.8			14.6	
Approach LOS		E			C			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 143.2
 Actuated Cycle Length: 143.2
 Offset: 88 (61%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 17.8
 Intersection LOS: B
 Intersection Capacity Utilization 69.0%
 ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 7: Newport Blvd & Industrial Way



**CUMULATIVE CONDITIONS
WITH PROJECT
MID-DAY (SATURDAY)**

Cumulative Conditions with Project - Mid-Day (Saturday)

Lanes, Volumes, Timings

1: Superior Ave & 17th St

Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	27	519	64	222	430	85	80	121	444	120	197	121
Future Volume (vph)	27	519	64	222	430	85	80	121	444	120	197	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	100		250	0		0	80		0	90		0
Storage Lanes	1		1	1		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3451	0	1770	1616	1504	1770	3337	0
Flt Permitted	0.950			0.319			0.496			0.284		
Satd. Flow (perm)	1770	3539	1583	594	3451	0	924	1616	1504	529	3337	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			214		33			85	296		130	
Link Speed (mph)		35			30			35			35	
Link Distance (ft)		556			357			606			247	
Travel Time (s)		10.8			8.1			11.8			4.8	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Shared Lane Traffic (%)									38%			
Lane Group Flow (vph)	29	558	69	239	553	0	86	311	296	129	342	0
Turn Type	Prot	NA	Perm	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	
Protected Phases	1	6		5	2		3	8		7	4	
Permitted Phases			6	2			8		8	4		
Total Split (s)	12.0	22.0	22.0	20.0	30.0		12.0	21.0	21.0	12.0	21.0	
Total Lost Time (s)	4.2	5.1	5.1	4.2	5.1		4.2	5.1	5.1	4.2	5.1	
Act Effct Green (s)	5.7	27.4	27.4	42.5	37.3		20.3	13.7	13.7	21.1	14.1	
Actuated g/C Ratio	0.08	0.37	0.37	0.57	0.50		0.27	0.18	0.18	0.28	0.19	
v/c Ratio	0.22	0.43	0.10	0.48	0.32		0.26	0.85	0.57	0.49	0.47	
Control Delay	36.1	22.0	0.3	13.3	13.9		17.9	43.6	8.4	23.1	18.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	36.1	22.0	0.3	13.3	13.9		17.9	43.6	8.4	23.1	18.1	
LOS	D	C	A	B	B		B	D	A	C	B	
Approach Delay		20.4			13.7			25.4			19.5	
Approach LOS		C			B			C			B	

Intersection Summary

Area Type: Other
 Cycle Length: 75
 Actuated Cycle Length: 75
 Offset: 9.6 (13%), Referenced to phase 2:WBTL and 6:EBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 19.5 Intersection LOS: B
 Intersection Capacity Utilization 64.2% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 1: Superior Ave & 17th St



Intersection						
Int Delay, s/veh	1.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations	↔		↑↓		↔	↑↑
Traffic Vol, veh/h	32	47	600	19	35	465
Future Vol, veh/h	32	47	600	19	35	465
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	65	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	100	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	47	652	21	38	505

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	992	337	0	0	673
Stage 1	663	-	-	-	-
Stage 2	329	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14
Critical Hdwy Stg 1	5.84	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22
Pot Cap-1 Maneuver	243	659	-	-	914
Stage 1	474	-	-	-	-
Stage 2	701	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	233	659	-	-	914
Mov Cap-2 Maneuver	355	-	-	-	-
Stage 1	474	-	-	-	-
Stage 2	672	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14	0	0.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	483	914
HCM Lane V/C Ratio	-	-	0.169	0.042
HCM Control Delay (s)	-	-	14	9.1
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1

Cumulative Conditions With Project - Mid-Day (Saturday)
 3: Old Newport Blvd (W) & E 16th St

HCM 6th TWSC
 Synchro 11 Report

Intersection												
Int Delay, s/veh	4.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↻			↻			↻			↻	
Traffic Vol, veh/h	3	42	11	54	74	8	7	0	55	9	0	3
Future Vol, veh/h	3	42	11	54	74	8	7	0	55	9	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	45	12	57	79	9	7	0	59	10	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	88	0	0	57	0	0	256	259	51	285	261	84
Stage 1	-	-	-	-	-	-	57	57	-	198	198	-
Stage 2	-	-	-	-	-	-	199	202	-	87	63	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1508	-	-	1547	-	-	697	645	1017	667	644	975
Stage 1	-	-	-	-	-	-	955	847	-	804	737	-
Stage 2	-	-	-	-	-	-	803	734	-	921	842	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1508	-	-	1547	-	-	673	619	1017	609	618	975
Mov Cap-2 Maneuver	-	-	-	-	-	-	673	619	-	609	618	-
Stage 1	-	-	-	-	-	-	953	845	-	802	708	-
Stage 2	-	-	-	-	-	-	769	705	-	866	840	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			2.9			9			10.5		
HCM LOS							A			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	962	1508	-	-	1547	-	-	672
HCM Lane V/C Ratio	0.069	0.002	-	-	0.037	-	-	0.019
HCM Control Delay (s)	9	7.4	-	-	7.4	0	-	10.5
HCM Lane LOS	A	A	-	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.1

Cumulative Conditions with Project - Mid-Day (Saturday)

Lanes, Volumes, Timings

4: Newport Blvd & E 16th St

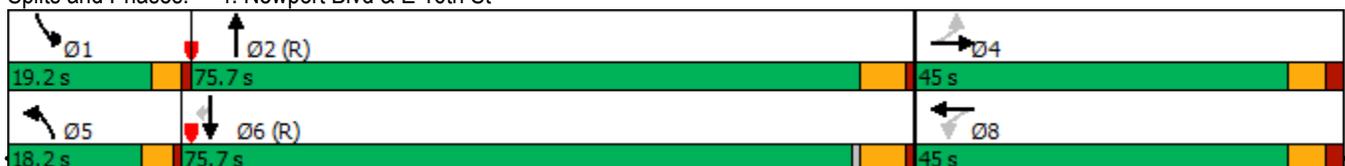
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	34	31	81	52	82	32	1888	81	52	1983	31
Future Volume (vph)	36	34	31	81	52	82	32	1888	81	52	1983	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	95		0	85		55
Storage Lanes	0		0	0		0	1		0	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1754	0	0	1736	0	1770	5055	0	1770	5085	1583
Flt Permitted		0.734			0.801		0.950			0.950		
Satd. Flow (perm)	0	1310	0	0	1416	0	1770	5055	0	1770	5085	1583
Right Turn on Red			Yes			Yes			No			Yes
Satd. Flow (RTOR)		16			22							56
Link Speed (mph)		25			25			50				50
Link Distance (ft)		160			479			1146				979
Travel Time (s)		4.4			13.1			15.6				13.4
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	110	0	0	234	0	35	2140	0	57	2155	34
Turn Type	Perm	NA		Perm	NA		Prot	NA		Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8								6
Total Split (s)	45.0	45.0		45.0	45.0		18.2	75.7		19.2	75.7	75.7
Total Lost Time (s)		6.0			6.0		4.2	5.7		4.2	5.7	5.7
Act Effct Green (s)		25.4			25.4		9.2	91.2		10.0	92.0	92.0
Actuated g/C Ratio		0.18			0.18		0.07	0.65		0.07	0.66	0.66
v/c Ratio		0.44			0.85		0.30	0.65		0.45	0.64	0.03
Control Delay		47.1			76.1		69.3	17.9		73.5	17.1	1.3
Queue Delay		0.0			0.0		0.0	0.0		0.0	0.0	0.0
Total Delay		47.1			76.1		69.3	17.9		73.5	17.1	1.3
LOS		D			E		E	B		E	B	A
Approach Delay		47.1			76.1			18.7			18.3	
Approach LOS		D			E			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 139.9
 Actuated Cycle Length: 139.9
 Offset: 103 (74%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.85
 Intersection Signal Delay: 22.0 Intersection LOS: C
 Intersection Capacity Utilization 69.3% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 4: Newport Blvd & E 16th St



Cumulative Conditions with Project - Mid-Day (Saturday)
 5: Superior Ave & W 16th St/Industrial Way

Lanes, Volumes, Timings
 Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	92	75	22	57	33	23	482	32	25	373	63
Future Volume (vph)	72	92	75	22	57	33	23	482	32	25	373	63
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	100		110	100		0
Storage Lanes	1		0	0		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1738	0	0	1770	0	1770	3539	1583	1770	3461	0
Flt Permitted	0.950				0.990		0.431			0.391		
Satd. Flow (perm)	1770	1738	0	0	1770	0	803	3539	1583	728	3461	0
Right Turn on Red			Yes			Yes			Yes			No
Satd. Flow (RTOR)		41			16				64			
Link Speed (mph)		30			30			40			35	
Link Distance (ft)		216			687			694			1138	
Travel Time (s)		4.9			15.6			11.8			22.2	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Shared Lane Traffic (%)												
Lane Group Flow (vph)	76	176	0	0	118	0	24	507	34	26	459	0
Turn Type	Split	NA		Split	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	6	6		2	2			3			3	
Permitted Phases							3		3	3		
Total Split (s)	56.1	56.1		35.1	35.1		30.9	30.9	30.9	30.9	30.9	
Total Lost Time (s)	5.1	5.1			5.1		5.9	5.9	5.9	5.9	5.9	
Act Effct Green (s)	10.8	10.8			30.0		25.0	25.0	25.0	25.0	25.0	
Actuated g/C Ratio	0.13	0.13			0.37		0.30	0.30	0.30	0.30	0.30	
v/c Ratio	0.33	0.67			0.18		0.10	0.47	0.06	0.12	0.43	
Control Delay	35.7	38.3			16.9		23.2	25.4	2.4	23.7	25.0	
Queue Delay	0.0	0.0			0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	35.7	38.3			16.9		23.2	25.4	2.4	23.7	25.0	
LOS	D	D			B		C	C	A	C	C	
Approach Delay		37.5			16.9			23.9			24.9	
Approach LOS		D			B			C			C	

Intersection Summary

Area Type: Other
 Cycle Length: 122.1
 Actuated Cycle Length: 82
 Control Type: Actuated-Uncoordinated
 Maximum v/c Ratio: 0.67
 Intersection Signal Delay: 26.1
 Intersection LOS: C
 Intersection Capacity Utilization 49.8%
 ICU Level of Service A
 Analysis Period (min) 15

Splits and Phases: 5: Superior Ave & W 16th St/Industrial Way



Cumulative Conditions With Project - Mid-Day (Saturday)
6: Industrial Way & Old Newport Blvd (W)

HCM 6th TWSC
Synchro 11 Report

Intersection												
Int Delay, s/veh	3.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	129	16	24	81	42	13	0	21	38	0	17
Future Vol, veh/h	8	129	16	24	81	42	13	0	21	38	0	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None									
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	145	18	27	91	47	15	0	24	43	0	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	138	0	0	163	0	0	350	364	154	353	350	115
Stage 1	-	-	-	-	-	-	172	172	-	169	169	-
Stage 2	-	-	-	-	-	-	178	192	-	184	181	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1446	-	-	1416	-	-	605	564	892	602	574	937
Stage 1	-	-	-	-	-	-	830	756	-	833	759	-
Stage 2	-	-	-	-	-	-	824	742	-	818	750	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1446	-	-	1416	-	-	580	548	892	574	558	937
Mov Cap-2 Maneuver	-	-	-	-	-	-	580	548	-	574	558	-
Stage 1	-	-	-	-	-	-	824	751	-	827	743	-
Stage 2	-	-	-	-	-	-	790	726	-	791	745	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.4			1.2			10.1			11.1		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	740	1446	-	-	1416	-	-	652
HCM Lane V/C Ratio	0.052	0.006	-	-	0.019	-	-	0.095
HCM Control Delay (s)	10.1	7.5	0	-	7.6	0	-	11.1
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0.1	-	-	0.3

Cumulative Conditions with Project - Mid-Day (Saturday)
7: Newport Blvd & Industrial Way

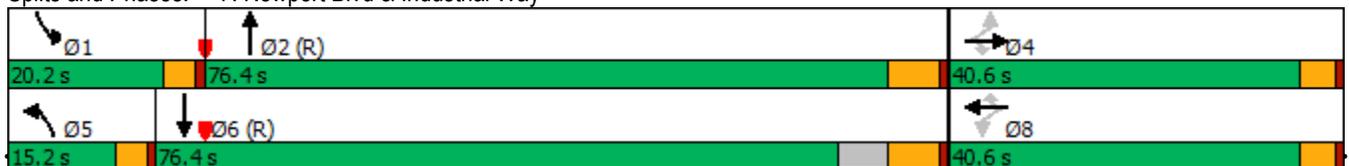
Lanes, Volumes, Timings
Synchro 11 Report

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	58	82	11	46	65	42	1884	16	43	1997	53
Future Volume (vph)	49	58	82	11	46	65	42	1884	16	43	1997	53
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	90		0	95		0
Storage Lanes	0		1	1		1	1		0	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1822	1583	1770	1863	1583	1770	5080	0	1770	5065	0
Flt Permitted		0.829		0.520			0.950			0.950		
Satd. Flow (perm)	0	1544	1583	969	1863	1583	1770	5080	0	1770	5065	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			94			94		1				4
Link Speed (mph)		30			30			50				50
Link Distance (ft)		175			191			846				1146
Travel Time (s)		4.0			4.3			11.5				15.6
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	111	85	11	48	68	44	1980	0	45	2135	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA		Prot	NA	
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8						
Total Split (s)	40.6	40.6	40.6	40.6	40.6	40.6	15.2	76.4		20.2	76.4	
Total Lost Time (s)		4.6	4.6	4.6	4.6	4.6	4.2	6.4		4.2	6.4	
Act Effct Green (s)		14.4	14.4	14.4	14.4	14.4	9.3	100.9		9.4	100.9	
Actuated g/C Ratio		0.10	0.10	0.10	0.10	0.10	0.07	0.74		0.07	0.74	
v/c Ratio		0.69	0.34	0.11	0.25	0.27	0.37	0.53		0.37	0.57	
Control Delay		79.8	12.0	55.5	57.9	6.9	69.9	9.4		70.1	10.0	
Queue Delay		0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay		79.8	12.0	55.5	57.9	6.9	69.9	9.4		70.1	10.0	
LOS		E	B	E	E	A	E	A		E	B	
Approach Delay		50.4			30.4			10.8			11.3	
Approach LOS		D			C			B			B	

Intersection Summary

Area Type: Other
 Cycle Length: 137.2
 Actuated Cycle Length: 137.2
 Offset: 102 (74%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.69
 Intersection Signal Delay: 13.3 Intersection LOS: B
 Intersection Capacity Utilization 69.4% ICU Level of Service C
 Analysis Period (min) 15

Splits and Phases: 7: Newport Blvd & Industrial Way



Appendix D PARKING AND QUEUING SURVEY DATA SHEETS



Raising Canes's Queue/Parking Study

3150 Harbor Blvd., Costa Mesa

Thursday, 9 February 2023

Time	Queue	Parking	Time	Queue	Parking	Time	Queue	Parking
11:00	3	14	3:00	2	15	7:00	18	7
11:05	3		3:05	1				
11:10	2		3:10	7				
11:15	5		3:15	5				
11:20	8		3:20	3				
11:25	3		3:25	2				
11:30	3	15	3:30	4	12			
11:35	2		3:35	3				
11:40	2		3:40	5				
11:45	3		3:45	3				
11:50	4		3:50	13				
11:55	3		3:55	10				
12:00	6	14	4:00	8	10			
12:05	6		4:05	5				
12:10	4		4:10	9				
12:15	10		4:15	2				
12:20	5		4:20	3				
12:25	8		4:25	4				
12:30	9	23	4:30	9	8			
12:35	2		4:35	11				
12:40	6		4:40	12				
12:45	13		4:45	7				
12:50	3		4:50	5				
12:55	4		4:55	9				
1:00	3	19	5:00	5	7			
1:05	2		5:05	5				
1:10	2		5:10	5				
1:15	3		5:15	6				
1:20	1		5:20	6				
1:25	1		5:25	8				
1:30	2	19	5:30	9	8			
1:35	1		5:35	10				
1:40	3		5:40	8				
1:45	4		5:45	6				
1:50	1		5:50	4				
1:55	5		5:55	3				
2:00	10	14	6:00	7	9			
2:05	11		6:05	3				
2:10	3		6:10	1				
2:15	5		6:15	4				
2:20	8		6:20	7				
2:25	11		6:25	8				
2:30	3	13	6:30	13	5			
2:35	17		6:35	16				
2:40	7		6:40	18				
2:45	2		6:45	13				
2:50	5		6:50	14				
2:55	1		6:55	16	157-			

Raising Canes's Queue/Parking Study
 2249 N. Tustin St., Orange
 Thursday, 9 February 2023

Time	Queue	Parking	Time	Queue	Parking	Time	Queue	Parking
11:00	0	3	3:00	6	4	7:00	9	4
11:05	2		3:05	7				
11:10	5		3:10	6				
11:15	4		3:15	5				
11:20	3		3:20	3				
11:25	5		3:25	2				
11:30	4	2	3:30	6	7			
11:35	1		3:35	7				
11:40	1		3:40	7				
11:45	2		3:45	5				
11:50	5		3:50	8				
11:55	4		3:55	12				
12:00	4	6	4:00	7	6			
12:05	0		4:05	6				
12:10	7		4:10	5				
12:15	5		4:15	4				
12:20	7		4:20	5				
12:25	13		4:25	4				
12:30	8	4	4:30	1	4			
12:35	1		4:35	3				
12:40	2		4:40	6				
12:45	4		4:45	3				
12:50	6		4:50	0				
12:55	3		4:55	3				
1:00	2	4	5:00	3	5			
1:05	2		5:05	2				
1:10	3		5:10	5				
1:15	4		5:15	5				
1:20	3		5:20	10				
1:25	2		5:25	14				
1:30	4	7	5:30	9	5			
1:35	2		5:35	6				
1:40	1		5:40	2				
1:45	4		5:45	1				
1:50	2		5:50	1				
1:55	1		5:55	3				
2:00	0	7	6:00	7	5			
2:05	1		6:05	14				
2:10	5		6:10	15				
2:15	1		6:15	18				
2:20	1		6:20	12				
2:25	4		6:25	17				
2:30	1	3	6:30	10	4			
2:35	0		6:35	10				
2:40	4		6:40	14				
2:45	7		6:45	10				
2:50	9		6:50	15				
2:55	8		6:55	10	158-			

Raising Canes's Queue/Parking Study

23971 El Toro Rd., Laguna Hills

Thursday, 9 February 2023

Time	Queue	Parking	Time	Queue	Parking	Time	Queue	Parking
11:00	5	14	3:00	8	23	7:00	9	21
11:05	7		3:05	7				
11:10	6		3:10	11				
11:15	6		3:15	11				
11:20	5		3:20	10				
11:25	4		3:25	9				
11:30	2	21	3:30	5	21			
11:35	5		3:35	5				
11:40	4		3:40	4				
11:45	7		3:45	5				
11:50	8		3:50	3				
11:55	9		3:55	3				
12:00	9	20	4:00	5	19			
12:05	7		4:05	5				
12:10	9		4:10	5				
12:15	10		4:15	5				
12:20	12		4:20	5				
12:25	6		4:25	4				
12:30	10	23	4:30	6	19			
12:35	8		4:35	5				
12:40	8		4:40	4				
12:45	8		4:45	4				
12:50	4		4:50	4				
12:55	3		4:55	3				
1:00	5	20	5:00	4	20			
1:05	5		5:05	4				
1:10	3		5:10	4				
1:15	1		5:15	4				
1:20	2		5:20	4				
1:25	2		5:25	5				
1:30	2	24	5:30	7	19			
1:35	2		5:35	3				
1:40	2		5:40	5				
1:45	1		5:45	4				
1:50	3		5:50	6				
1:55	5		5:55	7				
2:00	3	29	6:00	7	18			
2:05	2		6:05	3				
2:10	1		6:10	5				
2:15	1		6:15	4				
2:20	2		6:20	9				
2:25	0		6:25	6				
2:30	3	26	6:30	6	27			
2:35	3		6:35	7				
2:40	4		6:40	5				
2:45	6		6:45	7				
2:50	6		6:50	7				
2:55	8		6:55	7-159-				

Raising Canes's Queue/Parking Study
 3150 Harbor Blvd., Costa Mesa
 Saturday, 11 February 2023

Time	Queue	Parking	Time	Queue	Parking	Time	Queue	Parking
11:00	2	9	3:00	19	12	7:00	15	5
11:05	2		3:05	16				
11:10	1		3:10	20				
11:15	4		3:15	18				
11:20	2		3:20	18				
11:25	3		3:25	12				
11:30	4	13	3:30	8	13			
11:35	5		3:35	9				
11:40	5		3:40	13				
11:45	9		3:45	18				
11:50	12		3:50	13				
11:55	13		3:55	5				
12:00	8	14	4:00	4	14			
12:05	3		4:05	6				
12:10	1		4:10	7				
12:15	6		4:15	5				
12:20	7		4:20	8				
12:25	10		4:25	2				
12:30	13	17	4:30	0	9			
12:35	16		4:35	2				
12:40	16		4:40	2				
12:45	11		4:45	0				
12:50	14		4:50	2				
12:55	13		4:55	11				
1:00	13	15	5:00	6	11			
1:05	10		5:05	13				
1:10	9		5:10	14				
1:15	14		5:15	15				
1:20	20		5:20	18				
1:25	18		5:25	11				
1:30	14	14	5:30	14	10			
1:35	7		5:35	3				
1:40	8		5:40	8				
1:45	9		5:45	17				
1:50	11		5:50	13				
1:55	8		5:55	9				
2:00	12	14	6:00	13	10			
2:05	11		6:05	17				
2:10	12		6:10	16				
2:15	14		6:15	15				
2:20	16		6:20	14				
2:25	15		6:25	18				
2:30	15	15	6:30	20	8			
2:35	12		6:35	21				
2:40	14		6:40	19				
2:45	19		6:45	20				
2:50	18		6:50	21				
2:55	17		6:55	19	160-			

Raising Canes's Queue/Parking Study
 2249 N. Tustin St., Orange
 Saturday, 11 February 2023

Time	Queue	Parking	Time	Queue	Parking	Time	Queue	Parking
11:00	2	0	3:00	8	5	7:00	9	3
11:05	6		3:05	5				
11:10	5		3:10	1				
11:15	8		3:15	3				
11:20	3		3:20	1				
11:25	2		3:25	4				
11:30	3	2	3:30	6	6			
11:35	6		3:35	2				
11:40	6		3:40	2				
11:45	4		3:45	3				
11:50	5		3:50	2				
11:55	10		3:55	1				
12:00	13	7	4:00	0	3			
12:05	11		4:05	3				
12:10	8		4:10	6				
12:15	13		4:15	4				
12:20	7		4:20	1				
12:25	9		4:25	2				
12:30	8	8	4:30	2	4			
12:35	12		4:35	5				
12:40	13		4:40	7				
12:45	19		4:45	3				
12:50	11		4:50	0				
12:55	7		4:55	4				
1:00	4	4	5:00	3	5			
1:05	3		5:05	7				
1:10	5		5:10	8				
1:15	7		5:15	9				
1:20	9		5:20	7				
1:25	16		5:25	8				
1:30	14	6	5:30	9	6			
1:35	11		5:35	11				
1:40	12		5:40	11				
1:45	12		5:45	12				
1:50	7		5:50	10				
1:55	6		5:55	12				
2:00	6	6	6:00	3	3			
2:05	4		6:05	1				
2:10	3		6:10	2				
2:15	9		6:15	3				
2:20	7		6:20	6				
2:25	9		6:25	6				
2:30	10	7	6:30	4	3			
2:35	9		6:35	6				
2:40	6		6:40	10				
2:45	0		6:45	10				
2:50	4		6:50	10				
2:55	4		6:55	4				

Raising Canes's Queue/Parking Study

23971 El Toro Rd., Laguna Hills

Saturday, 11 February 2023

Time	Queue	Parking	Time	Queue	Parking	Time	Queue	Parking
11:00	0	14	3:00	5	16	7:00	7	30
11:05	1		3:05	4				
11:10	2		3:10	4				
11:15	3		3:15	3				
11:20	1		3:20	1				
11:25	3		3:25	1				
11:30	1	12	3:30	4	11			
11:35	2		3:35	5				
11:40	5		3:40	4				
11:45	6		3:45	6				
11:50	10		3:50	3				
11:55	5		3:55	1				
12:00	4	13	4:00	2	21			
12:05	7		4:05	2				
12:10	9		4:10	1				
12:15	9		4:15	2				
12:20	8		4:20	2				
12:25	12		4:25	1				
12:30	6	27	4:30	1	16			
12:35	8		4:35	3				
12:40	8		4:40	2				
12:45	6		4:45	3				
12:50	10		4:50	4				
12:55	11		4:55	2				
1:00	6	29	5:00	5	22			
1:05	11		5:05	1				
1:10	8		5:10	1				
1:15	7		5:15	2				
1:20	7		5:20	3				
1:25	7		5:25	4				
1:30	7	19	5:30	8	31			
1:35	8		5:35	10				
1:40	6		5:40	13				
1:45	6		5:45	10				
1:50	10		5:50	10				
1:55	11		5:55	6				
2:00	13	30	6:00	10	31			
2:05	11		6:05	13				
2:10	11		6:10	9				
2:15	6		6:15	4				
2:20	6		6:20	11				
2:25	7		6:25	10				
2:30	6	18	6:30	11	28			
2:35	6		6:35	9				
2:40	5		6:40	8				
2:45	7		6:45	11				
2:50	7		6:50	10				
2:55	6		6:55	8-162-				

PROJECT TEAM

CIVIL ENGINEER
AMELIA BELTRAN, PE
KIMLEY-HORN AND ASSOCIATES, INC.
1100 W TOWN & COUNTRY ROAD, SUITE 700
ORANGE, CA 92668
(714) 939-1030
AMELIA.BELTRAN@KIMLEY-HORN.COM

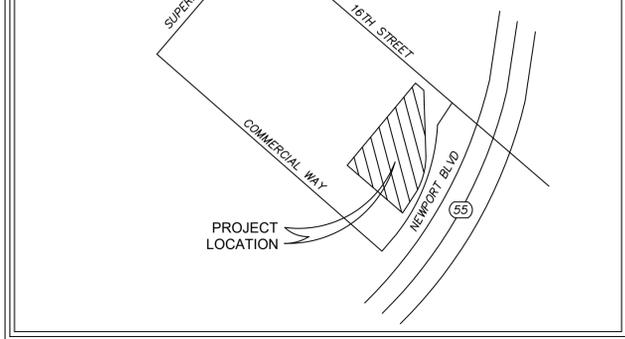
LEGEND:

- CENTER LINE
PROPERTY LINE
RIGHT-OF-WAY LINE
EASEMENT LINE / SETBACK LINE
APPROXIMATE LIMIT OF WORK LINE
FIRE LANE CURB MARKING
STANDARD DUTY CONCRETE PAVEMENT
HEAVY DUTY CONCRETE PAVEMENT
LANDSCAPE/PLANTER AREA
HEAVY DUTY ASPHALT PAVEMENT
DETECTABLE WARNING SYSTEM
COLORED CONCRETE/ENHANCED PAVING
ACCESSIBLE ROUTE (LOCATION PURPOSES ONLY, DO NOT PAINT)
SIGN POST
ACCESSIBLE PARKING SPACE
NUMBER OF PARKING SPACES

LEGAL DESCRIPTION

THE LAND REFERRED TO IS SITUATED IN THE COUNTY OF ORANGE, CITY OF COSTA MESA, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:
THAT PORTION OF LOT 41 OF NEWPORT HEIGHTS, IN THE CITY OF COSTA MESA, COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP THEREOF RECORDED IN BOOK 4 PAGE 83 MISCELLANEOUS MAPS, RECORDS OF SAID ORANGE COUNTY, LYING SOUTHEASTERLY OF THE FOLLOWING DESCRIBED LINE:
BEGINNING AT A POINT IN THE NORTHEASTERLY LINE OF SAID LOT 41, SAID POINT BEING 580.65 FEET SOUTHEASTERLY OF THE MOST NORTHERLY CORNER OF LOT 41; THENCE SOUTHWESTERLY ON A LINE PARALLEL TO THE NORTHWESTERLY LINE OF LOT 41, A DISTANCE OF 300.17 FEET TO THE WESTERLY LINE OF SAID LOT 41.
EXCEPTING THEREFROM THAT PORTION OF SAID LOT 41, LYING SOUTHEASTERLY OF THE FOLLOWING DESCRIBED LINE:
BEGINNING AT A POINT IN THE CENTER LINE OF SIXTEENTH STREET, 60 FEET WIDE, DISTANT NORTH 50° 15' 49" WEST 291.59 FEET, MEASURED ALONG SAID CENTER LINE, FROM THE CENTER LINE OF THE COUNTY ROAD, 60 FEET WIDE, AS SHOWN ON SAID MAP; THENCE SOUTH 39° 44' 11" WEST, 30.00 FEET; THENCE SOUTH 3° 13' 32" EAST, 167.49 FEET TO THE POINT OF TANGENCY OF THIS COURSE WITH A CURVE, CONCAVE TO THE WEST AND HAVING A RADIUS OF 174 FEET; THENCE SOUTHERLY ALONG SAID CURVE THROUGH AN ANGLE OF 30° 33' 40" AN ARC DISTANCE OF 92.91 FEET TO THE POINT OF TANGENCY THEREOF, WITH A CURVE, CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 1317.72 FEET; THENCE SOUTHWESTERLY ALONG SAID CURVE, AN ARC DISTANCE OF 100.00 FEET, MORE OR LESS, TO THE SOUTHWESTERLY LINE OF SAID LOT 41.

VICINITY MAP
COSTA MESA, CALIFORNIA



SITE DATA

PROJECT DESCRIPTION: DEMOLITION OF EXISTING PARKING LOT AND ONE BUILDING. NEW CONSTRUCTION OF A RAISING CANE'S DRIVE THRU RESTAURANT AND PARKING LOT IN COMMERCIAL ZONE.
ADDRESS: 1595 NEWPORT BLVD, COSTA MESA, CA 92627
APN: 425-361-08
ZONING DISTRICT: C2-GENERAL BUSINESS
ADJACENT ZONING DISTRICTS: NW: C2 - GENERAL BUSINESS; SW: C2 - GENERAL BUSINESS; N: C1 - LOCAL BUSINESS

LAND USE: COMMERCIAL
ADJACENT LAND USE: NW: GENERAL COMMERCIAL; SW: GENERAL COMMERCIAL; N: GENERAL COMMERCIAL
GENERAL PLAN DISTRICT: GENERAL COMMERCIAL
SPECIFIC PLAN: 19 WEST URBAN PLAN
FLOOD ZONE: ZONE X - AREAS DETERMINED TO BE OUTSIDE THE 0.02% ANNUAL CHANCE FLOODPLAIN.
MAXIMUM BUILDING HEIGHT: 30'
PROPOSED BUILDING HEIGHT: 19'10"
MAXIMUM F.A.R.: 0.20
PROPOSED F.A.R.: 0.07
TOTAL DISTURBED AREA: 43,593 S.F. (1.00 AC)
TOTAL PAD AREA: 2,913 S.F. (0.07 AC)
TOTAL PATIO AREA: 1,303 S.F. (0.03 AC)
TOTAL CORRAL AREA: 225 S.F. (0.005 AC)
TOTAL LOT AREA: 43,593 S.F. (1.00 AC)

LOT COVERAGE
TOTAL SITE AREA: 43,593 S.F. (1.00 AC) 100%
BUILDING AREA: 2,913 S.F. (0.07 AC) 6.7%
PATIO AREA: 1,303 S.F. (0.03 AC) 3.0%
IMPERVIOUS AREA: 24,935 S.F. (0.57 AC) 57.2%
LANDSCAPE AREA: 14,442 S.F. (0.33 AC) 33.1%

PARKING/LANDSCAPE BUFFER
FRONT (NEWPORT BLVD): 20.0'
REAR (W): 0.0'
SIDE (S): 0.0'
SIDE (E): 15.0'
PARKING SUMMARY: RAISING CANE'S: 3,000 S.F. (10 STALLS/1,000 S.F.) + 1,216 S.F. (12 STALL/1,000 S.F.) = 43 STALLS REQUIRED PER CITY CODE
• 2,913 S.F. (BUILDING AREA CONDITIONED SPACE WHICH EXCLUDES CORRAL) + 384 S.F. (SOUTH PATIO) + 919 S.F. (NORTH PATIO) = 4,216 S.F. TOTAL
• ADA PARKING FOR 26-50 PARKING STALLS = 2 ADA PARKING STALLS REQUIRED
• TOTAL EV SPACES FOR 26-50 PARKING STALLS = 8 (PER 2022 CALGREEN CODE)
EV CAPABLE WITH EVSE = 2 STALLS
FUTURE EV CAPABLE = 6 STALLS
1 EV CAPABLE STALL MUST BE VAN ACCESSIBLE

Table with columns: PARKING TABLE, REQUIRED, PROVIDED. Rows include Standard, Compact (C), Motorcycle, Standard EV Capable, VAP EV Capable, Future EV Capable, Accessible, and Total.

TITLE REPORT EXCEPTIONS

- 7 AN EASEMENT AFFECTING THAT PORTION OF SAID LAND AND FOR THE PURPOSES STATED HEREIN AND INCIDENTAL PURPOSES AS PROVIDED IN THE FOLLOWING GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION FOR: UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS RECORDED: JULY 12, 1988, IN OFFICIAL RECORDS AS INSTRUMENT NUMBER 88-334801.
8 AN EASEMENT AFFECTING THAT PORTION OF SAID LAND AND FOR THE PURPOSES STATED HEREIN AND INCIDENTAL PURPOSES AS PROVIDED IN THE FOLLOWING GRANTED TO: SOUTHERN CALIFORNIA EDISON COMPANY, A CORPORATION FOR: UNDERGROUND ELECTRICAL SUPPLY SYSTEMS AND COMMUNICATION SYSTEMS RECORDED: AUGUST 22, 1991, IN OFFICIAL RECORDS AS INSTRUMENT NUMBER 91-453282.
PLOTTED HEREON.

SIGN INFORMATION

- (K) CMUTCD SIGN R5-1 - "DO NOT ENTER"
(L) CMUTCD SIGN R1-1 - "STOP"
(M) CMUTCD SIGN R10-7 - "DO NOT BLOCK INTERSECTION"

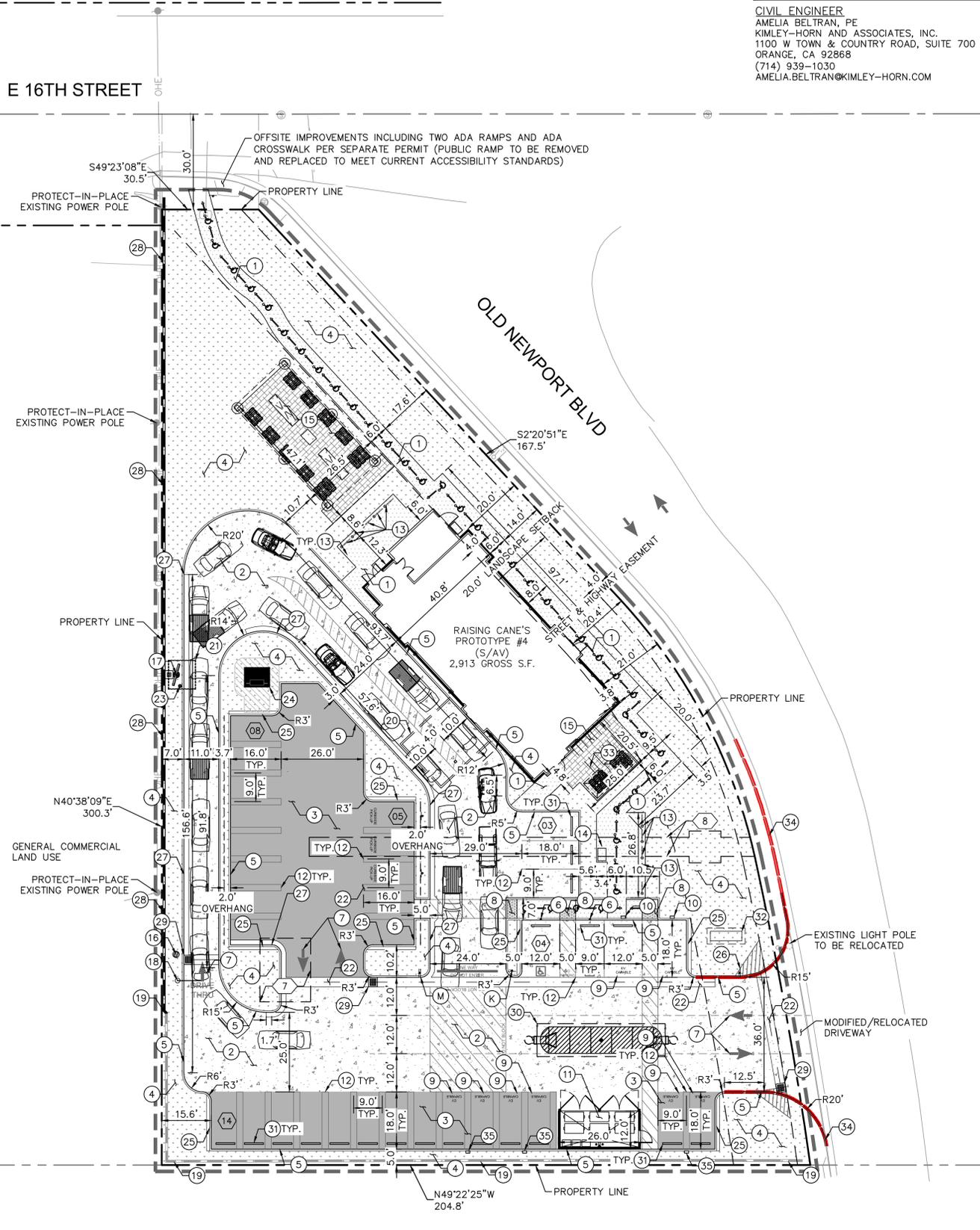
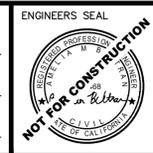


Table with columns: ISSUE, DATE, DESCRIPTION. Includes a list of revision notes.

JC
DRAWN BY AB
CHECKED BY JP
RECOMMENDED



Kimley-Horn
1100 W TOWN & COUNTRY RD, SUITE 700
ORANGE, CA 92668
(916) 859-3411
PREPARED UNDER THE DIRECT SUPERVISION OF:
Amelia Beltran DATE: 11/6/2023
AMELIA BELTRAN, PE, R.C.E. NO. 87468 EXP. 9/30/2023

CITY OF COSTA MESA
APPROVED BY:
CITY ENGINEER RCE # EXP DATE



CITY OF COSTA MESA
PRELIMINARY SITE PLAN

1 OF 1
SCALE
1" = 20'
WHEN PRINTED AT FULL SIZE (24"x36")

ROOF TOP EQUIPMENT AND ACCESSORIES

1	RTU-1. PROVIDE TAPERED INSULATION CRICKET AT CURB.
2	RTU-2. PROVIDE TAPERED INSULATION CRICKET AT CURB.
3	MAKE-UP AIR UNIT. PROVIDE TAPERED INSULATION CRICKET AT CURB.
4	HOOD EXHAUST FAN. PROVIDE TAPERED INSULATION CRICKET AT CURB.
5	ICE MACHINE CONDENSER. RE: 7/A8.21
6	COOLER / FREEZER CONDENSER. RE: 7/A8.21
7	RESTROOM EXHAUST FAN
9	PRIMARY ROOF SCUPPER - COORDINATE w/ A0.10 FOR SITEDRAINAGE. RE: 5/A8.40
10	SECONDARY OVERFLOW SCUPPER
13	ROOF ACCESS HATCH
14	GUARD RAIL
15	ROOF WALKWAY PADS
17	ROOF PENETRATION FOR CONDENSER UNIT
21	GAS VEH EXHAUST
23	PLUMBING STACK VENT
24	ROOF HYDRANT (RE: PLUMB)
25	ROOF PENETRATION FOR IT EQUIPMENT

GENERAL NOTES

1	THE DETAILS SHOWN ON THE DRAWINGS ARE TO BE CONSIDERED SCHEMATIC. ITEMS SUCH AS PARAPET FLASHING, CANTS, BLOCKING, ROOF PENETRATIONS AND EXPANSION JOINTS ARE TO BE INSTALLED PER MANUFACTURERS STANDARD ROOF DETAILS PRIOR TO THE BEGINNING OF THE WORK.
2	REFER TO TRUSS COORDINATION PLAN FOR DECK BEARING ELEVATION @ ROOF.
3	REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL ITEMS ON OR THROUGH ROOF.
4	CLEAN ROOF OF ALL CONSTRUCTION DEBRIS AT PROJECT COMPLETION.
5	ALL ROOF TOP MECHANICAL EQUIPMENT SHALL BE STRAPPED AND SECURED TO THE ROOF PER EQUIPMENT MANUFACTURER STANDARDS.
6	CONTRACTOR TO VERIFY WEIGHT AND LOADING REQUIREMENTS OF ALL ROOF TOP EQUIPMENT WITH DATA SHEETS PRIOR TO TRUSS DESIGN.
7	IN ADDITION, VERIFY WEIGHT AND LOADING OF WOOD MILLWORK ITEMS SUSPENDED FROM BOTTOM CHORD IN DINING ROOM.
8	GENERAL CONTRACTOR TO VERIFY REQUIREMENTS OF ALL ROOFTOP EQUIPMENT WITH SPECIFICATION SHEETS PRIOR TO TRUSS DESIGN.
9	GENERAL CONTRACTOR TO COORDINATE FREEZER EQUIPMENT PER MANUFACTURER SPECIFICATIONS.



Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tel: 972-769-3100 Fax: 972-769-3101

Restaurant:
Raising Cane's
Restaurant #862
1595 Newport Blvd.,
Costa Mesa, CA 92627
P4-AV [B]

Designer's Information:
CSRS
301 E. OCEAN BLVD. SUITE 1560
LONG BEACH, CA 90802
Telephone: 833-523-2526
www.csrsinc.com

Prototype Phase: 2021-3.0
Project Issue Date: 09-20-2023
CSRS Project Manager: BYH

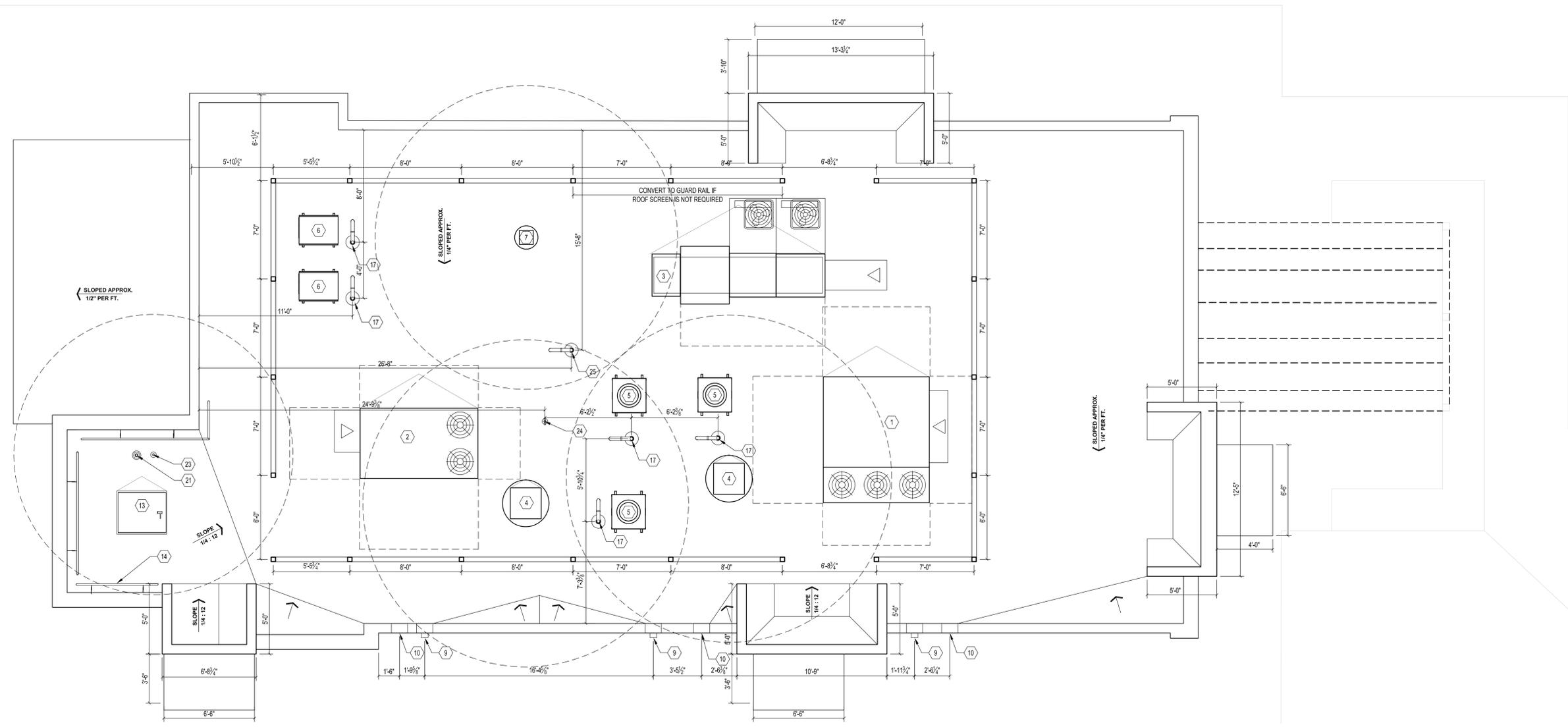
ENTITLEMENT
09-20-2023

Sheet Versions:

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-	-	-
-	-	-

Sheet Title:
ROOF PLAN

Sheet Number:
A1.50



1 | ROOF PLAN
1/4" = 1'-0"



Restaurant Support Office
6800 Bishop Road, Plano, TX 75024
Tele: 972-769-3100 Fax: 972-769-3101

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Raising Cane's
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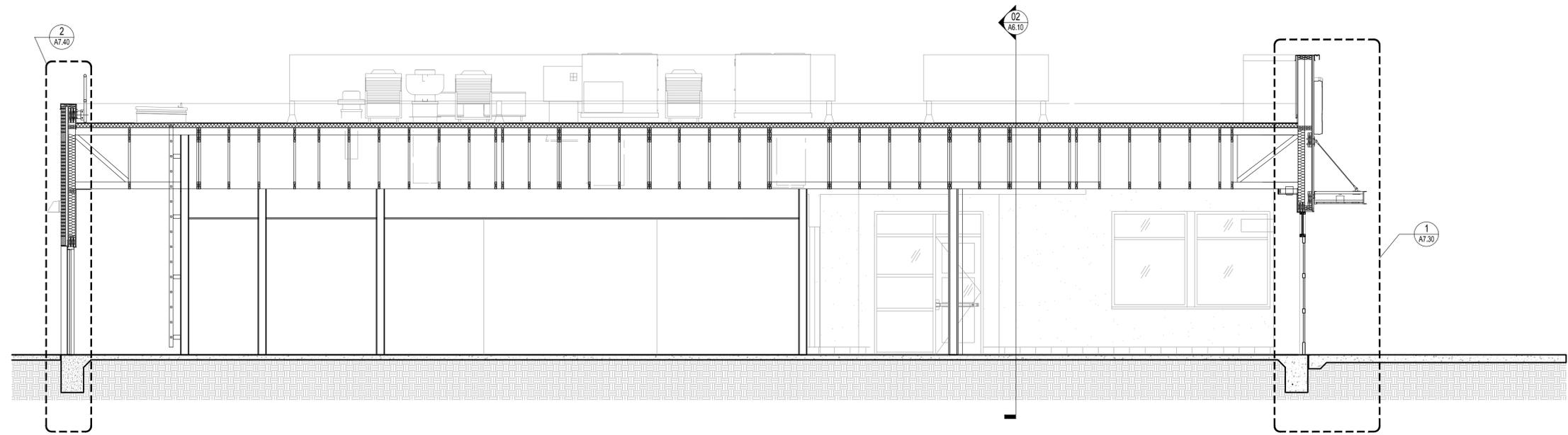
ENTITLEMENT
09-20-2023

Sheet Versions:

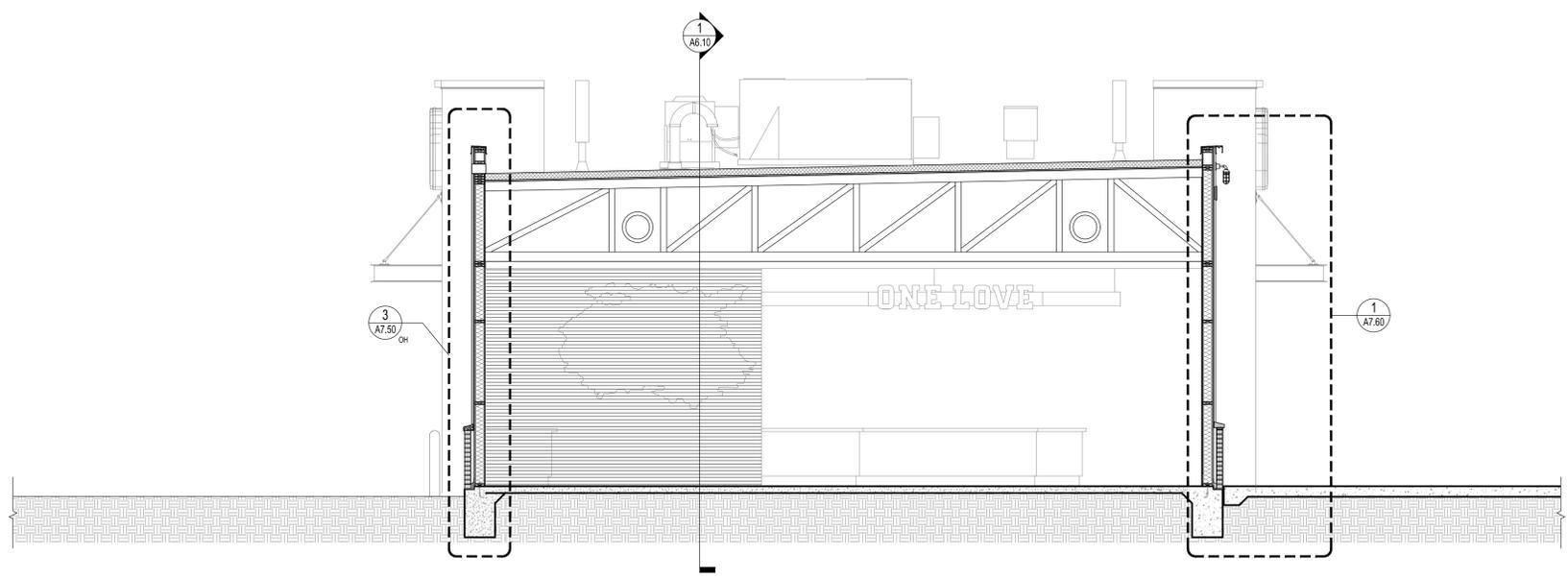
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1	11/11/2020	CONSTRUCTION SET
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-
-	-	-

Sheet Title:
BUILDING SECTIONS

Sheet Number:
A6.10



1 | TRANSVERSE SECTION
1/4" = 1'-0"



2 | LONGITUDINAL SECTION
1/4" = 1'-0"

P4 AV Front Patio Elevations



FRONT ENTRY ELEVATION
SCALE: 1" = 12'-0"



DRIVE THRU ELEVATION
SCALE: 1" = 12'-0"



SIDE ENTRY ELEVATION
SCALE: 1" = 12'-0"



REAR ELEVATION
SCALE: 1" = 12'-0"

MATERIAL FINISHES

EM-3



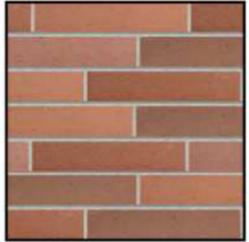
HOT ROLLED STEEL W/ CARBON GRADE FINISH - W/ CLEAR MATTE POWDER COAT FINISH

EM-4



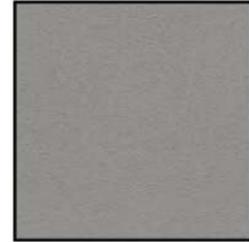
RECLAIMED METAL PANEL: VINTAGE CAR HOOD OCCURS AT FACE OF THE "I" ELEMENT ONLY

EWF-1



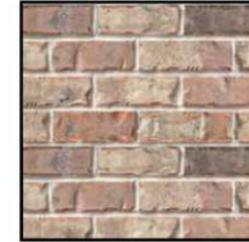
BELDEN NORMAN BRICK MASONRY MEDIUM RANGE, SMOOTH, IRON SPOT. MORTAR TO MATCH SOLOMON PRODUCTS IO H, WEATHERED HORIZONTAL STRIKE. VERTICAL JOINTS ARE FLUSH

EWF-2



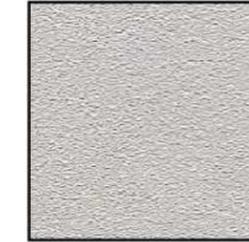
"SW 7669 SUMMIT GRAY" PORTLAND CEMENT STUCCO

EWF-4



BORAL: "ALAMO" MODULAR BRICK, MORTAR TO MATCH SOLOMON PRODUCTS IO H, LIGHT BUFF SACK RUB FINISH.

EWF-5



"132 MOUNTAIN FOG" PORTLAND CEMENT STUCCO

EWF-6



"456 OYSTER SHELL" CEMENT STUCCO

EWS-2



ALUMINUM STOREFRONT SYSTEM FINISH: ANODIZED BLACK

ELEVATIONS

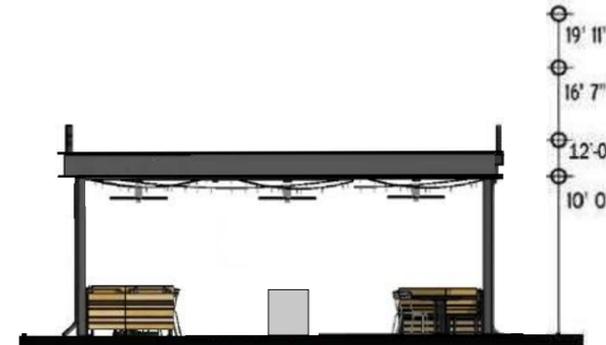


REAR PATIO DINING AREA



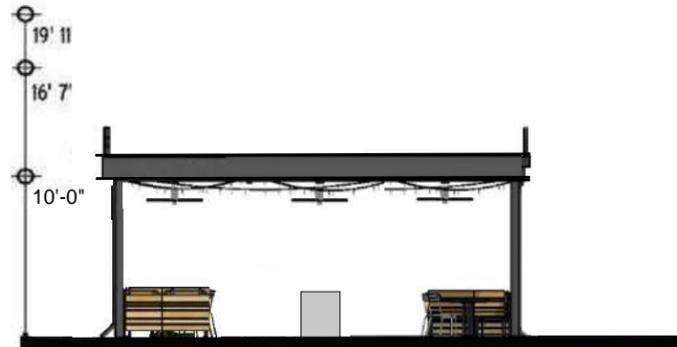
FRONT VIEW ELEVATION

SCALE: NTS



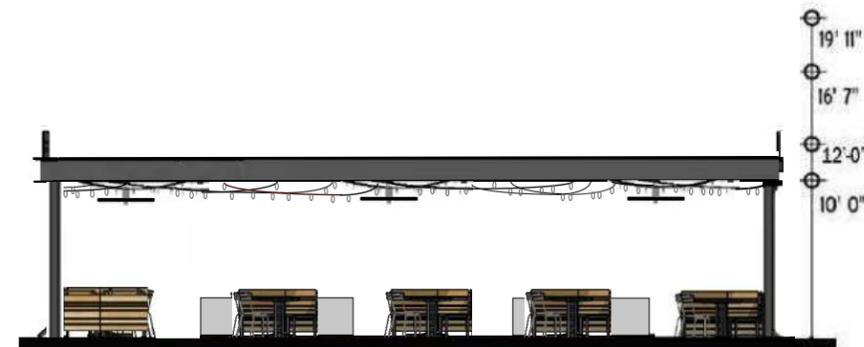
SIDE VIEW ELEVATION

SCALE: NTS



SIDE VIEW ELEVATION

SCALE: NTS



BACK VIEW ELEVATION

SCALE: NTS

BACK VIEW ELEVATION

SCALE: NTS

MATERIAL FINISHES

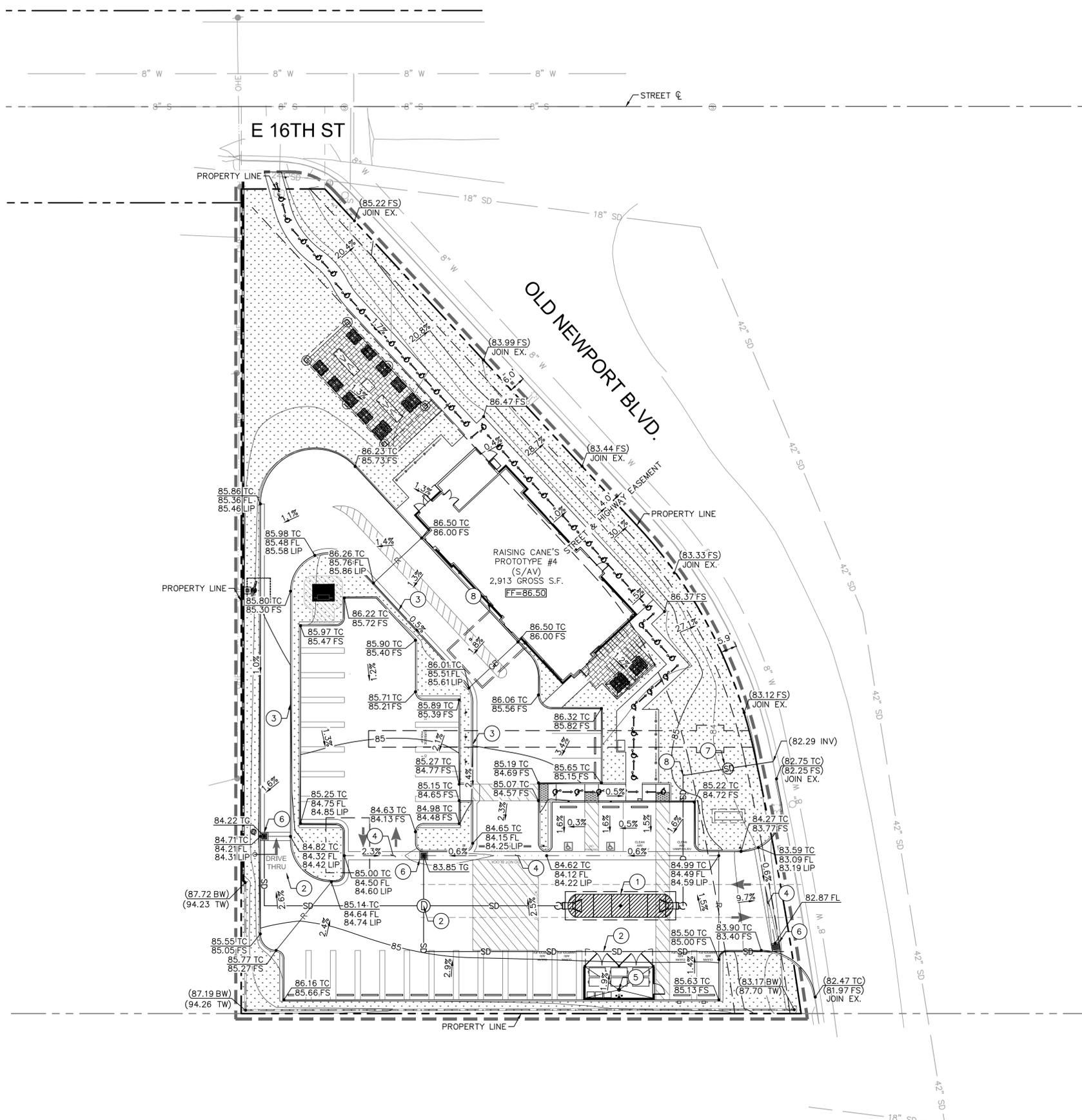
EM-3



HOT ROLLED STEEL W/ CARBON
GRADE FINISH - W/ CLEAR,
MATTE POWDER COAT FINISH

ELEVATIONS

Drawing name: K:\ORA\DEV\Raising_Cane's\094797132 - Costa Mesa (Newport & 16th)_862\CADD\Exhibits\Entitlement_Package\C2.0 - Preliminary Grading Plan.dwg Oct 31, 2023 2:23pm by: Bao.Duong
 This document, together with the concepts and designs presented herein, is intended only for the specific purpose and client for which it was prepared. Use of and improper reliance on this document without written authorization and adaptation by Kimley-Horn and Associates, Inc. shall be without liability to Kimley-Horn and Associates, Inc.



LEGEND

- CENTER LINE
- PROPERTY LINE
- RIGHT-OF-WAY LINE
- EASEMENT LINE
- APPROXIMATE LIMITS OF DISTURBANCE
- PROPOSED RIDGE LINE
- PROPOSED GRADE BREAK LINE
- PROPOSED SPOT ELEVATION
- EXISTING SPOT ELEVATION
- PROPOSED FLOW LINE
- EXISTING STORM DRAIN LINE
- PROPOSED STORM DRAIN LINE

GRADING AND DRAINAGE NOTES

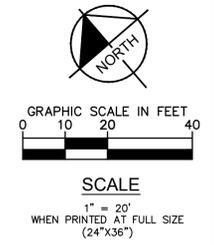
- 1 MC-7200 STORMTECH UNDERGROUND INFILTRATION SYSTEM.
- 2 6" SDR-35 PVC STORM DRAIN PIPE SLOPED AT 0.5% MIN.
- 3 CONCRETE CURB AND GUTTER.
- 4 CONCRETE VALLEY GUTTER.
- 5 TRASH ENCLOSURE DRAIN WITH ACCESSIBLE GRATE. DRAIN TO SEWER.
- 6 24" X 24" JENSEN PRECAST DROP INLET WITH CATCH BASIN FILTER INSERT FOR TRASH CAPTURE.
- 7 PROPOSED PUMP.
- 8 4" SDR-26 PVC STORM DRAIN PIPE. DRAIN THRU CURB FACE.

ESTIMATED EARTHWORK QUANTITIES

CUT: 535 CY
 FILL: 112 CY
 NET: 423 CY (EXPORT)

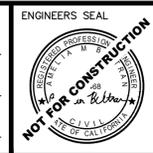
NOTE: THE ABOVE QUANTITIES ARE APPROXIMATE IN PLACE VOLUMES CALCULATED FROM THE EXISTING GROUND TO THE PROPOSED FINISHED GRADE. EXISTING GROUND IS DEFINED BY THE CONTOURS AND SPOT GRADES ON THE BASE SURVEY. PROPOSED FINISHED GRADE IS DEFINED AS THE FINAL GRADE AS INDICATED ON THE GRADING PLAN(S).

THE EARTHWORK QUANTITIES ABOVE ARE FOR PERMIT PURPOSES ONLY. THEY HAVE NOT BEEN FACTORED TO ACCOUNT FOR CHANGES IN VOLUME DUE TO BULKING, CLEARING AND GRUBBING, SHRINKAGE, OVER-EXCAVATION AND RE-COMPACTION, AND CONSTRUCTION METHODS. NOR DO THEY ACCOUNT FOR THE THICKNESS OF PAVEMENT SECTIONS, FOOTINGS, SLABS, REUSE OF PULVERIZED MATERIALS THAT WILL UNDERLIE NEW PAVEMENTS, ETC. THE CONTRACTOR SHALL RELY ON THEIR OWN EARTHWORK ESTIMATES FOR BIDDING PURPOSES.



ISSUE	DATE	DESCRIPTION

JC
 DRAWN BY AB
 CHECKED BY JP
 RECOMMENDED



Kimley-Horn
 1100 W TOWN & COUNTRY RD, SUITE 700
 ORANGE, CA 92668
 (919) 859-3411
 PREPARED UNDER THE DIRECT SUPERVISION OF:
 Amelia Beltran, PE, R.C.E. NO. 87468 DATE: 10/31/2023
 EXP. 9/30/2023

CITY OF COSTA MESA
 APPROVED BY: _____
 CITY ENGINEER RCE # _____ EXP _____ DATE _____



CITY OF COSTA MESA
PRELIMINARY GRADING PLAN

1 OF 1



375 E Main Street
Ventura, CA 93001
O: 805.947.0730
kieseldesign.com

**Raising Canes
Costa Mesa
RC#862**

1595 Newport Blvd
Costa Mesa, CA 92627

Submittals:

#	DATE	NAME
01.18.21	CUP Resubmittal	
03.30.22	CUP Resubmittal	
08.12.22	CUP Resubmittal	
09.21.23	CUP Resubmittal	



Type: Preliminary

Initial Setup Date:
December 1, 2021

Drawn By:
NAME DATE
S. Colbert 10/2023

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Title:
**Preliminary
Landscape Plan**

Sheet Number:

L0.1

Conceptual Plant List

Species Name	Common Name	Size
Trees		
<i>Geijera parviflora</i>	Australian Willow	36" box
<i>Lagerstroemia indica</i>	Crape Myrtle	36" box
<i>Quercus agrifolia</i>	Coast Live Oak	36" box
<i>Tipuana tipu</i>	Tipu Tree	36" box
Screening Shrubs		
<i>Olea europaea 'Montra'</i>	Little Ollie	15 gal
<i>Rhamnus californica 'Eve Case'</i>	Coffee Berry	15 gal
<i>Raphiolepis indica 'Clara'</i>	White India Hawthorn	15 gal
<i>Myrica californica</i>	California Wax Myrtle	15 gal
Shrubs/ Groundcover		
<i>Achillea 'Moonshine'</i>	Yarrow	5 gal
<i>Agave 'Blue Glow'</i>	Blue Glow Agave	15 gal
<i>Archostaphylos 'sunset'</i>	Sunset Manzanita	5 gal
<i>Ceanothus g. 'Yankee Point'</i>	California Lilac	5 gal
<i>Dianella revoluta 'Little Rev'</i>	Little Rev Flax Lily	5 gal
<i>Eriogonum grande var. rubescens</i>	Red-flowered Buckwheat	5 gal
<i>Iris douglasiana</i>	Pacific Coast Iris	5 gal
<i>Lantana x 'New Gold'</i>	New Gold Lantana	5 gal
<i>Leucophyllum frutescens 'Compacta'</i>	Texas Ranger	5 gal
<i>Lomandra 'Platinum Beauty'</i>	Variiegated Dwarf Mat Rush	5 gal
<i>Mahonia sp.</i>	Oregon Grape	5 gal
<i>Muhlenbergia rigens</i>	Deer Grass	5 gal
<i>Ribes vibernifolium</i>	Catalina perfume	5 gal

Materials Legend

Material	Size	Area
'Horse Creek' Crushed Stone	1/2" DIA	2,081 SF
Direct Colors® Smokestack Grey 102 - 5lb integral colored concrete W/ 3/8" sawcut joints. Finish: TOPCAST @ #05	N/A	1,316 SF
Natural colored concrete W/ 3/8" sawcut joints. Finish: TOPCAST @ #05	N/A	2,601 SF
'Apache Gold' Boulders	18" - 24" DIA	TBD (QTY)
	24" - 36" DIA	TBD (QTY)
	36" - 48" DIA	TBD (QTY)

*Crushed Stone Supplier: Southwest Boulder & Stone (714) 882-1010
*Integral Colored Concrete Supplier: Direct Colors <https://www.directcolors.com/>

Existing Notes

A (E) easement

Proposed Notes

- ① (P) headache bar per Architect
- ② (P) order board per Architect
- ③ (P) garbage enclosure per Architect
- ④ (P) transformer per Electrical
- ⑤ (P) pre order board per Architect
- ⑥ (P) bike parking per Architect
- ⑦ (P) overhead structure per Architect
- ⑧ (P) overhead structure with open roof per Architect
- ⑨ (P) monument sign
- ⑩ (P) patio furniture per Architect
- ⑪ (P) screen wall per Civil

Tree Requirement Calculations per Predevelopment Findings

1. Canopy trees shall be installed throughout parking lot areas at the ratio of one tree per 6 parking spaces, with an average of 36 sq ft of planter area provided per tree.
of parking = 34
of (P) trees required = 6
of (P) trees provided = 18
2. 25% of the required trees shall be 24in box or larger.
3. 50% percent of all trees shall be evergreen.
4. 50% of all shrubs shall be 5 gal at time of planting.

TOTAL LANDSCAPE AREA: 14,396 S.F.
PROJECT TYPE: Commercial
WATER SUPPLY: Potable

MAWA & ETWU CALCULATIONS

Site Information							
Site Name		RC Costa Mesa					
Site Type		Commercial		Allowed ETAF:		0.45	
Annual Eto (inches/yr)		48.2					
Hydrozone or Planting Description	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Hydrozone Area (sqft.)	ETAF x Area	Estimated Total Water Use (gal./yr.)
1	0.3	Low Drip	0.81	0.4	14,396	5,332	159,337
SUBTOTAL					14,396	5,332	159,337
Special Landscape Areas							
0				1	0	0	0
SUBTOTAL					0	0	0
Estimated Total Water Use (ETWU)					159,337		
Maximum Allowed Water Allowance (MAWA)					193,595		

ETAF Calculations

Regular Landscape Areas	
Total ETAF x Ar	(B) = 5,332
Total Area	(A) = 14,396
Average ETAF	(B) / (A) = 0.4
All Landscape Areas	
Total ETAF x Area	5,332
Total Area	14,396
Sitewide ETAF	0.37

Notes:
Calculator developed to meet code effective Dec. 1, 2015
This calculator is for estimating purposes only.

Irrigation Notes

- Landscape Plan are in compliance with the State Model Efficiency Landscape Ordinance (MWEL). 100% of plant material are drought tolerant and low water use per WUCOLS.
1. The design of the irrigation system shall conform to the hydrozones of the landscape design plan.
 2. In all planting areas, low volume water irrigation (subsurface drip) will be provided to maximize water infiltration to the roots.
 3. A dedicated water meter shall be provided for common landscape area.
 4. A weather base "smart controller" shall be utilized. Controller shall be programmed to water in early morning or night.
 5. A rain sensor shall be installed at each controller.
 6. Water use calculation shall certify conformance with the current requirements.
 7. Trees are to be irrigated by bubbler.

If approved an official Landscaping Plan will require a plan check and review from the Planning department and must comply with all applicable CMMC Landscaping requirements including but not limited to tree count, shrub count, front setback landscaping and any applicable water conservation measures.

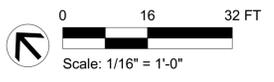
E 16TH ST

OLD NEWPORT BLVD.

GIL'S CATAMARAN
BOAT BUILDERS



WEST COAST MARINE SERVICES
MARINE SUPPLY STORE





KIESEL • DESIGN
Kiesel Landscape Architecture, Inc.

375 E Main Street
Ventura, CA 93001
O: 805.947.0730
kieseldesign.com

**Raising Canes
Costa Mesa
RC#862**

1595 Newport Blvd
Costa Mesa, CA 92627

Submittals:

#	DATE	NAME
	01.18.21	CUP Resubmittal
	03.30.22	CUP Resubmittal
	08.12.22	CUP Resubmittal
	09.21.23	CUP Resubmittal



Type: Preliminary

Initial Setup Date:
December 1, 2021

Drawn By:
NAME DATE
S. Colbert 10/2023

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Title:

**Preliminary
Planting Images**

Sheet Number:

L0.2

Trees



Lagerstroemia indica



Tipuana tipu



Geijera parviflora



Quercus agrifolia

Species Name	Common Name	Size
Trees		
<i>Geijera parviflora</i>	Australian Willow	36" box
<i>Lagerstroemia indica</i>	Crape Myrtle	36" box
<i>Quercus agrifolia</i>	Coast Live Oak	36" box
<i>Tipuana tipu</i>	Tipu Tree	36" box
Screening Shrubs		
<i>Olea europaea 'Montra'</i>	Little Ollie	15 gal
<i>Rhamnus californica 'Eve Case'</i>	Coffee Berry	15 gal
<i>Raphiolepis indica 'Clara'</i>	White India Hawthorn	15 gal
<i>Myrica californica</i>	California Wax Myrtle	15 gal
Shrubs/ Groundcover		
<i>Achillea 'Moonshine'</i>	Yarrow	5 gal
<i>Agave 'Blue Glow'</i>	Blue Glow Agave	15 gal
<i>Arctostaphylos 'sunset'</i>	Sunset Manzanita	5 gal
<i>Ceanothus g. Yankee Point</i>	California Lilac	5 gal
<i>Dianella revoluta 'Little Rev'</i>	Little Rev Flax Lily	5 gal
<i>Eriogonum grande var. rubescens</i>	Red-flowered Buckwheat	5 gal
<i>Iris douglasiana</i>	Pacific Coast Iris	5 gal
<i>Lantana x 'New Gold'</i>	New Gold Lantana	5 gal
<i>Leucophyllum frutescens 'Compacta'</i>	Texas Ranger	5 gal
<i>Lomandra 'Platinum Beauty'</i>	Variegated Dwarf Mat Rush	5 gal
<i>Mahonia sp.</i>	Oregon Grape	5 gal
<i>Muhlenbergia rigens</i>	Deer Grass	5 gal
<i>Ribes viburnifolium</i>	Catalina perfume	5 gal

Screen Shrubs



Olea europaea 'Little Ollie'



Rhamnus californica 'Eve Case'



Raphiolepis umbellata 'Minor'



Myrica californica

Shrubs/ Groundcover



Achillea Moonshine



Agave 'Blue Glow'



Arctostaphylos Sunset Manzanita



Ceanothus 'Yankee Point'



Dianella 'Little Rev'



Eriogonum grande var. rubescens



Iris douglasiana



Lantana x 'New Gold'



Leucophyllum frutescens 'Compacta'



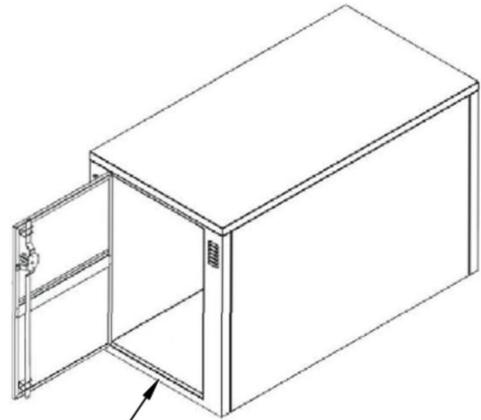
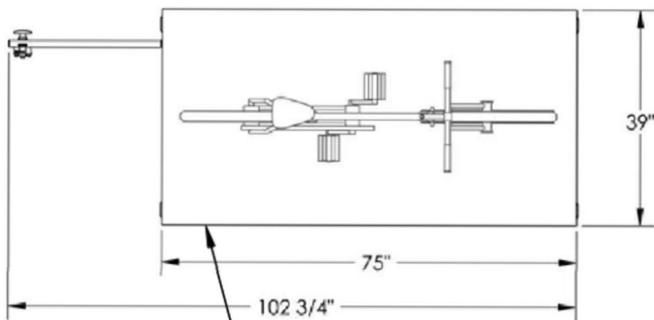
Lomandra 'Platinum Beauty'



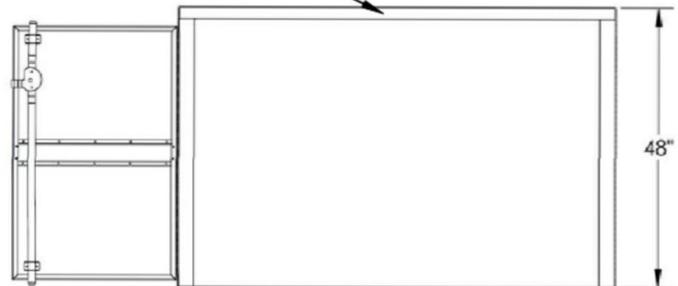
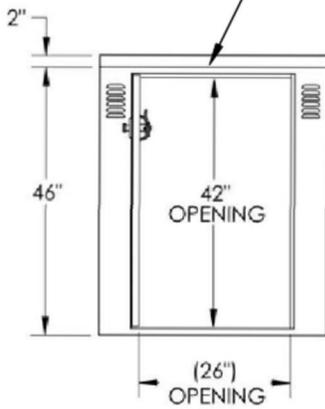
Muhlenbergia rigens



Ribes viburnifolium



**DL1 DURA BIKE LOCKER, FINISH:
GAL. SILVER. INSTALL PER
MANUFACTURER'S REQUIREMENTS**



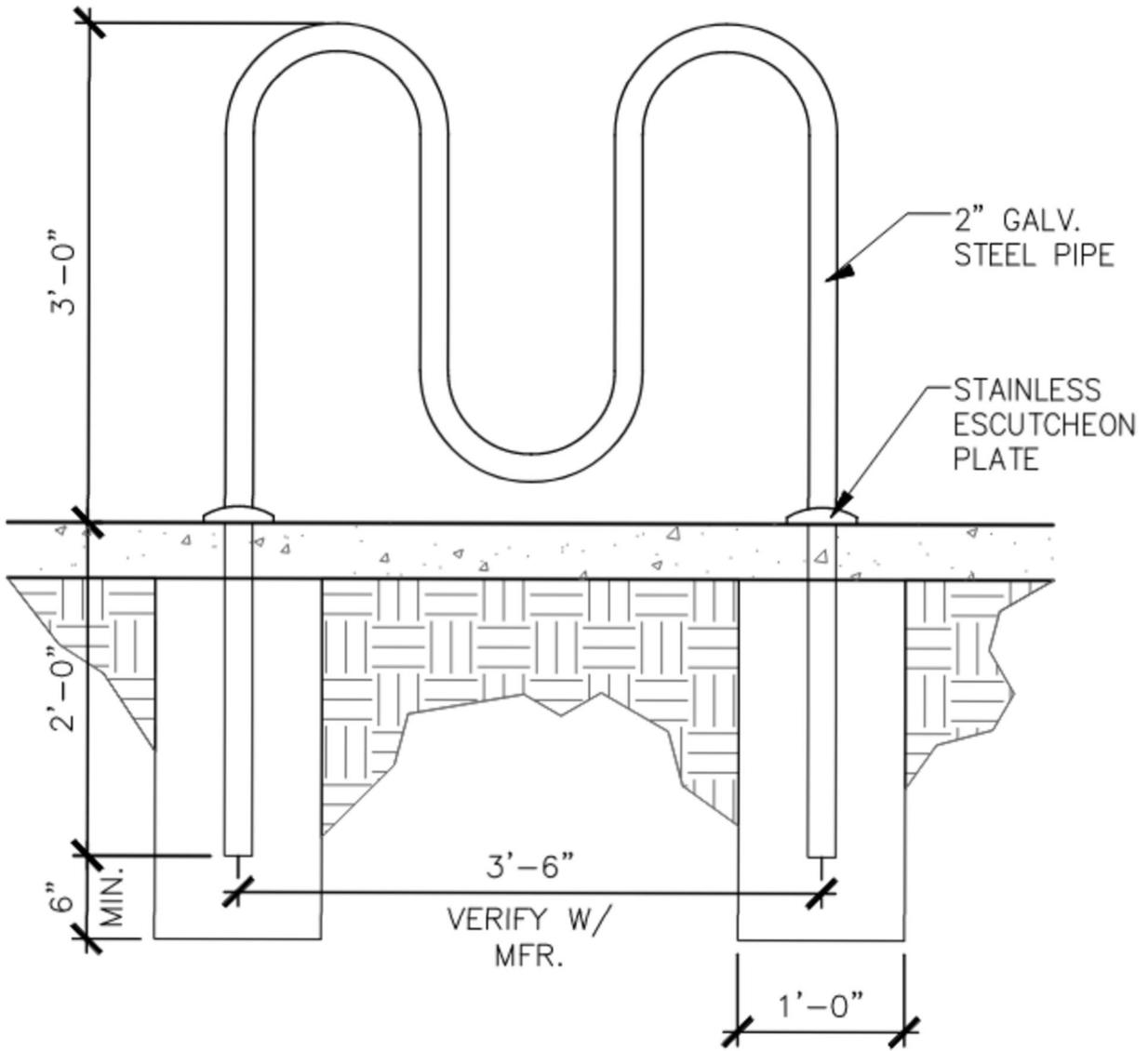
Kimley»Horn

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1100 W TOWN AND COUNTRY ROAD, SUITE 700,
ORANGE, CA 92668
PHONE: 714-939-1030 FAX: 714-938-9488
WWW.KIMLEY-HORN.COM

LONG-TERM BICYCLE PARKING

PROJECT NO.
094797132
DRAWING NAME

SHT 1 OF 1



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 1100 W TOWN AND COUNTRY ROAD, SUITE 700,
 ORANGE, CA 92668
 PHONE: 714-939-1030 FAX: 714-938-9488
 WWW.KIMLEY-HORN.COM

SHORT-TERM BIKE RACK

PROJECT NO.
094797132

DRAWING NAME

SHT 1 OF 1

ALDANA, CHRISTOPHER

From: PARTIDA, ANNA
Sent: Monday, December 4, 2023 1:05 PM
To: ALDANA, CHRISTOPHER
Subject: FW: Zoning Application 22-11 (Raising Cane's) at Von Hemert location

Follow Up Flag: Follow up
Flag Status: Completed

Public comment to be added to report

From: Ty Hansen <tystick000@gmail.com>
Sent: Sunday, December 3, 2023 4:18 PM
To: PC Public Comments <PCPublicComments@costamesaca.gov>
Subject: Zoning Application 22-11 (Raising Cane's) at Von Hemert location

I am opposed to Application ZA-22-11 regarding demolishing the VonHemert furniture store into a Raising Cane's fast food location a number of reasons

1. The two lane side road to Newport Boulevard will be overwhelmed by traffic, specifically on the weekends, when visitors leaving the beaches need to feed the kids. I believe the traffic jams will be nightmarish.
2. As a person who visits the intersection at E 16th Street and Newport Blvd. daily, I have seen my share of collisions and near collisions. These accidents will only increase, not decrease.
3. The businesses and mobile home park located on E 16th will experience a very negative effect regarding parking and access. In addition, as is well established, fast food litter will only exacerbate the homeless persons garbage that already exists in the area.
4. West Coast Marine, located just down the block on Commercial Way (a private road) already has difficulty getting large boats in and out of its location. That access can only get worse.
5. The City of Costa Mesa leadership is only interested in advancing it's own agenda... increasing tax and fee revenue regardless of who gets killed in that intersection. Only a small percentage of people win, and the rest of us locals lose.

Why not just build more homes like they did down the street? Why not build a state of the art sober living home? This is only about making the VonHemerts richer than they already are.

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ALDANA, CHRISTOPHER

From: Antonia Cohrs <antonia.cohrs61@gmail.com>
Sent: Monday, December 4, 2023 1:48 PM
To: PC Public Comments; ALDANA, CHRISTOPHER
Subject: Raising Cane's, 1595 West Newport Boulevard, MCUP Application

Follow Up Flag: Follow up
Flag Status: Completed

Chairman Ereth and Planning Commission:

I am a resident of Costa Mesa and am thrilled to hear that Raising Cane's is seeking approval to open a second location. As someone who lives and works in Costa Mesa this is the type of business that I support coming to our town.

This use is a perfect addition to the Westside area, and given that it is along Newport Blvd., the location could not be better. This type of use shows the reinvestment potential in the area and will only continue the revitalization of the area. This part of Newport Blvd. is in a transition with new uses, residents, and businesses coming to the area. As the area evolves it is an opportunity for the street and general area to improve. This is exactly the kind of use and business this area calls for.

I urge you to vote in favor of the proposed MCUP. Thank you for your time!

Best,

Antonia Cohrs

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ALDANA, CHRISTOPHER

From: Isabella Mourani <isabellamourani@gmail.com>
Sent: Tuesday, December 5, 2023 11:23 AM
To: ALDANA, CHRISTOPHER; PC Public Comments
Subject: Raising Cane's, 1595 West Newport Boulevard, MCUP Application

Dear Chairman Ereth and Planning Commission

As a longtime Costa Mesa resident, please let this letter serve as my support for the proposed Raising Cane's. The proposed site (former Von Hemert Furniture) redevelopment will bring a much-needed upgrade to the area, being both aesthetically pleasing and revitalizing a now vacant complex. As a young professional, restaurants like this are great, they serve a tasty meal and it is affordable, convenient, and fast! I encourage you to support Raising Cane's and their new proposed location!

Thank you for your consideration.

Sincerely,

Isabella Mourani
2833 Club House Rd
Costa Mesa, CA 92626

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ALDANA, CHRISTOPHER

From: Mike Brazil <mbrazil140@gmail.com>
Sent: Tuesday, December 5, 2023 10:20 AM
To: ALDANA, CHRISTOPHER; PC Public Comments
Subject: Raising Cane's, 1595 West Newport Boulevard, MCUP Application

Chairman Ereth and Planning Commission:

As a young professional, now almost exclusively remote, running out to grab lunch has become the part of my day when I interact with other people face-to-face. Having an option like Raising Cane's on Newport Blvd. would be great – and save me the extra miles of heading to the one on Harbor. Their food is delicious, fast, and affordable. And I don't want to leave out their great crew – always friendly and smiling. Currently this site is vacant and has been for some time – I hope you support the proposed use and approve the project before you.

Thank you for your time.

Sincerely,

Mike Brazil

432 Enclave Cir, Costa Mesa, CA 92626

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KILLYBROOKE ELEMENTARY

714-424-7945

3155 Killybrooke Ln. Costa Mesa, CA 92626

killybrooke.nmusd.us

Laura Taylor, Principal

Dear Raising Cane's Costa Mesa Team,

I wanted to take a moment to express our heartfelt gratitude for the incredible support and presence you brought to Killybrooke Elementary during Red Ribbon Week. Your commitment to connecting with our school, understanding our needs, and uplifting our students and staff has left a lasting impact.

Karina Gil, your team member who served as our Principal for the Day, was truly amazing in every way. Her genuine connection to the Costa Mesa community and her passion for supporting our students shone brightly. Her visit was a source of excitement and motivation for our students, and they were absolutely thrilled to receive generous donations and hear her encouraging words. Additionally, our staff was so excited to have lunch from their principal for the day. That was so thoughtful and a much needed pick me up.

Your involvement during Red Ribbon Week not only brightened our days but also reinforced the importance of meaningful connections within the Costa Mesa community. We are deeply grateful for your partnership and the positive influence you have on our school. We look forward to future collaboration and meaningful connection with Cane's as it evolves in our Costa Mesa community.

Once again, thank you, Raising Cane's Costa Mesa, for your support and partnership, and for making a difference in the lives of our students. We look forward to continuing our partnership in the future and creating more memorable moments together. Our schools are so lucky to have community partners that are invested in building up our youth. Your presence in our community is impactful and for that we are grateful.

With warm regards and appreciation,

Laura Taylor

Principal

Killybrooke Elementary School

PH-3

PARTIDA, ANNA

From: Kelly Normandin <kmn021@gmail.com>
Sent: Thursday, December 7, 2023 8:03 PM
To: PC Public Comments; ALDANA, CHRISTOPHER
Subject: Raising Cane's, 1595 West Newport Boulevard, MCUP Application

Chairman Ereth and Planning Commission:

I have worked on the Westside of Costa Mesa for more than two decades. In that time a lot has changed, a lot has improved, and some areas still need work. With the proposed Raising Cane's along Newport Blvd., you have an opportunity to spruce up a corner that "still needs work." This would be a great addition to the area and a great community partner for the city. Please consider this application and I hope you will support their request.

Thank you for your time.

Sincerely,

Kelly Normandin
741 Schenley Bay
costa mesa ca
92626

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PH-3

PARTIDA, ANNA

From: Stacy Mason <stacycmason@gmail.com>
Sent: Friday, December 8, 2023 11:25 AM
To: PC Public Comments
Subject: Re: 1595 Newport Blvd

Dear Costa Mesa Planning Division:

I am writing in response to an Official Public Notice I received in the mail regarding application number ZA-22-11, PDVR-23-003 & PMND-23-003. The affected address is 1595 Newport Boulevard. I am a neighbor and homeowner in the Level1 community (cross streets Newport Frontage Road/Industrial), and I strongly ask that this proposal not be approved.

Currently, the 1500 block of Newport Boulevard is quiet. It is located on Frontage Road, which is narrow and winding, and 16th Street, which is also not very large. Right now (even without such a busy business like Raising Cane's), the traffic backs up on 16th street during evening rush hour, and there are times it is impossible for me to turn right onto 16th from south-bound Newport Boulevard and then make the left onto Newport Frontage Road because cars are already there. Adding a Raising Cane's will guarantee that I will never be able to use that intersection to go home again.

The proposed hours of Raising Cain's are 9am until the wee hours of the morning (2am or 3am). This would guarantee additional traffic to what can already be a congested intersection. It would also bring unwanted noise and trash.

In addition, the application is asking for exceptions. It deviates from required parking by seven stalls, the drive-through will be 10 feet wide instead of the normal 11 feet, and it will be 20% closer to the street than what is normally required. If a vehicle is too large for the drive-through, they would need to park and walk in. If there are fewer parking spaces, where will they park to do so? There are already parking issues with people illegally parking on the east side of Newport Frontage Road, making a narrow road even narrower. Where will the drive through lane go? If the building is closer to the road and has a smaller parking lot, the drive-through will likely spill onto 16th street and/or wind onto the Newport Frontage Road or even Newport Boulevard.

For the above reasons, please do not approve this business proposal. We have plenty of fast-food restaurants on 17th Street and Harbor Boulevard. We do not need a Raising Cane's outside of those areas, especially when it cannot abide by current building requirements, disrupting our neighborhood.

Thank you for your consideration. Please contact me via email with any questions.

Stacy Mason

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From: Jonathan Mason <jonathandavidmason@gmail.com>
Sent: Sunday, December 10, 2023 4:52 PM
To: PC Public Comments
Subject: Public Comments against Raising Cane's at 1595 Newport Boulevard

To whom it may concern,

I am an owner and resident at the Level 1 community, less than an 1/8th of a mile from the proposed location for a new Raising Cane's at 1595 Newport Boulevard. The growth of new restaurants is usually a positive development in our community, but there are too large a number of issues with this proposition.

The small roads between Newport Boulevard and Superior (with the exception of 17th St.), as well as the Newport Boulevard frontage roads are very narrow and already tight passing spaces against oncoming traffic. Adding a busy restaurant (known to have exceptionally long drive through lines, similar to In N Out and Chick-fil-A) will only cause more congestion. As it stands, northbound on the West Newport Boulevard Frontage Road gets backed up at 16th St., trying to turn onto or cross Newport Boulevard.

The traffic and customer noise, with the operation hours ending at 2 or 3:30 in the morning, is inappropriate with the housing just feet to the West on 16th Street. And the multiple building exceptions speak to the inadequate site conditions for this project. These include building deviation requests of an overly narrow drive-through lane, truncated parking space counts, and erecting the structure closer to the street than normal commission requirements.

For all the above reasons listed above, I strongly urge this project to not be approved.

Thank you,
Jonathan Mason

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From: Lester Tucker <lestertucker@gmail.com>
Sent: Monday, December 11, 2023 8:29 AM
To: PC Public Comments
Subject: PLEASE APPROVE Raising Canes!

I am writing to let you know I strongly urge you to approve a Raising Canes on Newport Blvd. This company is OUTSTANDING. They are very proactive in managing their properties which are always very well kept (e.g. no homeless vagrants, graffiti, dead plants, etc.) I know people are going to say no because of traffic but if people in Costa Mesa/Newport are worried about traffic then they should move. It's a fact of life here, it's the beach and it's crowded. A new drive thru restaurant isn't going to make a lick of difference in the traffic. What should we cancel the Newport Boat Parade because too many people drive on Newport Blvd? Of course not. This company really promotes the right things about business entrepreneurship, trains their employees well and gives back to the community. They are also very proactive in managing the drive thru cars so PLEASE SAY YES! Food is sooo good.

Jon Tucker
west side

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From: Laura Whitcher <laura.whitcher@ukg.com>
Sent: Monday, December 11, 2023 8:52 AM
To: PC Public Comments
Subject: Raising Cane's

Hello,

I wanted to send a note in support of putting in Raising Cane's where the old Grant's for Guns is located. Their food is great, and I think a lot of us locals would love having a Cane's closer than we have now. I know for sure that my two teenage sons would be thrilled.

This should also bring some great revenue to the city of Costa Mesa.

From a local in NB:)

Laura Whitcher
UKG Strategic Account Manager
(310) 779-7766

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From: Ethen Thacher <ethen.thacher@gmail.com>
Sent: Monday, December 11, 2023 9:12 AM
To: PC Public Comments
Subject: Raising Cane's

Hello Costa Meas Planning Commission -

I work in the City of Costa Mesa and I'm emailing the Planning Commission to request approval of Zoning Application 22-11, Development Review PDVR-23-0003, and Minor Modification PMND-23-0003 for the demolition of an existing 25,159-square-foot furniture store and the construction of a new 2,913-square-foot drive-through restaurant (Raising Cane's) with a drive-thru, and 1,303 square feet of outdoor patio area.

Thank you, Ethen

--
Ethen Thacher
(714) 914-5616
ethen.thacher@gmail.com
www.linkedin.com/in/ethenthacher

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PARTIDA, ANNA

PH-3

From: Brad Kelly <brad@makenaprop.com>
Sent: Monday, December 11, 2023 9:39 AM
To: PC Public Comments
Cc: ALDANA, CHRISTOPHER; gkelly57@pacbell.net
Subject: Raisin Canes Application ZA-22-11
Attachments: Canes Planning Commission.pdf

Please see attached comments related to the above project to be included in the package for the planning commission tonight December 11, 2023.

Cc: Christopher Aldana

Brad Kelly
President

M a k e n a P r o p e r t i e s

Office (949) 348-3333
Cell (949) 533-5722

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December 11, 2024

Planning Commission
77 Fair Drive
Costa Mesa, CA 92626

Re: Application No. ZA-22-11, Site Address 1595 Newport Blvd

Dear Chairman Ereth and Planning Commission:

As a resident of Costa Mesa, I am concerned with the plan referenced above for the following reasons:

- **These high-volume drive through food service business really stretch the standard of traffic** and often miss the mark resulting in:
 - Back up to traffic on adjacent streets
 - In N Out on 19th
 - Canes on Harbor Boulevard
 - Chick Fillet on Harbor Boulevard
 - Goop Kitchen Costa Mesa
 - On site traffic flow impacting neighboring properties
 - Denny's on harbor Blvd (Canes)
 - Seiwa Market (Chic Fillet)
 - Home Depot (Northgate Mercado)
- **The project didn't address any impacts or offer any accommodations to the neighbors.**
 - How can a project that increases traffic and intensity of use **NOT** have an impact?
- **The project seemed to avoid any improvements of the adjacent street** as no consideration was evident of:
 - Widening the street
 - Improving the existing sidewalk
 - Providing more on street parking for the neighborhood
 - Getting rid of the overnight RV/Homeless parking

Sincerely,


Brad Kelly

From: Cyndie Williams <cyndie@infinetgrouppllc.com>
Sent: Monday, December 11, 2023 10:44 AM
To: PC Public Comments
Cc: ALDANA, CHRISTOPHER
Subject: Raising Canes ZA-22-11

Hello Planning Commission Members,

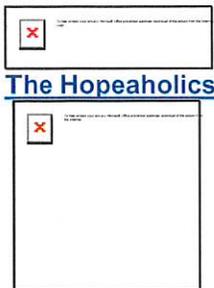
Thank you for considering my comments. I work out of 1545 Old Newport Blvd in Costa Mesa and am writing in opposition to the proposed site with the current plans for traffic and parking. I reviewed the traffic study and it is apparent that the traffic engineers agree there will be a deficit in drive through queuing space during peak times resulting in either parking spaces, sidewalks, or streets being blocked with cars. What is the solution here? The main driveway proposed with block cars passing on Old Newport Blvd during business hours and this must be considered. This will cause issues with the surrounding businesses including, but not limited to 1545 Old Newport.

Additionally, if I understood this correctly, these numbers of potential cars passing through Raising Canes proposed by the traffic study are increased by 1% each year. What happens with the potential growth of the city of Costa Mesa with the current residential development project? Has that been calculated into the planning and development of Raising Canes? Surely, this will be more than a 1% increase in traffic and I would like to hear solutions and outcomes based on the culmination of both projects as they affect this part of Costa Mesa greatly.

Finally, the homeless issue on Old Newport Blvd is vast and we continuously need to employ the local law enforcement to aid in removing homeless people from the property at 1545. I share a concern about this problem growing with the census created by Raising Canes and the residential development project.

I believe there needs to be further thought and study before deciding or approving the CUP as written. I would only ask that the thoughts and comments from the surrounding businesses should have a louder voice in the planning commission's consideration in this matter

Again, thank you for your time today.



Cyndie Dunkerson Williams, CATCIII
VP of Legal

w: www.infinetgrouppllc.com
e: cyndie@infinetgrouppllc.com
m: (949) 254-2727 | p: (949) 715-7773 | f: (949) 606-9220
[Hope by the Sea](#) | [Hope Lodge](#) |
[Ken Seeley Communities](#) | [Mental Wellness](#) |
[N.E.M. Recovery Centers](#) | [Serene Behavioral Health](#) |

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PH-3

PARTIDA, ANNA

From: Gregg Kelly <gkelly57@pacbell.net>
Sent: Monday, December 11, 2023 11:01 AM
To: PC Public Comments
Subject: Public Comments to ZA-22-11
Attachments: RaisingCanes.pdf

December 11, 2023

Planning Commission
77 Fair Drive
Costa Mesa, CA 92626

Chairman Ereth and Planning Commission:

Re: Application No. ZA-22-11, Site Address 1595 Newport Blvd

My name is Gregg Kelly and I own the property at 1555 Newport Blvd, which is adjacent to the proposed Raising Cane's development. As the property owner along with my tenant West Coast Marine Service, we may be the most impacted by this project. I ask for your serious consideration to my concerns.

1. I would like more time to review the project. I just received the details of the plan 3 days ago, and it seems unfair to only allow a weekend during the holidays to review and comment on the potential impact to our business. Contrary to Raising Cane's claim of outreach to the adjacent neighbors in their letter to the City dated November 6, 2023, no such outreach was ever made to me as the property owner or my tenant. I suspect this lack of outreach and communication is true for many in the neighborhood.
2. Parking is a significant issue in this area of Costa Mesa. The street parking spaces are full and every business has restricted parking signs. Raising Cane's in this neighborhood will only make parking worse. Allowing them a variance for a reduced number of spots is irresponsible.
3. Traffic caused by cars in the drive-through queue could be a serious issue. I visited the Cane's on Harbor Blvd twice this last week, and both times the queue of cars fully consumed the parking lot and extended onto and blocked the right lane of Harbor Blvd. I took a picture, which I have included as Exhibit A. The Cane's on Harbor Blvd has a longer drive-through queue than what is proposed, and it leads me to believe the flow of traffic in front of my property will be greatly impacted. It only takes one car waiting to make a left hand turn into a full queue of cars to completely stop traffic on Newport Blvd.
4. Commercial Way between Newport Blvd and Superior Ave. is a private street. Repaving and cleaning this street is the financial responsibility of the property owners along this road. The additional traffic and litter from Raising Cane's will make it more expensive for me and the other property owners.

I respectfully ask the Planning Commission to not approve this Application No. ZA-22-11 as presented, and at the very least give us more time to research possible solutions to my concerns and the concerns of the community.

Sincerely,

Gregg Kelly

EXHIBIT A

Raising Cane's Harbor Blvd, Costa Mesa

Picture taken December 8, 2024 approx 6:10 PM



From: Dan <dkang68@gmail.com>
Sent: Monday, December 11, 2023 11:24 AM
To: PC Public Comments
Subject: ZA-22-11 Raising Cane's

I am the property owner next door to the proposed Raising Cane's.

A few general concerns of the planning of Costa Mesa City and specific to my property:

As it is more a function of what the Community and City of Costa Mesa wish to envision as how the future of the balance in live and work opportunities, I'm concerned that we are developing around a commercial fast food corridor that does not serve the community at this time.

Some of the key points in particular of this development:

- 1) A drive through use that intends to be open till 3:30 am which we have seen the effects on Harbor Blvd.
- 2) GOOP has already created a traffic back up on Newport Blvd, with no alternative corrections.

Some comments and notes from surrounding interested parties and myself:

1-The current buildings at 1595 Newport Blvd are below grade without a permit, and proper drainage at grade needs to be addressed by the city on the next use.

2 - The current buildings and improvements at 1595 Newport Blvd have buried the adjacent neighbor's front building up to the window and built into the utility easement - the city needs to consider the impacts to the adjacent property as they approve drawings for the project.

3 - The proposed project should not be allowed a variance on parking requirements as Westside Costa Mesa already has a parking shortage since the city has approved multiple conversions of mfg zoning to C2 type uses without addressing the increased demand on street parking.

4- The city is aware that members of the community do not want more high traffic impact to Newport Blvd - Starbucks and Chick Fillet's planning applications were denied for this reason and Raising Cane on Harbor has regularly created a dangerous traffic backup and it will be worse at this location

5-The 19 West Mixed Use and Mesa West Plans encourage architectural appeal, small business and entrepreneurialism...national fast food chains, such as this project, are not consistent with the type of local Main Street businesses that are cultivating Westside Costa Mesa.

6-The city approved high density housing in 2021-22 for the adjacent properties between 16th and Placentia, how shortsighted is this project's traffic impact to future development of housing that will also impact traffic.

PARTIDA, ANNA

PH-3

From: nick@wcmservice.com
Sent: Monday, December 11, 2023 11:26 AM
To: PC Public Comments
Subject: No. ZA-22-11
Attachments: Dec 11, Doc 1.pdf

Please review attached document in regards to Application number: ZA-22-11
Site Address 1595 Newport BLVD.

Thank you,
Nick Kelly
949-698-0550
Nick@wcmservice.com
West Coast Marine Service
1555 Newport BLVD.
Costa Mesa, CA. 92627

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Sent from my iPhone



www.westcoastmarine.com

December 11, 2023

Planning Commission
77 Fair Drive
Costa Mesa, CA 92626

Chairman Ereth and Planning Commission:

RE: Application No. ZA-22-11, Site Address 1595 Newport Blvd.

My Name is Nick Kelly and I own West Coast Marine Service, adjacent to the proposed Raising Cane's development. I have operated this business in this location for 13 years.

1. I have not had sufficient time to review this potential development. I only received the plans Friday the 8th. I feel this has not given me enough time to consider all potential impacts. I am on my property every day and available, however, neither Raising Cane's nor the property owner at Von Hemert have contacted me to discuss the impact of this decision. In the short amount of time I have had over the weekend these are a few of my initial concerns.
2. Parking: Parking in this area is severely restricted. I currently sublet a private curb side on Commercial way across from my property for my employees. The curbside parking in front Von Hemert is currently almost 100% occupied by vagrants who live in their cars or are taken up by other businesses in our area. Having a Raising Cane's with added traffic and a need for parking will certainly cause more Parking issues.
3. Traffic: The intersection of 16th and Newport Blvd is already dangerous enough. I witness multiple car accidents in this intersection every year. I have personally almost been hit by a driver running a red light in this intersection. 16th and Newport Blvd is a thorough fair for students heading to and from school from West side Costa Mesa to Newport Mesa Unified school districts. We currently have great examples of

1555 Newport Blvd • Costa Mesa • CA • 92627 • (949) 515-2822 • Fax: (949) 515-2830

traffic congestion in Costa Mesa. The Raising Cane's on Harbor Blvd., Chick fil A on Harbor and In' N out on 19th street. In my business we cater to the local boating community. Again, having extra traffic congestion with a Raising Canes will make access to my facility much more difficult and hurt the profitability of the business.

4. See attached Exhibit A aerial photo for the following:

Intersection A with a Raising Cane's in my attached aerial photo is going to negatively affect my business. This intersection is our primary intersection we use to conduct business. We serve the local boating community and customers trailer their boats through this East 16th street intersection to us for service. This intersection is the safest and easiest point to access our business. We have not been able to utilize intersection B because the city constructed a curbed island. Visiting truck and trailers cannot maneuver around this curbed island. I must educate our customers bringing boats to not use intersection B. If intersection A, and B become problematic we will be forced to use intersection C at Commercial Way and Superior. Intersection C does not have a signal and is more dangerous to use with large truck and trailers. Commercial way is a private street, and I would be at the mercy of the other business owners to make sure we can get through with our truck and trailers. We also have deliveries of new engines and new boats continuously coming throughout the year. Large semi-trucks will have major problems accessing our property to deliver our merchandise that we sell. This will negatively impact sales and service of my business.

I sincerely ask the Planning Commission to issue a continuance at the very least because we have not had enough time to consider all the potential impacts of this decision.

Thank you,

Nick Kelly



February 7, 2024

Planning Commission Chair Adam Ereth
City of Costa Mesa
77 Fair Drive
Costa Mesa, CA 92626

CC: Planning Commission Members:
Russell Toler, Karen Klepack, Jon Zich,
Johnny Rojas, Angely Andrade Vallarta,
Jimmy Vivar
Scot Drapkin, Assistant Director of EDS

Subject: Detailed Objections to and a request for Denial of Project ZA-22-11, PDVR-23-0003, PMND-23-0003 (Raising Cane's at 1595 Old Newport Boulevard)

Planning Commission Chair Ereth and Commissioners:

On behalf of the Consortium of property owners: Steve Schwimer, Paul Schwartz, Gregg and Nick Kelly, Dan Kang, Michael Guerin and John Morehart, we hereby express our unequivocal **opposition** to project ZA-22-11, PDVR-23-0003, and PMND-23-0003, re: Raising Cane's Restaurant at 1595 Old Newport Boulevard.

Our comprehensive objections, detailed below, highlight our numerous concerns:

Raising Cane's is playing the system by using February, the **slowest month** of the year for fast food restaurants, as a basis for the Stantec traffic study to entitle a too-small irregularly shaped property bordering a narrow, congestion side street for its fast food restaurant. The low numbers of the traffic study allowed for a number of conditional uses needed to squeeze and manipulate the site plan to fulfill parking and queuing requirements.

May is more typical of normal traffic for fast food restaurants while still accounting for school and traffic impacts on surrounding areas.

Page two

Planning further picks over zoning codes to justify unwarranted environmental impacts on 100+ residents in the adjacent Sea Breeze Villa mobile home park by dismissing **CMMC 13-49** of the General Plan, and Measure K, that exist to protect mobile home parks from such impacts.

Raising Cane's proposed use doesn't align with the goals of Measure K and the General Plan to meet State housing mandates. It's piecemeal planning at best.

Planning did not include Measure K overlay and goals relating to land use and mobile home park residents in general;

Planning failed to include General Plan goals and elements regarding 100+ residents at the adjacent Sea Breeze Villas.

Individually and separately, the **denial** of the Raising Cane's project is warranted.

Traffic Study Flaws

Planning should have requested a traffic study based on the busier months of May instead of one of the two slowest months of the year for the fast food industry. Note that School is in session in May as well.

The study does not take into account extrapolated traffic data for the increased sales each year of the sales goals shown by Raising Cane's for its Seven Year Plan. That is from \$5.4mm in 2023 to \$8.0mm by 2030.

Note: the Stantec traffic study was conducted in February 2023, a month of **heavy rain**, and according to QSR50 (a Journal for fast food restaurants) among the **two slowest months** for fast food restaurants during the year.

Note: in 7 years, according to Raising Cane's Co-CEO A J Kumeran, sales are projected to increase from \$5.4 mm per store (2023) to \$6.1mm (2024),

Page three

to \$8 mm per store in 2030. (per QSR 50 report of April 2023, regarding the top 50 fast food restaurants.). (that's 8% sales increase per year.)

Note: a significant amount of traffic going to Raising Cane's is **destination oriented**, versus by-pass trips, which adds to the trips per thousand per square feet normally associated with drive in restaurants. (See Fehr & Peers Technical Memorandum for the City of Citrus Heights - Raising Cane's September 3, 2020).

Note: Stantec also failed to include the traffic impact on Newport Boulevard and Industrial Way, and 16th Street, intersections known for daily gridlock between 4 and 6 PM, nor its impacts on private streets of the adjacent properties. Making a left or right turn onto 16th, and then a left onto Old Newport during rush hour has only a 2 - 3 car stack on 16th and no left turn lane on 16th and Old Newport Boulevard.

The slowest month for fast food restaurants, February, can't provide data required for a realistic site plan that meets May through August traffic, parking and queuing impacts.

Minimally, a new traffic study must be done during May for a realistic traffic flow, parking and queuing impact at this site, taking into account Raising Cane's dependence on destination oriented traffic and yearly increases in sales.

Note: Staff suggests that a reduction in operating hours would result in lessening the need for additional parking and queuing, per Condition of Approval 6.

It appears disingenuous since Peak Operating Hours are at the lunch and dinner hours, when parking and queuing are at the highest need, and a reduction in total operating hours would not lessen the need for additional spaces or queuing requirements.

Note: Raising Cane's has suggested off-site parking for staff, but never identified the site in the year since.

Page four

Note: Operating hours, including truck deliveries, will be from 7 AM to either 4 AM or 5:30AM (included are 2 hours for cleaning the site and restaurant), depending on the day of the week. Total operating hours of 21 to 22.5 hours per day impacts on 100+ residents must be addressed.

MEASURE K OVERLAY AND GOALS

Measure K, approved by Costa Mesa voters in November, 2022, identifies specific properties for which there is opportunity for the city to meet their Regional Housing Needs Assessment numbers mandated by the State Department of Housing and Community Development.

Measure K is further designed to protect and expand residential uses for low and middle income residents currently in commercial zoning. (Up to 70% in the overlay are Middle and South American ancestry.) Measure K goals include expanding affordable housing and protecting Mobile Home parks.

As a Consortium of adjacent property owners, we are interested in determining a scope of work for a **specific plan** for the area, including a plan for assemblage of those adjacent properties to help meet the 11,721 unmet housing needs (years 2021 - 2029) for the City of Costa Mesa. We believe Raising Cane's severely **restricts** such a specific plan for mixed use and affordable housing closely aligned with the goals of Measure K and the General Plan.

Note: The proposed Raising Cane's is adjacent to the **Sea Breeze Villas**, a 62 unit mobile home park built in 1992; and, within 90 feet of the project. (The homes are 30 years old, thin wall construction with single pane windows.) More than one hundred residents occupy the units.

Sea Breeze Villas *is* a legal non-conforming residential use grandfathered in a commercial zone. **It is a mistake to dismiss CMMC Section 13-49 development standards in lieu of Measure K's passage.** It is counter to

Page five

the General Plan goals and Measure K meant to protect residence and Mobile Home Parks from the developmental impacts of this intensity. It's a slap in the face of over one hundred low income residents who have little to no resource to mitigate these impacts.

GENERAL PLAN ELEMENTS INCONSISTENT WITH CUP:

CD-8.1 Development Compatibility - access, circulation, parking, should be as far away from residences (and mobile home parks) as possible.

LU-3.1 states "Protect existing stabilized neighborhoods, **including mobile hone parks**, from encroachments of incompatible or potentially disruptive land uses or activities."

Raising Cane's is asking to operate between the hours of 9 AM and 3:30 AM Thursday through Saturday, and 9 AM and 2 AM Sunday through Wednesday (deliveries as early as 7 AM occurring any day of the week).

Raising Cane's estimates it will take an additional two hours to clean and close the operation. This will entail cleaning the parking lot as well. All in all, hours of operation will range from 7AM to either 4 AM or 5:30 AM the following day. That is 21 hours to 22.5 hours of operation every day, regardless of the impacts on adjacent residents.

Noise, traffic, loitering, trash, lights, smells, etc. are all disruptive to the residents of the Sea Breeze Villas.

N-2.1 Limit the hours of operation adjacent to residential in order to minimize excessive noise.

It is important to emphasize that Sea Breeze Villas were built in the 1992, having thin walls and single pane windows; staffs' sound study at 3150 Harbor adjacent condos have double pane windows and stucco and concrete walls.

Parking lot cleaning, vehicle noise including load music, tire squealing and braking, loud mufflers, motorcycles, diesel engines, yelling, door

slamming, all are noise impacts affecting adjacent residents at all hours of the days and nights.

Page six

LU-2.11 Parking lots and other noise sources (such as speakers for ordering) should **face away from residential homes**.

The proposed Raising Cane plan parking lot **faces** the Sea Breeze Villas and not Old Newport Boulevard, and therefore does not meet the requirements of LU-2.11.

IN SUMMARY

In light of these comprehensive concerns, we strongly urge the Planning Commission to **deny** ZA-22-11, PDZVR-23-0003, and PMND-23-0003.

There are significant deficiencies in the Stantec traffic study utilizing February 2023 data, The month of **May** better reflects truer peak hour traffic, parking, and queuing impacts for the proposed site. 2024 to 2030 sales projections stated by Raising Cane Corporate should be incorporated into a year by year traffic simulation to stress test the site plan.

The **site plan** should be **flipped** per CD-8.1, N-2.1, LU-2.1 and LU-2.11 with parking, queuing and ordering facing Old Newport Boulevard to comply with the General Plan and Measure K.

The summary dismissal of CMMC Section 13-49 is a slap in the face of the low income residents of Sea Breeze Villas. To not protect adjacent residential uses is counter to the elements and goals of the General Plan and Measure K that call for the respect of all its residents, and is an error on the part of Planning.

Finally, we believe Raising Cane's is piecemeal planning for an area now covered by Measure K, and this area is better served by a comprehensive specific plan that better achieves the goals of Measure K.

Deny ZA-22-11, PDZVR-23-0003, and PMND-23-0003.

Page seven

Respectfully submitted for the above listed consortium,

S/S **DAVID SWERDLIN**

David Swerdlin
Swerdlin & Associates, A Governmental Relations Group
31125 Via Cristal
San Juan Capistrano, CA 92675
swerdlin@me.com.
949-636-4407

COLGAN, JULIE

From: Bradd Barmettler <bradd.barmettler@gmail.com>
Sent: February 6, 2024 2:46 PM
To: PC Public Comments
Subject: Fwd: I am glad to hear Caines Chicken is coming to 16th and Newport Blvd.

Dear Planning Office,

I recently heard the property on the corner of 16th and Newport Blvd is going to become a Cane's Chicken.

As someone who lives on 16th street I am excited to have yet more choices when it comes to eating out. I am also glad I do not have to spend 40 minutes driving to the one on Harbor Blvd anymore and I now can drive 5 minutes over to this new one.

I am also glad to hear the property will now be rented after being vacant for almost 4 years.

The homeless have abused the property by parking out front and living in their cars, parking shopping carts out front, leaving trash on the sidewalk and in the street, and sleeping on and around the building.

Many construction workers have left their vehicles in the street in front of the vacant building for months on end, cluttering up the area with dilapidated vehicles.

It will be great to see the chain link fence once construction is over be removed for years to come.

With all those new condos the city had permitted over the last decade, it will also take some pressure off other restaurants and give folks in this area more choices.

Lastly, it's a great corner for a fast food joint, that corner has been hardly used since VonHemert Interiors last rented it out. And there are no adjacent homes on any side of the building.

I vote yes on Cane's Chicken!

I live at 2421 E. 16th #5 Street, Newport Beach. Just 5 blocks down from where Cane's Chicken will be going in on the Costa Mesa/Newport Beach city boarder.

Thank you,

--

Bradd Barmettler
949-533-6405

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ALDANA, CHRISTOPHER

From: PARTIDA, ANNA
Sent: Thursday, February 8, 2024 8:17 AM
To: ALDANA, CHRISTOPHER
Subject: FW: Raising Caines Chicken coming to Newport Blvd

Follow Up Flag: Follow up
Flag Status: Flagged

From: GRIFFEN Kathy <Kathy.GRIFFEN@biomerieux.com>
Sent: Wednesday, February 7, 2024 7:42 PM
To: PC Public Comments <PCPublicComments@costamesaca.gov>
Subject: Raising Caines Chicken coming to Newport Blvd

Hello,

I am a Costa Mesa Resident and I just wanted to voice my approval for the Raising Caines Chicken to come to Newport Blvd. I think it would be an excellent spot to open this restaurant. It will save me a 40 minute run to the nearest one today. I think it is a perfect spot and I am glad the existing building will no longer be vacant. This area will be is easy to get in and out of and Costa Mesa area needs more reasonably priced restaurant choices. I live on 474 Cabrillo Street in Costa Mesa and I look forward to Canes Chicken coming to our area.

Kind Regards,
Kathy Griffen



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